

# **Balancing screen time and social interactions: South African caregivers' experiences**

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## ABSTRACT

### **Balancing screen-time and social interactions: South African caregivers' experiences**

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**DEGREE:** MSW (Play Therapy) (Play-based intervention)

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Social interaction plays a crucial role in human development, fostering communication, cooperation, and relationship building across various contexts, such as family, school, and work. During middle childhood, spanning grades four to six, children in South Africa undergo significant cognitive, social, emotional, and physical growth, transitioning from family dependency to increased independence and identity exploration. This study draws on Bronfenbrenner's Ecological Systems Theory, which emphasises the importance of understanding children's development within the context of their environment, including the influence of caregivers, schools, and broader societal factors. Furthermore, Vygotsky's Social Interaction Theory informs this study by emphasising that social development occurs through meaningful interactions with more knowledgeable others, such as caregivers and peers.

Recent research indicates that increased screen time, defined as digital media use for entertainment, texting, video chatting, browsing the internet, gaming, emailing, social media use, app engagement, typing and document editing, viewing content on devices, and browsing images on a phone, impacts children's development and social interactions. Exploring caregivers' experiences of screen time's impact on the social interactions of intermediate phase children in Paarl, Western Cape, can provide valuable recommendations to encourage greater engagement with family and friends.

This study aimed to explore and share the experiences of caregivers in Paarl, Western Cape, South Africa, regarding the impact of screen time on the social interactions of their intermediate phase children. An interpretivist, qualitative research

approach was used for an in-depth understanding of caregivers' experiences. The researcher employed applied research for a comprehensive understanding of the experiences of each of the six caregivers in the Western Cape, South Africa. This study made use of a case study research design as it employed a descriptive and exploratory research purpose to gain insight into caregivers' experiences regarding the impact of screen time on the social interactions of South African children in the intermediate phase.

Semi-structured interviews were conducted with caregivers who have utilised the services of the Afrikaans Christelike Vrouevereniging (ACVV), a welfare organisation in Paarl Valley.

The study highlights the positive and negative effects of screen time on children in the intermediate phase, particularly during the COVID-19 pandemic. The pandemic prompted learners to adapt by utilising screens for educational purposes and maintaining social connections. Acknowledging these complexities, participants emphasised the need to strike a balance that supports their children's growth and social interaction in the digital age. Additionally, their responses underscored effective strategies for managing screen time, encouraging healthy media use habits, and fostering positive social interactions.

This study recommends that social work services develop and implement educational programmes for parents and caregivers that address the effects of screen time on children in the intermediate phase. These programmes should emphasise practical strategies for managing screen time effectively. Additionally, policy development should prioritise creating and enforcing national or regional guidelines on screen time limits and content appropriateness, ensuring a balanced and healthy digital environment for children.

**Key concepts:**

Caregiver

COVID-19 pandemic

Intermediate phase

Middle Childhood

Screen time

Social interaction

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## CHAPTER 1: INTRODUCTION

### 1.1 INTRODUCTION

Social interaction is a process in which people influence each other through face-to-face encounters, allowing them to share thoughts, emotions, and learn from one another (Little, 2016:913). Hoppler, Segerer, and Nikitin (2022:1-2) refer to social interaction as stimulation and response processes that occur between two or more people using culturally approved methods of communication in a way that facilitates social roles and how children react to one another. Social interaction is essential for human development, allowing people to connect, collaborate, and build relationships with those around them (Cummings & Karraker, 2016:471). Social interaction takes place in various settings, including family, school, work, and social activities. Furthermore, social interaction includes verbal and nonverbal communication, and is crucial for social, emotional, and cognitive growth (Cummings & Karraker, 2016:471).

The intermediate phase corresponds to the developmental stage of middle childhood, plays a crucial role in social interaction and development (Louw & Louw, 2019:8). According to the Department of Basic Education (2012), children in the intermediate phase are in grades four to six, aged between six and twelve. In terms of psychosocial development, according to Erikson's (1950:247) psychosocial development theory, a child between these ages is in middle childhood. In the intermediate phase, children undergo significant cognitive, social, emotional, and physical development. They begin shifting from family-centred care to gaining independence, developing their self-identity, and discovering their diverse hobbies (Lamb & Lewis, 2011:275).

This phase is also marked by the development of key skills, including problem-solving, logical thinking, social interaction, emotional regulation, and physical coordination (Lamb & Lewis, 2011:275). Erikson's (1950:247) psychosocial development theory states that children aged nine to twelve experience the "industry vs. inferiority" stage. During this period, they build a sense of competence and mastery over tasks while developing a stronger sense of belonging within a larger social group. This aligns with the developmental trajectory of intermediate phase

learners as they acquire the social and academic skills essential for future success (Lamb & Lewis, 2011:275).

## **1.2 PROBLEM STATEMENT AND GOAL**

Children's screen time has increased in recent years, further amplified by the COVID-19 pandemic, which reshaped how they engage with digital media platforms (Clair, 2023). The growing reliance on digital devices and screen usage globally and locally affects child development and social interaction (Hu, Johnson, Teo & Wu, 2020:183). Screen time is any time spent in front of a device with an electronic screen, such as a television (TV), tablet, cell phone, or computer (Dunckley, 2015:19; Ponti et al., 2017:461). This may involve screens for tasks related to work, education, or leisure. Screen time is the use of digital media for entertainment and excludes video chatting and online learning (Council on Communications and Media, 2016).

The literature review conducted in this study revealed a lack of knowledge about screen time and its effects on the social interaction of children in the intermediate phase in South Africa. This lack of knowledge highlights how under-researched the phenomenon is. Thus, it is important to examine how the rise in screen time is impacting the social interactions of children in the intermediate phase. The goal of this study was to explore and describe the impact of screen time on the social interactions of intermediate phase children in Paarl. The COVID-19 pandemic accelerated the shift for many South Africans to rely on digital technology for work, education, and staying connected with loved ones. Even post-pandemic, elevated screen time remains prevalent, especially among children.

Social workers play a crucial role in service delivery to families and children (Wiederhold, 2021:481-482). This research offers important insights into the potential risks linked to screen time and its effects on children's social interactions with others. Additionally, the research suggests strategies to encourage social interaction between children, their families, and friends. Such findings can guide social workers in their interventions with families and children whose social connections are affected by excessive screen time. The overarching research question the study sought to answer is:

*“How do caregivers in Paarl, Western Cape, South Africa, experience the effects of screen time on the social interactions of their children in the intermediate phase?”*

The following section defines the key terms used in this study:

- **Caregiver:** The Children’s Act 38 of 2005 defines a caregiver as any individual, aside from the parent or guardian, responsible for a child's care, including foster parents, community caregivers, or even the oldest child in a child-headed household. The White Paper on Families (2021:180) further clarifies that a caregiver is responsible for meeting a child’s basic and physical needs. In this study, a caregiver refers to any adult who attends to and provides for the child's fundamental safety, educational, and social needs, specifically for a learner in the intermediate phase.
- **Intermediate phase learner/child:** In this study, a child or learner in grades four to six is categorised as being in the intermediate phase, according to the Department of Basic Education (2012).
- **Social interaction:** Social interaction is a reciprocal process in which individuals influence each other through face-to-face encounters or culturally approved methods of communication, aimed at learning, sharing thoughts and feelings, and facilitating appropriate social roles and responses (Little, 2016:913; Hoppler, Segerer & Nikitin, 2022:1-2). This research defines social interaction as both in-person contact between individuals and communication through technology using electronic devices, such as smartphones.
- **Screen time:** In this study, screen time is defined as the duration a child spends using or viewing electronic devices with screens, such as smartphones, tablets, computers, or televisions, for activities like entertainment, education, internet browsing, texting, chatting, gaming, and engaging on social media or other communication platforms (Priya & Veena-Kumari 2021:1529).

### **1.3 GOAL AND OBJECTIVES**

The study’s goal was to explore and describe the experiences of caregivers in Paarl, Western Cape, South Africa, of the effects of screen time on the social interaction of their children in the intermediate phase/ middle childhood.

To achieve this goal, the following objectives needed to be achieved:

- To explore and describe the positive and negative experiences of caregivers in Paarl of the effects of screen time on their children in the intermediate phase.
- To explore and describe how the use of screen time has affected the social interaction of children in the intermediate phase in Paarl.
- To explore and describe measures promoted by caregivers to engage children in the intermediate phase in social interaction with friends and family in Paarl.

#### **1.4 OVERVIEW OF RESEARCH METHODOLOGY**

The qualitative research approach was suitable for this research as it allowed the researcher to explore and describe caregivers' experiences of the effects screen time had on their children's social interactions. This approach ensured that rich data was collected and allowed the researcher to gain a better understanding of the phenomenon (Cooper & White, 2012:6; Lietz & Zayas, 2010:189; Trainor & Graue, 2013:129). The research was applied in nature because it allowed the researcher to solve practical problems and answer questions relevant to real-world situations (Adler & Clark, 2015:359). This included studying the effect screen time had on the social interaction of children in the intermediate phase. Furthermore, this study made use of case study research design as it employed a descriptive and exploratory research purpose to gain insight into caregivers' experiences regarding the impact of screen time on the social interactions of South African children in the intermediate phase (De Vos, Strydom, Fouché & Delpont, 2011:96; Leedy & Ormrod, 2013:94-97).

The participants in the study were caregivers or parents caring for children in middle childhood in the Paarl community. All participants were recruited from the ACVV Paarl Valley Welfare Organisation, an NGO previously serving the caregivers as clients. A non-probability sampling approach, specifically purposive sampling, was used to select participants who were most suitable for the research criteria. A semi-structured interview schedule was employed in this study, which allowed the participants to share their views, opinions, thoughts, and ideas without the influence of the researcher's assumptions (Nieuwenhuis, 2019:108). Participants were

interviewed until no new information emerged, indicating data saturation had been reached. A pilot study was conducted to test the data collection tool. With the participants' permission, the interviews were recorded with a voice recorder for transcription. The transcriptions were analysed thematically, which allowed the researcher to identify, analyse, organise, describe, and report themes found within the data set (Braun & Clarke, 2006:77-101). The identified themes and sub-themes are reported in chapter four of the research report.

## **1.5 CHAPTER OUTLINE**

The research report is arranged as follows:

### **Chapter 1: Introduction**

The first chapter provides background on the effects of screen time on the social interactions of children in the intermediate phase and further highlights the knowledge gap that the study addresses.

### **Chapter 2: Literature Review**

Chapter two presents a thorough literature review on the impact of screen time on children's social interactions. It examines both passive and active screen time, exploring its effects on attention, behaviour, language development, and physical health. Additionally, the review investigates the influence of COVID-19 on screen time usage and social interactions.

### **Chapter 3: Research Methodology**

This chapter outlines the research methodology used and the ethical guidelines followed.

### **Chapter 4: Research Findings**

This chapter summarises the key research findings.

### **Chapter 5: Research Conclusions and Recommendations**

The final chapter presents the conclusions and applicable recommendations based on the key findings.

## **CHAPTER 2: LITERATURE REVIEW AND THEORITICAL FRAMEWORK**

### **2.1 INTRODUCTION**

This chapter provides an overview of the available literature on the research topic. The first section provides an overview of middle childhood and narrows down to the child in the intermediate school phase in South Africa. The views of various theorists on childhood development during the intermediate phase are discussed. Secondly, the importance of social interaction with caregivers, educators, and peers is highlighted, focusing on the role of teachers in fostering secure attachment relationships with their learners. Thirdly, the chapter conceptualises screen time, focusing on screen time and COVID-19, the effects of screen time, specifically the physiological and psychological effects. The review includes literature on strategies to balance screen time usage.

### **2.2 MIDDLE CHILDHOOD**

Middle childhood is the phase between early childhood and adolescence. Children in this phase are generally between the ages of six and twelve (Louw & Louw, 2019:8). Louw and Louw (2019:298) regard this stage as a fundamental period of cognitive, emotional, social, and moral development in children. During middle childhood, children enter the intermediate phase of school, which in South Africa is categorised as grades four to six (Department of Basic Education, 2012). In this phase, children are nearing the end of middle childhood in preparation for adolescence. For this reason, school, friends, social experiences, and interactions are very important in preparation for the confusing adolescent stage of development.

This phase is also dedicated to formal education since major advances occur cognitively (Louw & Louw, 2019:299). On a social level, children in middle childhood encounter new social learning experiences that significantly impact their development (Louw & Louw, 2019:299). According to Louw and Louw (2019:299), competence in four basic areas is developed during this phase. These four areas include: “integrating into school, forming peer connections, learning to play by the rules, and achieving academically” (Louw & Louw, 2019:299). During middle childhood, the child’s cognitive abilities start to mature; they focus more on their peers, and later find

their way through puberty. This means caregivers should be mindful of a child's self-esteem and emotions as these can be negatively impacted in the process (Chung, Hutteman, van Aken & Denissen, 2017:122)

Carr (2017:83) emphasises the profound developments that occur during middle childhood, especially in the social and emotional domains. School-aged children prefer independently regulating their feelings and relying on their abilities to work with peers, rather than asking their caregivers to help them manage daily task (Carr, 2017:85). As children progress through middle childhood and move closer to adolescence, their competence increases in creating and using strategies such as distancing or distraction to autonomously regulate intense emotional states and emotionally challenging situations. Carr (2017:86) further explains that there is a growing application of skills to manage their feelings and those of others. Children also become aware of multiple conflicting feelings, sometimes for the same person, for example, being angry at a friend. Relationships with peers in middle childhood provide social support and a chance to learn how to manage relationships (Carr, 2017:85-86).

### **2.2.1 Theories of Middle Childhood**

Theorists such as Piaget, Freud, and Erikson offer different perspectives on childhood development (Louw & Louw, 2019:20-26). Notably, all three emphasise the significance of social interaction during middle childhood. Piaget focused on cognitive development, classifying middle childhood as the concrete operational stage, where children acquire numerous skills that enhance their ability to interact with individuals, objects, and events (Parish, 2014:112). Children become less egocentric at this stage, allowing for greater cooperation, empathy, and understanding in peer relationships. Piaget argued that children construct knowledge through active engagement with their environment, including social experiences, and that peer interaction is essential for developing reasoning and moral understanding. According to Henderson and Thompson (2016:37), cognitive traits typical of this age group include communication skills, the ability to distinguish between fictional and factual, improved concentration and memory, and the capacity for reversible thinking. Children in this stage begin to engage in more rule-based games, negotiate roles,

and resolve conflicts more independently, skills best fostered in real-life, interactive settings. Therefore, when screen time replaces these face-to-face interactions, especially during critical developmental windows, it may limit opportunities for practising and refining these social-cognitive skills. For example, screen-based activities that are highly individualistic or passive, such as watching videos, may not provide the same level of cognitive challenge or social negotiation as unstructured play with peers, which Piaget emphasised as crucial for learning and adaptation (Berk, 2018).

Freud's theory of psychosexual development places children in middle childhood within the latency stage, where sexual urges diminish, and the emphasis shifts to developing social and cognitive skills. During this stage, children are thought to gain new social values through interactions with peers and adults (Arnett & Maynard, 2017:19-20; Louw & Louw, 2019:21-22). Success in this stage fosters a sense of competence, while failure can result in feelings of inadequacy. Social interaction and cooperative learning are, therefore, central to healthy development. Lastly, Erikson's psychosocial development theory refers to middle childhood as the phase of life where children face industry vs. inferiority. Louw and Louw (2019:22) describe this stage as when children acquire fundamental skills such as literacy, writing, personal hygiene, and socialising. According to Arnett and Maynard (2017:20-21), children in this phase also explore cultural concepts and develop the knowledge and skills to collaborate. As mentioned, children gain competence by mastering new skills, including forming peer relationships, a significant predictor of social competence in later life (Louw & Louw, 2019:256). The skills developed during middle childhood form the foundation for children to build relationships with caregivers, educators, and peers. Technology use and screen time play a predominant role in society today, and children are exposed to screens from a young age.

Given these theoretical frameworks, the impact of screen time on children's development, particularly on social interaction, calls for closer examination. Excessive screen time, mainly when dominated by passive or solitary activities, may displace opportunities for collaborative play, verbal interaction, and real-life problem-solving. For instance, children who spend substantial time on digital devices may have fewer chances to engage in face-to-face interactions, potentially affecting their

communication skills, empathy development, and capacity for cooperation, core skills emphasised across all these developmental theories. Furthermore, exposure to fast-paced media or unmoderated online content may interfere with attention span, delay gratification, and reduce the depth of interpersonal engagement.

## **2.3 UNDERSTANDING SCREEN TIME**

Screen time refers to the period spent engaging with electronic screens, including activities such as watching TV, using cell phones, computers, and other devices, for both educational and non-educational purposes (Anuradha, 2019:105; Dunckley, 2015:19; Kaye, Orben, Ellis, Hunter & Houghton, 2020; Pandya & Lodha, 2021). According to Dunckley (2015:19), screen time encompasses texting, video chatting, browsing the internet, gaming, emailing, social media use, app engagement, online shopping, typing and document editing, viewing content on devices, and browsing images on a phone

Dunckley (2015:19) and Huang et al. (2021) identify two main types of screen time interactions:

- Passive screen time refers to activities like watching TV or using other electronic devices, typically associated with inactivity, passivity, and laziness (Dunckley, 2015:19-20).
- Active screen time involves tasks where the user actively interacts with a device, such as work, education, and research (Dunckley, 2015:19).

### **2.3.1 Effects of screen time**

As indicated above, the increase in technology during the COVID-19 pandemic contributed to children using screens more frequently. Various research studies were conducted to understand both the negative and positive effects of screen time on children (Allen, Walter & Swann, 2019; Hu et al., 2020:183-185; Mesce et al., 2022; Munsamy, Chetty & Ramlall, 2022:3; Rahman et al., 2020; Sigman, 2012:935). These are discussed below.

### **2.3.1.1 Physiological effects of screen time**

Excessive screen time during childhood has been shown to impact both brain development and physiological health, with consequences that can affect cognitive, emotional, and physical functioning (Christakis et al., 2018; Domingues-Montanari, 2017; Twenge & Campbell, 2018:271-283). These effects are particularly significant during middle childhood, a critical period for neurological growth, social learning, and behavioural regulation.

Recent research indicates that high screen time can lead to structural and functional changes in the brain (Hutton et al., 2019; Takeuchi et al., 2015). Brain imaging studies show that excessive screen use is associated with cortical thinning, particularly in critical thinking and language processing areas. These structural changes may impair executive functioning, language skills, and emotional regulation (Chapman & Pellicane, 2020:27; Domingues-Montanari, 2017:333-334; Dunckley, 2015:21). Children exposed to prolonged screen time also exhibit lower performance on cognitive and language assessments, and elevated levels of cortisol, the stress hormone, suggesting that screen overuse can dysregulate emotional and physiological stress responses.

In addition, screen time, particularly video gaming and fast-paced media, has been shown to affect the brain's dopamine system, leading to reduced dopamine receptors and transporters. This can interfere with the brain's reward processing, mimicking patterns observed in substance addiction, and may impair decision-making and impulse control (Chapman & Pellicane, 2020:27; Weinstein, 2017:204-215). Brain scans of frequent video game users have revealed similarities to those seen in individuals with drug dependency, indicating potential risks for compulsive behaviour and reduced self-regulation.

Observable cognitive and behavioural issues often accompany these neurological changes. Studies have found that excessive passive screen time, such as watching television or non-interactive content, is linked to attention deficits, language delays, and executive functioning difficulties (Domingues-Montanari, 2017:333-334; Dunckley, 2015: 21; Hu et al., 2020:183). Children may struggle with concentration, memory retention, and problem-solving skills, which theorists like Piaget and

Vygotsky emphasise as foundational during the concrete operational stage of cognitive development.

From a socio-emotional perspective, these cognitive impairments often manifest as behavioural problems and social withdrawal. As Piaget and Vygotsky highlighted, children develop key social reasoning and cooperation skills through interactive, real-world play and dialogue. When screen-based activities replace these experiences, children may miss critical opportunities for peer interaction, emotional regulation, and perspective-taking, leading to delays in social competence and empathy.

Another key physiological concern is sleep disturbance caused by blue light exposure from screens, especially before bedtime. Blue light inhibits melatonin production, disrupting the circadian rhythm and delaying sleep onset (Domingues-Montanari, 2017:333-334; Dunckley, 2015; Hale & Guan, 2015). Consistently poor sleep can impair memory consolidation, mood regulation, and physical growth, which are essential to a child's well-being and academic functioning (Beattie et al., 2015; Dahl & Lewin, 2002; Gruber et al., 2014).

Excessive screen time also contributes to sedentary lifestyles, displacing physical activities essential for musculoskeletal and cardiovascular development. This inactivity is closely linked with an increased risk of childhood obesity, metabolic disorders, and postural problems (Domingues-Montanari, 2017:333-334; Straker et al., 2018; Tremblay et al., 2011). Furthermore, prolonged screen engagement without ergonomic support can lead to musculoskeletal strain, particularly in the neck, back, and shoulders (Hakala et al., 2010; Jacobs et al., 2011; Straker et al., 2018).

Studies also show that high screen time correlates with unhealthy eating patterns, including mindless snacking, reduced family mealtime interaction, and exposure to unhealthy food advertisements, contributing to poor nutrition in children (Hu et al., 2020:183).

The cumulative evidence suggests that excessive screen time in children can significantly disrupt brain development, cognitive functioning, emotional regulation, and physical health. These outcomes challenge the foundational skills that theorists

such as Piaget, Vygotsky, and Erikson argue are essential for healthy development during middle childhood. Accordingly, balanced screen use, rich social interaction, and physical activity are critical for supporting children's holistic growth.

### **2.3.1.2 Psychological effects of screen time**

Children may also be at risk of cyberbullying, where they may be exposed to traumatic pornographic or sexually explicit images (Desai & Burton, 2022; Mesce et al., 2022). Such experiences can severely affect a child's sense of safety and trust in social environments, leading to social withdrawal, increased anxiety in peer relationships, and difficulty forming or maintaining friendships. These negative social consequences are particularly detrimental during middle childhood, a developmental stage where peer interaction is critical in shaping social identity, communication skills, and emotional resilience (Desai & Burton, 2022; Olweus, 2013; Kowalski et al., 2014).

Additionally, the extreme use of digital technology could pose a risk for children developing an internet addiction later in life (Dunckley, 2015: 21; Ho et al., 2014). Research indicates that children who spend excessive time online may develop a dependency on the instant gratification and social validation provided by digital platforms, potentially leading to social isolation, depression, and anxiety (Davis, 2001; Kuss & Griffiths, 2017:311; Männikkö et al., 2018; Young, 2017).

Other adverse effects of excessive screen time include mental health issues, including anxiety, depression, aggression, and cognitive problems (Domingues-Montanari, 2017:333-334; Gurvich et al., 2021; Hudimova, 2021; Lodha & De Sousa, 2020; Sigman, 2012:935). Dunckley (2015:17,31) notes that extreme screen time includes the disruption in the balance of neurotransmitters in the brain, leading to a range of mental and emotional symptoms such as moodiness, irritability, anxiety, insomnia, and difficulties focusing and paying attention. These disruptions can significantly impact social interactions in middle childhood, a crucial period for developing communication skills, emotional regulation, and the ability to form and maintain peer relationships.

Children experiencing these symptoms may have difficulty engaging in meaningful social exchanges, as irritability and anxiety can hinder their ability to connect with peers, leading to social withdrawal, increased conflicts with others, and challenges in collaborative tasks (Gentile et al., 2011:340-351; Oberst et al., 2017; Wright & Losch, 2017). Moreover, research suggests that children with emotional regulation difficulties due to screen time may struggle with social competence and experience increased peer rejection, further exacerbating their social isolation and emotional distress (Gentile et al., 2011:340-351; Oberst et al., 2017; Wright & Losch, 2017). This can, in turn, affect their overall social development, leaving them more isolated and at risk for future emotional and social difficulties (Cao et al., 2011:316-320; Kuss & Griffiths, 2017:311).

In conclusion, as mentioned above, screen time also takes away from face-to-face social interactions, where children build communication, cognitive, and social skills through their relationships with caregivers and peers (Sigman, 2012:935). This displacement effect is particularly concerning during middle childhood, a stage that theorists like Piaget, Erikson, and Vygotsky identify as critical for developing social competence, identity, and cooperative learning. As Munsamy et al. (2022:2-4) argue, insufficient real-world interaction can impair the development of key social and relational abilities foundational to academic success and emotional well-being. Therefore, aligning with the goal of this study, it is evident that excessive screen time negatively affects children's social interactions in middle childhood, underscoring the need for balanced and mindful screen use.

### **2.3.2 Balancing screen time**

Technology has significantly influenced what it means to be social, leading to widespread confusion and debates. One prominent debate exists between Sigman (2012:940) and Ashton and Beattie (2017:293). Sigman (2012:940) reasons children should have limited screen time, while Ashton and Beattie (2017:293), citing inconclusive proof, recommend that caregivers use their own judgment to manage children's screen time. The reality is that most people are exposed to some form of screen time, so caregivers are encouraged to adopt a more balanced approach. This includes promoting other activities for children, recreation, socialising with friends and

family, and pursuing hobbies and interests (Cohen, 2018; Hu et al., 2020; Munsamy et al., 2022; Pandya & Lodha, 2021; Sigman, 2012:938).

The authors also highlight the significance of setting limits on screen time, both in terms of duration and content, and suggest that caregivers be aware of the adverse effects of excessive screen time. Dunckley (2015:22) emphasises that screen time impacts children in various ways and advises caregivers not to categorise screen time as either good or bad, or to judge it based on whether it is excessive or minimal. Several authors note that media technologies can provide some value to young children (Chauhan et al., 2021; Guernsey, 2007; Louw and Louw, 2019:247); and Munsamy et al. (2022:2). These may include exposure to new ideas and skills through TV programmes. Playing computer and video games may enhance computer literacy skills in children. However, it is crucial to note that not all computer games and TV programmes are suitable and can harm children (Mesce et al., 2022).

## **2.4 SOCIAL INTERACTION**

In middle childhood, social interaction is understood as the dynamic interplay between children, their peers, and adults, encompassing how they establish and maintain relationships and internalise and apply societal expectations (Louw & Louw, 2017:274). Social interactions can occur in various settings, such as at school, at home, and during extracurricular activities. It can involve cooperative play, competitive games, conversation, and group activities. Additionally, social interaction in middle childhood is often characterised by increased social awareness and empathy and a growing understanding of the complexities of social relationships (Louw & Louw, 2017:274). In this study, the concept of social interaction will be explored in children's interactions with caregivers, teachers, and peers.

### **2.4.1 Social interaction with caregivers**

Children in middle childhood spend a significant amount of time at school. Yet, the family remains the central foundation of their lives and provides the base and security needed for their development (Louw & Louw, 2019:262). Caregivers instinctively shape a child's development; however, during middle childhood, children gradually rely less on their caregivers for direct assistance, such as homework, getting ready for school, studying, and peer interactions (Louw & Louw, 2019:262). According to

Arnett and Maynard (2017:329), coregulation represents a key developmental shift in family dynamics, characterised by a caregiver-child relationship where children increasingly engage in self-directed and independent behaviours. At the same time, caregivers primarily provide overarching guidelines rather than direct control. Through the shift to coregulation, a cooperative caregiver-child relationship based on give-and-take and mutual respect develops (Louw & Louw, 2019:262).

The transition toward greater independence in middle childhood is crucial as children develop autonomy, self-regulation, and social skills. While this process of coregulation enables children to make their own choices, caregivers continue to play an essential role in guiding their media consumption and encouraging healthy social development. The way caregivers regulate screen time can significantly impact children's social interactions, particularly during this developmental stage when peer relationships and the ability to navigate social dynamics become more prominent (Sigman, 2012:935).

Moreover, caregiver-child interactions are essential in helping children develop the social competencies necessary for success in social settings (Ramos et al., 2022). When caregivers actively model appropriate social behaviour, online and offline, they facilitate children's ability to manage peer relationships and effectively enhance emotional intelligence. However, without careful regulation, excessive screen use can limit face-to-face social interactions and disrupt emotional development, leading to difficulties in social adjustment (Cao et al., 2011:316-320; Tsur et al., 2016:819-830).

#### **2.4.2 Understanding social interaction with educators**

Educators play a crucial role in children's social interaction during middle childhood. Verschueren (2015:83) highlights the significant role teachers play in fostering secure attachment relationships with their students, which positively affects the students' social and emotional development. Teachers achieve this by being emotionally responsive and consistent, while also creating an inclusive, supportive, and nurturing environment, thereby helping children build a sense of trust and security that contributes to increased social competence (Hollingsworth & Buysse, 2009:295-296).

Verschueren (2015:84) suggests that teachers implement cooperative learning activities and actively promote positive social norms, such as sharing and turn-taking, to foster positive social interaction. By cultivating a classroom culture that prioritises and values these positive social interactions, educators can equip children with essential social skills that will benefit them throughout their lives. Despite these benefits, challenges exist in promoting positive social interaction within the classroom. Verschueren (2015:86) specifically cautions that teachers must remain cognisant of the individual differences, unique needs, and varied learning styles in children's social and emotional development, and concurrently be prepared to address problematic behaviours like bullying or social exclusion effectively.

In the South African context, this can be challenging as the learner-teacher ratio is 29:1 in public schools and 18:1 in private schools (Education Statistics in South Africa, 2016:3). This can make it difficult for teachers to pick up on the individual developmental needs of a child. Teachers must also be mindful of their biases and beliefs, which can affect their interactions with students and their ability to create an inclusive and supportive classroom environment (Verschueren, 2015:86; Wells, 2008). Effective communication between caregivers and teachers is critical for supporting positive social interaction to create a shared understanding of children's needs and abilities and provide opportunities for children to engage in conversations about topics that interest them (Wells, 2008). Again, in South Africa, not all caregivers can meet with their children's teachers regularly, thus impacting the support needed for creating opportunities to practice skills in the home setting.

To promote positive social interaction, teachers should prioritise developing strong relationships with their students, create opportunities for children to practice crucial social skills, and consistently use positive reinforcement to encourage pro-social behaviour, as suggested by Verschueren (2015:86). Furthermore, Verschueren (2015:86) highlights the value of ongoing professional development for teachers to deepen their understanding of both attachment theory and social-emotional development. Hollingsworth and Buysse (2009:296) found that teachers do acknowledge the importance of friendships and recommend that teachers take a more active role than caregivers in fostering friendships. The authors recommend that they do this by facilitating children's interactions with peers and by arranging

seating plans constructively in the classroom. Teachers, through fostering secure attachment relationships, promoting positive peer interactions, and modelling appropriate social behaviours, are instrumental in establishing an environment that encourages positive social interaction and facilitates the acquisition of vital social skills in children.

### **2.4.3 Understanding social interaction with peers**

The motivation to socialise with peers, encompassing a desire for friendship, affection, and fellowship, becomes prominent in middle childhood, as indicated by Louw and Louw (2019:274). The refinement of a child's social skills with other children is largely facilitated by their social interaction with friends, a point highlighted by some authors, in contrast to their interactions with adults (Louw & Louw, 2019:274; Singh & Verma, 2021:424).

Positive peer interaction is vital for language, cognitive, and social development, and the ability to communicate effectively is essential for engaging with peers (Bruce & Hansson, 2011:314-315). These interactions also provide opportunities to improve listening and comprehension, fostering responsiveness, assertiveness, and understanding of non-verbal communication (Singh & Verma, 2021:424).

Disconnection in peer social interaction can stem from a child's lack of relationships with other children (Louw & Louw, 2019:274). This problem is exacerbated by excessive screen time, which research suggests leads to social disconnection by reducing in-person interactions with peers, siblings, and adults (Paulich, Ross, Lessem & Hewitt, 2021:1). As a result, their social interactions and relationships with others are compromised. The COVID-19 pandemic has greatly influenced how families and children engage with technology (Kanekar & Sharma, 2020).

## **2.5 COVID-19 PANDEMIC**

The COVID-19 pandemic is a global “macro” environmental event that challenges individuals' physical, emotional, spiritual, and social well-being. The virus appeared in December 2019 in Wuhan, Hubei Province, China, and spread rapidly to other provinces in China and internationally. In January 2020, the World Health Organisation acknowledged COVID-19 as a public health emergency of international concern (Aigba et al., 2020:154-171). On 26 March 2020, the National Lockdown

regulations were implemented to decrease the transmission rate of the COVID-19 virus in South Africa. Globally and in South Africa, socialisation was limited as schools, public places, and offices were closed. People were obligated to work from home because of the COVID-19 pandemic restrictions implemented by the government (Mesce, Cerniglia & Cimino, 2022; October, Petersen, Adebisi, Rich & Roman, 2022; Pandya & Lodha, 2021).

### **2.5.1 Screen time and COVID-19**

The pandemic created a unique situation where families and children had abundant leisure time, resulting in children entertaining themselves for extended hours in front of the TV, playing video games, and using smartphones and tablets instead of the usual outdoor and extramural activities they were used to (Ruba & Pollak, 2020; Irwin et al., 2022; Buthaina & Mohamed, 2020:164-165). Children and caregivers also depend heavily on screens for home-schooling, shopping, work, and social events over video conferencing platforms such as Zoom (Desai & Burton, 2022; Mesce et al., 2022; Pandya & Lodha, 2021; Pandey & Pal, 2020; Wiederhold, 2021:481-482). A survey conducted during the early stages of the pandemic showed an over fifty per cent increase in internet use globally (Beech, 2020). As a result of the heavy lockdown levels and limited opportunities to interact with friends and family, children's screen time increased and has continued post-COVID-19.

### **2.5.2 Social interaction and COVID-19**

Children's lifestyles and routines have been affected by COVID-19 safety measures. In South Africa, these measures included heavy lockdown levels and, if infected, a quarantine period. This led to increased unemployment rates, the closure of schools, the inability to socialise, increased poverty and inequality, food insecurity, and increased mental health and psychosocial challenges in both adults and children (Buthaina & Mohamed, 2020:164-165). During COVID-19, children could not play freely with friends; thus, crucial peer-social interactions were affected (Irwin et al., 2022). Moreover, many children were separated from their family and friends, leading to feelings of loneliness, which negatively impacted their self-esteem and motivation.

The mandatory wearing masks in public spaces was another measure implemented to curb the spread of COVID-19. In South Africa, this requirement extended to adults

and children, even as lockdown restrictions eased and public areas, including schools, began reopening. While facial expressions are a vital component of non-verbal communication (Buthaina & Mohamed, 2020:164-165), research by Ruba and Pollak (2020) indicated that children could still accurately interpret emotions despite parts of the face being covered by masks. These findings suggest that wearing masks is unlikely to disrupt children's social interactions in daily life significantly. The children could make inferences from the visible parts of the face, such as the eyes (Buthaina & Mohamed, 2020:164-165; Ruba & Pollak, 2020). Irwin et al. (2022) contend that mask-wearing impedes young children's communication and socialisation by obscuring crucial facial features and expressions. This also makes it harder for children to recognise individuals and interpret emotions during interactions (Irwin et al., 2022; Ruba & Pollak, 2020). The study explored the effects of screen time on children's social interactions in the intermediate phase through the lens of two specific theoretical frameworks discussed below.

## **2.6 THEORETICAL FRAMEWORKS**

This study adopts Bronfenbrenner's Ecological Systems Theory and Vygotsky's Social Interaction Theory as theoretical frameworks. These theories offer a holistic perspective on human development, emphasising the reciprocal interactions between individuals and their environment (Bronfenbrenner, 1994:38), and can shed light on the impact of screen time on children's social interactions in the intermediate phase.

### **2.6.1 BRONFENBRENNER'S ECOSYSTEMS PERSPECTIVE**

Bronfenbrenner's Ecological Systems theory (Bronfenbrenner, 1994:38) highlights that child development happens within multiple interconnected systems and children are exposed to numerous risk and protective factors. Using the ecological risk model, stemming from this theory, provides insights into the effects of screen time on the social interaction of children in the intermediate phase in different environmental settings, including the individual, family, school, community, and socio-cultural levels (Olson & Goddard 2010:1-2; Tolan, Gorman-Smith & Henry, 2003:276-277). Understanding the risk and protective factors related to screen time in these settings provides insights into how caregivers can help positive social interactions among children in the face of the possible adverse effects of excessive screen time.

Mbedzi (2019:87-93) highlights the inseparable nature of the different systems that influence human development. It is noted that a disproportion in one part of the system can have a ripple effect throughout the entire ecosystem, leading to psychological tension and social problems in other parts of the system. When studying the impact of screen time on children in the intermediate phase's social interactions, the ecosystems theory can provide a valuable basis for analysis. The theory proposes that several systems or settings influence human development and recognises the imbalances that exist (Mbedzi 2019:96-97, Bronfenbrenner, 1994:38). In the context of screen time, the microsystem encompasses the immediate environments where the child interacts with screens, such as the home, school, and peer group (Vélez-Agosto, Soto-Crespo, Vizcarrondo-Oppenheimer, Vega-Molina & García Coll, 2017:902). The mesosystem refers to the relationships between these microsystems, such as the connection between a child's home and school settings. The exosystem consists of external factors that indirectly influence the child's screen time, such as media policies and cultural views on technology (Mbedzi, 2019:96-97). The macrosystem includes broader cultural and societal influences that shape attitudes towards screen time and technology (Mbedzi, 2019:96-97). By utilising the ecosystems theory to examine screen time and social interactions, the researcher can gain a more comprehensive insight into the intricate relationships between a child and their environment.

Furthermore, the concepts of energy and adaptation can be valuable in understanding how screen time affects social interactions (Mbedzi, 2019:91-92). Energy refers to the force that drives transactions in the ecosystem and can be positive or negative (Mbedzi, 2019:91). In the case of screen time, energy can be transferred between the child and their environment, influencing their social interactions. Adaptation refers to the ability of a child to adjust to changes in their environment, including changes in screen time (Mbedzi, 2019:92). Lastly, the concept of interdependence can help understand the larger societal effects of screen time on social interactions (Mbedzi, 2019:92). By recognising the interconnectedness of all elements in the ecosystem, including individuals, families, communities, and social systems, the researcher can develop a more nuanced understanding of the effects of screen time on social interactions and can recognise opportunities for partnership, shared responsibility, and mutual support within the ecosystem.

Van Breda (2018:13) reasons that the ecological perspective is valuable for understanding the complex and dynamic interactions between individuals and their environments and for recognising the influence of various systems and contexts on individual development and well-being. Van Breda (2018:13) notes that the ecological perspective stresses the importance of considering the social environment and its effect on individual functioning. In the case of screen time and social interactions in children, this means recognising how the use of screens (microsystem) may be influenced by factors such as family dynamics (mesosystem), community norms (exosystem), and cultural values and beliefs (macrosystem). Additionally, Van Breda (2018:13) highlights the concept of resilience from the ecological perspective, which refers to the skill of individuals and communities to adapt and thrive in the face of hardship. In the context of screen time and social interactions in children, this means considering how children may develop resilience in response to screen-related challenges such as cyberbullying and balancing between screen time and natural communication or developing alternative forms of social interaction (Olson & Goddard, 2010:1).

Overall, the ecosystem theory provides an inclusive framework for understanding the effect screen time has on children's social interactions. By recognising the interconnectedness of different systems, the dynamic nature of human development, and the potential for resilience in response to adversity, researchers and practitioners can develop a nuanced understanding of screen time's effect on social development and identify opportunities for encouraging positive change and supporting the well-being of children and communities.

### **2.6.2 VYGOTSKY'S SOCIAL INTERACTIONS THEORY**

Vygotsky's social interaction theory suggests that individuals are the product of human social activity by stressing the importance of social and cultural factors in learning and development (Card, 2014:167). According to Vélez-Agosto et al. (2017:904), Vygotsky's development theory is multifaceted and integrated, encompassing biological, social, cognitive, and emotional aspects. The theory emphasises that learning occurs through social interactions, and children's development is improved by interacting with people with more advanced knowledge and skills, such as caregivers. This is the Zone of Proximal Development (Cherry,

2022). By exploring the role of caregivers in fostering children's learning and development, the research provides insights into how caregivers can support children's social interaction skills in the context of screen time.

The Zone of Proximal Development concept is central to Vygotsky's theory. It refers to tasks that are too difficult for children to master, but they can accomplish them with guidance or assistance from adults or more skilled peers (Louw & Louw, 2014:168). In this way, Vygotsky emphasises the importance of collaboration and scaffolding in learning and development, rather than simply telling children what to do (Louw & Louw, 2014:168). In Vygotsky's view, children create their knowledge through dialogue with others in their social environment and adjust their actions and goals through self-talk. Consequently, learning is viewed as a collaborative and socially mediated process that transpires within a social context (Card, 2014:167). In the case of screen time, children may learn and interact with others through digital platforms in ways they would not be able to do in social interactions. However, it is essential to consider the quality of the interactions that occur through screen time and whether they help children develop social skills.

Vygotsky's theory is predominantly relevant when studying the effect of screen time on children's social interactions between the ages of nine and twelve because it highlights the importance of the cultural context in which children grow their cognitive skills (Vélez-Agosto et al., 2017:904, Wang et al., 2011:298). According to Wang et al. (2011:297), Vygotsky believed that children's cognitive development is influenced by the tools and concepts which are culturally and socially constructed, such as language, memory aids, and scientific concepts. Hence, the child's social interaction and development cannot be separated from their social, cultural, and historical context (Card, 2014:167). In the case of screen time, digital technology is a significant cultural force that has become increasingly prominent in children's lives in recent years (Vélez-Agosto et al., 2017:904, Wang et al., 2011:298).

Using Bronfenbrenner's Ecological Systems Theory and Vygotsky's Social Interaction Theory of Learning as theoretical frameworks for the research provides an inclusive approach to exploring the effects of screen time on children's social interaction in the intermediate phase. Understanding the different contextual risks and protective factors related to screen time's impact on social interaction, and the role of

caregivers in fostering children's learning and development, this study contributes to the field of social work by providing insights into how caregivers can promote positive social interactions among children in the context of screen time use.

## **2.7 CONCLUSION**

The COVID-19 pandemic sped up digital technology adoption in South Africa, leading to widespread screen use for work, education, and socialising. This trend persists post-pandemic, with increased screen time among all, including children. The research underscores the effects of extended screen use on individuals, especially children. The research uses Bronfenbrenner's Ecological Systems Theory and Vygotsky's Social Interaction Theory to study how screen time affects children's social interaction thoroughly. It studies various environmental factors and support systems influencing this impact while highlighting caregivers' roles in fostering children's development. This study provides important insights for social work, offering guidance to caregivers on promoting positive social interactions among children in the context of screen time usage. The following chapter presents the research methodology used in this study.

## **CHAPTER 3: RESEARCH METHODOLOGY**

### **3.1 INTRODUCTION**

This chapter presents the research design and methods applied to explore and describe caregivers' experiences of how screen time affects their children in the intermediate phase's social interaction within the South African context. Furthermore, this chapter discusses the sampling approach, data collection methods, data analysis techniques, data quality procedures, and the pilot study. The chapter concludes with a discussion of the ethical considerations adhered to in the study.

### **3.2 GOAL AND OBJECTIVES**

Achieving the study's goal was made possible by executing several attainable objectives.

#### **3.2.1 Goal of the study**

The study's goal was to explore and describe caregivers in Paarl, Western Cape, South Africa, and their experiences of screen time's effects on children's social interaction in the intermediate phase/ middle childhood.

#### **3.2.2 Objectives of the study**

To achieve the goal of the study, the following objectives were set:

- To explore and describe the positive and negative experiences of caregivers in Paarl of the effects of screen time on their children in the intermediate phase.
- To explore and describe how screen time has affected children's social interaction in the intermediate phase in Paarl.
- To explore and describe measures promoted by caregivers to engage children in the intermediate phase in social interaction with friends and family in Paarl.

### **3.3 RESEARCH APPROACH**

The fundamental paradigm of this study was interpretivism, which was used to gain an improved understanding of human behaviour by studying people in their natural

environment (Maree, 2019:66-68). The interpretivist perspective asserts that a deeper understanding of individuals' subjective interpretations about phenomena is the key to achieving insight (Maree, 2019:66-68). According to Nieuwenhuis (2019:67), the researcher must engage deeply with the participants' perspectives to understand and clarify their interpretations of the event. The interpretivist paradigm in qualitative research enables the flexible and in-depth exploration of how individuals make sense of phenomena, allowing for the collection of rich, descriptive data (Maree, 2019:58-59). Qualitative research was an appropriate approach for exploring and describing caregivers' experiences regarding the impact of screen time on their children's social interactions. Although qualitative research can be time-intensive, its flexibility aligns well with the interpretivist framework of this study. Employing qualitative methods allowed for collecting in-depth data, providing a deeper understanding of the phenomenon (Cooper & White, 2012:6; Lietz & Zayas, 2010:189; Trainor & Graue, 2013:129).

### **3.4 TYPE OF RESEARCH**

The type of research adopted in this study was applied research, which includes utilising data to expand upon existing knowledge of a particular phenomenon. This knowledge is then used to assist practitioners and policymakers in making informed decisions and delivering services efficiently (Hilton, Fawson, Sullivan & DeJong, 2019:8). Applied research focuses on addressing practical problems or answering questions relevant to real-world situations (Adler & Clark, 2015:359). Especially within the Humanities, this approach is highly valuable because its research findings directly impact individuals, organisations, and communities. (Bless, Higson-Smith & Sithole, 2013:7).

Applied research is frequently differentiated from basic research, which aims to expand theoretical knowledge within a specific field (Adler & Clark, 2015:359). However, applied research can also contribute to theoretical development and help identify new research questions and areas for further exploration (Adler & Clark, 2015:359). This study's use of applied research promotes the practical nature of the research (Maree, 2019:9). Applied research methods were used to collect data on caregivers' experiences of their children's screen time usage and its effect on their social interactions. The findings of this study could be used to develop interventions

or programmes that social workers can use to help caregivers manage their children's screen time in a way that promotes positive social interactions.

### **3.5 RESEARCH DESIGN**

This study made use of case study research design as it employed a descriptive and exploratory research purpose to gain insight into caregivers' experiences regarding the impact of screen time on the social interactions of South African children in the intermediate phase (De Vos, Strydom, Fouché & Delpont, 2011:96; Leedy & Ormrod, 2013:94-97). The case study research design was chosen because it allows for an in-depth exploration of complex social phenomena within their real-life context (Yin, 2018). Case study research design also has sub-types, and the instrumental case study subtype is applicable for the study. The instrumental case study design enabled the researcher to investigate real-world contexts using a single or small number of cases, allowing for an in-depth understanding of the phenomenon (Nieuwenhuis, 2019:90). This approach was particularly beneficial in achieving the study's primary objective. Additionally, it facilitated close collaboration between the researcher and participants, allowing them to share their experiences and perspectives. (Nieuwenhuis, 2019:90).

A notable disadvantage of the instrumental case study design was that using multiple cases could potentially reduce the significance and relevance of a particular case (Crowe, Cresswell, Robertson, Huby, Avery & Sheikh, 2011:7; Parker, 2016:223). Another drawback was the potential for the researcher's unconscious biases to influence the research findings, the limited ability to generalise findings when using a small number of participants, and the time-consuming nature of conducting intrinsic case studies and analysing the data to extract meaningful insights within a reasonable timeframe (Crowe et al., 2011:7; Parker, 2016:223). Even though these disadvantages are relevant to the design, the researcher was cognisant of each participant's experience during the study and conscious of potential biases when writing up the final findings.

### **3.6 RESEARCH METHODS**

This section outlines the study population, sampling method, data collection, and analysis processes. Trustworthiness, which comprises credibility, transferability,

dependability, and confirmability, confirmed the data quality in this research (Nowell et al., 2017:3). Lastly, the pilot study is discussed.

### **3.6.1 Study population and sampling**

The research's target population was caregivers of children between nine and 12 years old within the Paarl, Western Cape area. A small sample of six caregivers and parents was deemed sufficient for this qualitative research as the study aimed to gain in-depth insights and rich, detailed perspectives rather than generalise findings to a larger population. It was assumed that they would be most capable of providing insights into the impact of screen time on their children's social interactions during the intermediate phase. The study sample was drawn using non-probability sampling, specifically purposive sampling. In this method, the researcher selected the participants relevant to specific features of interest to the research (Strydom & Delport, 2011:392). This sampling method was advantageous as it ensured that thick and rich data was generated in relation to the phenomena (Nieuwenhuis, 2019:93). Additionally, this sampling method allowed the participants to have aspects in common, which enhanced the transferability of the findings (Nieuwenhuis, 2019:93).

The researcher approached (see Appendix A) ACVV Paarl-Valley, Western Cape, which helps children and families in Paarl. The Faculty of Humanities further granted permission (Appendix B) to the researcher to access research participants via the organisation. The recruitment process involved distributing posters and leaflets (Appendix C) within the organisation, and the NGO administrator also extended verbal invitations to potential participants. This guaranteed that the research included individuals with limited literacy skills. The administrator, rather than a social work professional, extended the verbal invitations to lessen the risk of participants feeling stressed or obliged to participate due to their service provider relationship.

The participants of this research were selected using specific sampling criteria (Bless et al., 2013:177), i.e., participants had to:

- Be caregivers responsible for children aged between nine and twelve years from Paarl, Western Cape.
- Reside with the child.

- Be over the age of majority.
- Be able to speak English.
- Be residents of Paarl, Western Cape, South Africa.

The sample included six participants, with interviews continuing until data saturation was reached, i.e., the point at which no fresh information, themes, or insights emerged from the data (Makofane & Shirindi, 2018:34).

### **3.6.2 Data Collection**

To meet the study's objectives, the researcher employed semi-structured interviews as the primary data collection method. An interview schedule (Appendix D) allowed participants to freely express their views, opinions, thoughts, and ideas without being influenced by the researcher's assumptions (Nieuwenhuis, 2019:108). This approach also enabled the researcher to inquire further or seek clarification when necessary, leading to a more in-depth exploration of the topic (Maree, 2019:110).

The interviews were conducted in person, on the premises of ACVV Paarl-Valley. The researcher was granted permission to use one of the offices in the organisation to carry out the interviews with the participants. This setting ensured privacy and confidentiality. The interviews lasted between 40-50 minutes per participant. While semi-structured interviews can be time-consuming and may involve additional costs, such as transportation, or result in participants providing brief or ambiguous responses (Maree, 2019:110), their advantages outweigh these challenges. Using open-ended questions allowed the researcher to understand the phenomenon more deeply through meaningful engagement with participants (Newcomer et al., 2015:494).

### **3.6.3 Data Analysis**

The researcher analysed the transcriptions using thematic analysis. Thematic data analysis allowed the researcher to recognise, analyse, organise, describe, and report themes within the data set (Braun & Clarke, 2006:77-101). Data analysis was guided by the steps suggested by Cresswell (2013:182-188), as discussed below.

**3.6.3.1 Familiarisation:** The researcher first acquainted herself with the data collected to “get a general sense of the information and an opportunity to reflect on its overall meaning” (Cresswell, 2014:197). The interviews were audio recorded, and the researcher transcribed all the audio recordings. The researcher then began by reading and re-reading the transcripts and listening to the audio recordings to develop a deep familiarity and engagement with the dataset (Maree, 2020:136). The researcher then reflected on the underlying meanings, noting emerging thoughts, views, and opinions throughout the process (Creswell, 2009:186). The researcher derived meaning from analysing the notes of nonverbal communication (Clarke, Braun & Hayfield, 2015:230).

**3.6.3.2 Coding:** Coding was the first step in recognising the patterns in the data. The researcher grouped similar data segments and assigned a code using text highlight colours for each data unit. This process formed the foundation for identifying and comparing themes found in the data (Clarke et al., 2015:230; Nieuwenhuis, 2016:116).

**3.6.3.3 Searching for themes:** The researcher grouped the codes to generate a plausible mapping of key patterns in the data (Clarke et al., 2015:236). Through this process, themes and sub-themes were generated. On a separate piece of paper, the researcher combined different codes to form one theme using brief descriptions for each code (Braun & Clarke, 2006:77-101). The researcher used a thematic map as a visual tool to assist with generating themes and sub-themes (Braun & Clark, 2006:77-101).

**3.6.3.4 Reviewing themes:** Throughout this phase, the researcher revised the coded data extracts for each theme to conclude whether they appeared to form a coherent pattern. The researcher found themes that were not supported by adequate data. For other themes, the data was too diverse. Some themes were collapsed, while others had to be broken down into separate themes. The researcher nominated themes specific enough to be discrete and broad enough to capture a set of ideas in numerous text segments. The data was condensed into a manageable set of significant themes that succinctly summarised the text. This stage allowed the

researcher to understand the different themes, how they fitted together, and the overall story they told about the data (Braun & Clarke, 2006:77-101).

**3.6.3.5 Defining themes:** During this stage, the researcher defined and refined the themes for analysis by identifying their essence. The researcher returned to the collated data extracts for each theme and organised these into coherent and internally consistent accounts with narratives. The researcher wrote a thorough analysis for each theme (Braun & Clarke, 2006:77-101; Clarke et al., 2015:240).

**3.6.3.6 Producing the report:** A report was generated after the final data analysis. The researcher was mindful of presenting the themes to best represent the participants' experiences (Braun & Clarke; 2006:77-101; Nowell, Morris, White & Moules, 2017:10). During this stage, the researcher conducted member checking and peer debriefing to verify the reliability and validity of the information presented (Nowell et al., 2017:10).

### **3.6.4 Data Quality**

Establishing trustworthiness is crucial in qualitative research to ensure the reliability and validity of data analysis, findings, and recommendations that truthfully represent the participants' experiences (Bless et al., 2013:236; Nieuwenhuis, 2019:143). To achieve this, researchers address key facets of trustworthiness, such as credibility, transferability, dependability, and confirmability (Nowell et al., 2017:3).

#### **3.6.4.1 Credibility**

Credibility is the assurance that can be placed in the truth of research findings. Credibility is established to guarantee that the qualitative research results are believable from the research participants' view. The researcher established rapport and familiarity with participants and the organisation to enhance credibility and ensured a well-defined purposive sampling and detailed data collection method. Additionally, the researcher attended peer debriefing sessions with the supervisor.

#### **3.6.4.2 Transferability**

Kumar (2011:185) defined transferability as the extent to which the results of qualitative research can be generalised or transferred to other contexts or settings.

The researcher achieved transferability by guaranteeing a thick description of the study. This involved a complete account of the context, participants, research design, and analysis (Nieuwenhuis, 2019:144).

#### **3.6.4.3 Dependability**

Dependability considers whether the findings would be similar if the study were conducted twice (Babbie & Mouton, 2001:278). The researcher guaranteed the consistency and reliability of the research findings by documenting the research processes. A comprehensive audit trail accounted for the data collection methods and analysis, and all decisions related to the research were reflected upon and detailed in a journal. (Babbie & Mouton, 2001:278; Nieuwenhuis, 2019:145; Kumar, 2011:185).

#### **3.6.4.4 Confirmability**

Confirmability is the degree to which others can thoroughly verify the results. To ensure credibility, the researcher followed the process identically for the results to be confirmed. The researcher considered the degree of neutrality and the degree to which the participant shaped the study findings, not by the researcher's prejudice, motivation, or interest. Biases were reduced by admitting the researcher's predispositions (Nieuwenhuis, 2019:145; Kumar, 2011:185).

#### **3.6.5 Pilot study**

A pilot study was conducted to improve the data quality and correct any shortfalls in the research process and instruments. This determined whether the data collection instrument was appropriate and would yield the necessary data to answer the research question (Bless et al., 2013:394). For the pilot study, the researcher interviewed with a single participant. No concerns arose after the pilot study, and the interview schedule did not require any refining or amending (Hilton et al., 2019:10). Because the data collected in the pilot study yielded relevant, rich data, which contributed to an understanding of the research question, it was incorporated in data analysis and reporting.

### **3.7 ETHICAL CONSIDERATIONS**

The researcher requested authorisation from the ACVV Paarl and the Research Ethics Committee of the Faculty of Humanities at the University of Pretoria to conduct and proceed with this research project (Appendix E). Also, to ensure the protection of the participants in the study, the following ethical considerations were followed:

#### **3.7.1 No harm**

Research participants must not be subjected to any physical or psychological harm. To ensure their well-being, they received all the information about the study's purpose, questions, procedures, and anticipated results (Babbie, 2017:62; Hilton et al., 2019:73). Transparency allowed participants to understand what to expect.

The researcher took thoughtful steps to prevent harm, including using sensitive and suitable language to avoid emotional distress and ensuring the confidentiality of all research data. Ethical guidelines were strictly followed, including adherence to the South African Council for Social Services' Code of Ethics.

If participants experienced emotional distress due to the interview content, Mrs. Merle Danhouse, a registered social worker (Appendix F) from Paarl, Western Cape, was available to provide follow-up counselling and psychosocial support.

#### **3.7.2 Voluntary participation and informed consent**

Participation should continuously be voluntary, and no one should be forced to participate in research (De Vos et al., 2011:116). The researcher informed all participants that participation in this study was their choice, and they could withdraw at any time (Maree, 2019:48). The researcher provided the participants with an informed consent letter (Appendix G). Participants received a clear explanation of the study's core focus, its overarching research goals, specific objectives, their role and responsibilities, all relevant ethical considerations, and how the researcher planned to utilise the findings from the study. This ensured the participants made an informed decision to participate in the research study (Maree, 2019:48). Additionally, the participants were informed that the research data would be kept for ten years according to the University of Pretoria's policy and the POPI Act. The participants

were required to sign the informed consent letter, agreeing to voluntary participation in the study.

### **3.7.3 Privacy, anonymity and confidentiality**

Anonymity was kept, and interviews were not associated with specific participants (Maree, 2019:48). The participants' names were not mentioned during the interviews, which were audio recorded with their consent. The researcher recorded the interviews for data analysis purposes. The participants were informed that information would be treated as confidential and used for research purposes only. Data safekeeping is important (Maree, 2019:49). Therefore, the researcher guaranteed that the data collected was stored securely. Electronic documents were safeguarded with password protection. All interview documentation, in both hard copy and electronic formats, will be securely stored by the researcher with the University of Pretoria's assistance for ten years following the study's completion.

### **3.7.4 Reflexivity and positionality**

To ensure that the researcher's values and beliefs did not hamper with the data-gathering process, the researcher identified and recognised the influences of political allegiance, religion, faith, gender, sexuality, historical and geographical location, ethnicity, race, social class, and status (Holmes, 2020:2). The researcher took a reflexive position, acknowledging how her political allegiance, faith, identity, and background could influence the data-gathering process to ensure objectivity and transparency. This process of acknowledging and addressing individual influences is called reflexivity, as defined by Corlett and Mavin (2018:378). Before entering the participant's realities and settings, the researcher identified and addressed personal influences potentially impacting the study. The researcher engaged in self-reflection, critically assessing how her background, values, and experiences, such as political beliefs, faith, gender, and status, might influence the research, and took steps like journaling and peer consultation to mitigate these biases.

### **3.7.5 Debriefing**

According to Strydom (2002:73), debriefing sessions are essential after a study, allowing participants to process their experience and its effects. These sessions help

minimise potential harm and allow the researcher to address any misconceptions participants may have developed. In this study, the researcher held debriefing sessions with the participants once the interviews were completed. During these sessions, participants were encouraged to share their thoughts and experiences related to the study. None of the participants reported any emotional distress resulting from their participation, and therefore, no referrals for counselling were necessary. These counselling sessions would have been conducted by Mrs Merle Danhouse, a registered social worker.

### **3.8. CONCLUSION**

This qualitative research study was guided by an interpretivist framework, which explored caregivers' experiences of how screen time affected their children's social interaction in the intermediate phase—the research design employed semi-structured interviews to gather rich and contextual insights. Participants were purposefully selected because of their relevance to the research context. Ethical considerations, including informed consent and confidentiality, were upheld. The unique contribution of this qualitative approach lies in its emphasis on capturing the intricate nuances of caregivers' experiences of screen time's effects on their children's social interaction, thereby enhancing the depth of understanding of the research topic.

## **CHAPTER 4: EMPIRICAL FINDINGS AND DISCUSSION**

### **4.1 INTRODUCTION**

This chapter synthesises the empirical results, organised logically and coherently to facilitate understanding and interpretation. As mentioned in the preceding chapter, the data collection process primarily involved meticulously recording interviews. Subsequently, the recorded interviews were transcribed and analysed using thematic analysis. Initially, codes that served as guiding markers were identified, aiding in recognising overarching themes and sub-themes within the dataset. These themes provided a structured framework for comprehending and interpreting the collected data.

The main goal of the research was to explore and describe caregivers' experiences of screen time's effects on their children's social interaction in the intermediate phase. Furthermore, the data sought to examine and describe caregivers' positive and negative experiences in this regard. Lastly, the chapter explores and describes measures caregivers use to promote engagement and social interaction between children, friends, and family. The chapter begins by examining the participants' biographical details, followed by an exploration of the identified themes and sub-themes.

### **4.2 EMPIRICAL FINDINGS**

The empirical findings are presented in the subsequent section of the chapter, followed by a discussion of the identified themes and sub-themes.

#### **4.2.1 Participant's biographical information**

This section describes the participants by focusing on their gender, age, home language, culture, household composition, participant's position in the family, and the child's age, in the intermediate phase.

**Table 1: Participants' biographical information**

Participant	Gender	Age	Home language	Population	Household composition	Participant's position in the family	Age of the intermediate phase child
1	Female	33	Afrikaans	Coloured	Nuclear family	Biological mother	10
2	Female	32	Afrikaans	Coloured	Nuclear family	Biological mother	11
3	Female	35	English	Coloured	Nuclear family	Biological mother	10
4	Male	33	Afrikaans	Coloured	Extended family	Biological father	12
5	Female	27	Afrikaans	Coloured	Foster family	Foster mother	10
6	Female	43	Afrikaans	Coloured	Nuclear family	Biological mother	11

Most research participants were female, with only one male participant. The participants' ages ranged from twenty-seven to forty-three. All participants identified as belonging to the Coloured population,<sup>1</sup> and served as the primary caregivers for their children. Four of the six participants were part of nuclear families. One participant lived in a foster family setting, and another lived with the paternal grandparents (a multi-generational family). The children in the intermediate phase were between ten and twelve years old.

According to Statistics South Africa (2017), the most common household type is the extended family, comprising 36% of all households in South Africa. This is followed by single-person households, which account for 22%. Less than one-fifth of households in South Africa are nuclear families. Although the nuclear family system has decreased within the greater South African population, in this study, it emerged as the dominant family structure.

#### **4.3 EMPIRICAL FINDINGS: THEMES AND SUB-THEMES**

This section summarises the themes and sub-themes uncovered during data analysis. The identified themes were social interaction, utilisation of screen time,

<sup>1</sup> The term *Coloured* is used in the South African context to refer to a multiracial ethnic group with mixed ancestry, including African, European, and Asian heritage. While it has different connotations globally, in South Africa it is an official racial classification used in demographic data and policy, and is commonly used by individuals who identify as such (Dooms & Chutel, 2023:1-16).

increased screen time during COVID-19, effects of screen time, and balancing screen time. These themes and associated sub-themes are presented, accompanied by verbatim quotes from the participants and pertinent literature.

**Table 2: Table of Themes**

<b>Themes</b>	<b>Sub-themes</b>
Theme 1: Social interaction	1.1 Social interaction with family 1.2 Social interaction with peers
Theme 2: Utilisation of screen time	2.1 Understanding of screen time 2.2 Educational utilisation of screen time 2.3 Screen time utilisation for social interaction 2.4 Utilisation of screen time for entertainment
Theme 3: The impact of COVID-19 on children's screen time	3.1 Increased screen time during COVID-19
Theme 4: Effects of screen time	4.1 Positive effects of screen time 4.2 Negative effects of screen time
Theme 5: Balancing screen time	5.1 Encouraging alternative activities 5.2 Time spent on screens 5.3 Parental supervision 5.4 Support Strategies

#### **4.3.1 THEME 1: SOCIAL INTERACTION**

Social interaction is described as a process of reciprocal influence by individuals over one another through face-to-face encounters to learn and share emotions and thoughts (Little, 2016:913). Social interaction occurs in diverse settings and facilitates communication, cooperation, and relationships through verbal and nonverbal means, promoting social, emotional, and cognitive growth (Cummings & Karraker, 2016:471). Human growth relies heavily on social interaction, with the intermediate phase being especially critical for achieving developmental milestones and fostering social connections (Louw & Louw, 2019:8 & 298). The following sub-themes provide an in-depth description of the child's social interaction in the intermediate phase, as revealed through the participants' views.

##### **4.3.1.1 Social interaction with family**

Louw and Louw (2019:262) emphasise that a child's household is the place that offers the most security, and the family is still the pivot on which their life hinges. Moreover, parents are essential agents in their children's social development (Louw

& Louw, 2019:266). Furthermore, family activities strengthen family bonds and enhance children`s sense of belonging.

All participants emphasised the significance of spending time with their families and building strong bonds. They understood that quality family time is vital for creating a supportive and nurturing atmosphere and improving their children`s social interactions. The following quotes demonstrate this observation.

*“We either go to the beach and do activities like playing netball or tennis, or go to the mountains and spend some time together”.* (Participant 2)

*“Well, we`ll either be at home, do chores, or watch movies to spend quality time together. Or we would go out, we love to go out and have fun”.* (Participant 3)

*“We visit our closest family a lot; we have a very close bond. We like to do sports activities together, where the dad participates the most. And then we usually have a lot of alone time with our children, especially with our eldest; either father-and-daughter or mother-and-daughter time”.* (Participant 1)

*“So, on weekends, most of the time, my wife and I take our daughters out to the park, and some Sundays, we drive out with them, maybe to the beach and take a stroll”.* (Participant 4)

Participant six mentioned that although work commitments made it challenging to spend time together, they still made a concerted effort to do so. She shared:

*“That`s a difficult one because my husband is a chef, so we get very limited weekends time [sic]. If we get a weekend, we will maybe go for a walk in the mountains, or we will go to the beach, or we will go to a restaurant to go and eat something”.*

Furthermore, the six participants came from households with more than one child and reported that the children participated in activities with their siblings. The sibling relationship acted as a natural learning environment for children. This provided opportunities to develop social interaction skills, manage conflicts, regulate emotions,

and help them understand the dynamics of family members who can be both affectionate and challenging (Kramer, 2014:160-184; Howe et al., 2023). This is indicated in the following quote:

“She [referring to the child] plays with her eight-year-old *[sibling]*”. (Participant 1)

Children develop crucial social skills like empathy, cooperation, and effective communication through regular family activities and open communication (Liben et al., 2015:401; Taylor et al., 2017:1-15). These skills are important for social interaction and bonding among family members.

#### **4.3.1.2 Social interaction with peers**

Social interaction with peers is important as it enhances children`s communication skills, their ability to work within a group, understand rules and boundaries, and develop their sense of identity (Henderson & Thomson, 2016:43). The six participants indicated that their children had friends and engaged in social interactions with them, whether at school, at home, or during play dates. The six participants observed that social interactions with peers involved engaging in various activities. The activities included pretend play, sports games, drawing, and dancing. The following quotes exemplify this:

*“She has a wide circle of friends from a school perspective, though, so she plays with balls, jump ropes, and all the types of games played in the community. Stokkies [playing with sticks], blikkies [playing with tins] and poppehuisie [playing house-house], things like that”.* (Participant 1)

*“They like to draw, they like to dance, and they play hide and seek ... or they would take breaks and go outside, playing with sticks, playing with mud or whatever”.* (Participant 6)

*“They play with dolls, [I] don’t know what else”.* (Participant 4)

Participant one noted:

*“She’s [referring to the child] an introvert, very shy, and had a low self-esteem in the beginning. She wouldn’t just talk randomly”.* The participant continued:

*“There isn’t [sic] a lot of children to play with in the area we live in. It’s just the two or three of them that play together at the house. She has a wide circle of friends from a school perspective, though”.*

Participant one indicated that her child socialised with her friends, by stating the following:

*“They [referring to the child and her friends] would maybe play netball, poppehuisie [playing house-house], or skooltjie-skooltjie [playing pretend school]”.*

Participant six noted that although her child had found it difficult to make friends, she had one friend with whom she interacted.

*“My daughter was born with a cleft palate and lip, so it’s difficult for her to pronounce words. She’s having difficulty making friends and interacting with other kids because she must constantly repeat herself. So, she’s been having a bit of a hard time making friends, but she likes going to school. She has one friend that she’s very happy with”.*

Repeating herself can be frustrating and isolating, adding stress to her social interactions. School-aged children with cleft palate and lip often face social difficulties, such as isolation, reduced group involvement, and negative peer interactions, primarily due to communication problems (Murray et al., 2010:297-300).

The six participants also observed that even though their children participated in physical activities with their peers, they still dedicated time to screen-based activities while in their company. These screen-based activities varied from watching movies and playing video games to using social media or educational applications. The following quotes exemplify this:

*“They do physical games, but obviously, they will also take some time out and be on social media a little or use the tablet to play music”.* (Participant 3)

*“When they have play dates, sometimes they would be on their tablets, playing games and things”. (Participant 6)*

*“The 11-year-old is more with her friends, then they do TikTok [videos]. They like to be on the phones, tablets, and TVs, and [play] with make-up”. (Participant 5)*

*“There are games, or they have Netflix, so they watch movies. They’re on TikTok, so they dance”. (Participant 4)*

*“With her friends at home, they’re usually on the phone and do TikTok dances”. (Participant 2)*

TikTok is a video-sharing social network application that is accessible via mobile phones. It permits users to create short lip-sync, dancing, gaming, DIY, food videos, etc., in three to fifteen or sixty seconds (Yang, 2020; Miltsov, 2022:664-667). Even though users under thirteen years old are not allowed to post videos or comment, it appears to be a growing trend among children in middle childhood. TikTok provides children with a creative outlet to do different dances with their friends as a form of entertainment and self-expression. Even with physical play, screen-based activities frequently offer additional opportunities for social interaction.

#### **4.3.2 THEME 2: UTILISATION OF SCREEN TIME**

In contemporary society, screen time can function as a primary medium for communication (Anuradha, 2019:105; Dunckley, 2015; Kaye, Orben, Ellis, Hunter & Houghton, 2020; Pandya & Lodha, 2021). Screens can be used for both educational and non-educational purposes, such as texting, video chatting, browsing the internet, gaming, emailing, engaging in social media, using applications, shopping online, writing and word processing, reading from a device, and even scrolling through pictures on the phone (Dunckley, 2015:19). Families, particularly children, utilise screens to connect with relatives and friends, thereby facilitating the maintenance and cultivation of social bonds (Bergmann, Bergmann, Castro & Soriano, 2021:2721).

#### **4.3.2.1 Understanding of screen time**

Participants were asked for their understanding of what screen time is. All participants described screen time as time spent on electronic devices, including cell phones, tablets, televisions, or laptops. This is exemplified by the following quotes:

*“Screen time is when you’re on any electronic devices”.* (Participant 3)

*“I think my definition of screen time is when a child has her phone or is watching TV for a certain period and then stops”.* (Participant 2)

*“Screen time is the amount of time a child is behind a screen. A screen could be a TV, a tablet, or a phone”.* (Participant 5)

*“Screen time for me is when you’re on the laptop, on the TV, on a tablet, and a cellphone”.* (Participant 6)

The six participants' understanding of screen time aligns with the literature which defines screen time as the time spent watching television, cell phone, computer, and any other use of electronic screens for both educational and non-educational purposes (Anuradha, 2019:105; Dunckley, 2015:19; Kaye, Orben, Ellis, Hunter & Houghton, 2020:3661; Pandya & Lodha, 2021). It is evident from the six participants' answers that they understood the concept of screen time. As schools move away from paper-based activities, screen time is increasingly used for educational purposes (Shonfeld & Meishar-Tal, 2017:185-196). This is explored in the next sub-theme.

#### **4.3.2.2 Educational utilisation of screen time**

To avoid total curriculum disruption while the COVID-19 pandemic lasted, some countries, including South Africa, introduced technology-based pedagogy to ensure that learners had access to learning materials while at home (Mahaye, 2020:4-9). The six participants observed that because of the COVID-19 pandemic, their children had to rely on screens to complete their schoolwork. Four participants noted that transitioning to this new way of schooling was challenging. Participant 4 shared:

*“... it was difficult because we needed to explain it to them [referring to the children]. They had Google Classroom where all their subjects and homework were on it [sic]”.*

*“It was a bit difficult in the beginning because she [referring to the child] struggled to keep up with the amounts of schoolwork teachers gave. She had homework every day, and despite it not being finished, more homework came. With time it brought a bit of pressure”.* (Participant 2)

*“That [referring to schooling from home] was difficult during COVID because I had to home-school them ... My daughter asked me to never ever homeschool her again, it was not a good experience for her, and they did not enjoy homeschooling”.* (Participant 6)

The quotes above indicate that parents and caregivers, as well as children, struggled with the shift to online schooling during the pandemic. However, interestingly, despite the increased reliance on and challenges of screen time for educational purposes during the COVID-19 pandemic, participants observed that their children continue using screen time to aid in schoolwork. The transition to digital learning has enabled children to explore a diverse selection of educational resources, and this is reflective of the adaptation that takes place within systems (Bronfenbrenner, 1994). This is illustrated by the following quotes:

*“My oldest one [referring to the child] knows the password of the laptop, so everything she’s doing is Google-related and is for schoolwork”.* (Participant 4)

*“And sometimes they would go on YouTube to maybe Google something for schoolwork while watching the videos and getting information about it”.* (Participant 1)

*“She is not on any social media, but she has a tablet, so she’ll use it for Google Classroom if she has to do schoolwork or some homework”.* (Participant 3)

Google Classroom, a no-cost web service from Google designed for educational institutions, aims to streamline the creation, distribution, and assessment of

assignments in a digital format (Candilas & Casas, 2023:58-74). Google Classroom promotes screen time among children by creating an interactive and engaging learning environment with multimedia assignments, collaborative projects, real-time feedback, application integrations, virtual classrooms, and parental involvement. Google Classroom is a platform that is still being used post-COVID-19 at both public and private schools in South Africa. This can be linked to the ZPD, where the interaction of the child with the educator via the screen facilitates learning.

#### **4.3.2.3 Screen time utilisation for social interaction**

Research shows that with the increase of new forms of media and the development of society, most children will spend numerous hours a day absorbed in media and technology (Napier, 2014:18-25; Scairpon, 2021; Skalicka et al., 2019:427-443). Children can connect with others through messaging or voice chats in online multiplayer games, as well as through social networking applications to stay connected with friends and loved ones. Among the six participants, two noted that their children utilise screen time to communicate with friends.

*“I see them interacting with each other, but they use the tablet also to interact. My daughter’s friend moved away to another town, and that’s how they communicate with each other, through their phones and WhatsApp, or playing through online games. That’s how she’s staying connected with her friend”.* (Participant 6)

*“I know one friend she had from the previous school, they communicated through a game, Roblox, because she didn’t have a phone. But she was using a laptop ... That is how new communication started with each other, through screen time and phones”.* (Participant 4)

Participant 1 indicated that they use screens to keep in touch with their child:

*“When maybe visiting one of their grandma’s, they [referring to the child] would take their cell phones with them. It is mainly for us to keep in contact with them, just to know where they are”.*

Contrary to what other participants have shared about their children using screens to stay connected to friends and family, participant 3 noted:

*“I would say because my child likes to talk a lot, it’s not really a negative interaction. Because when she gets a friend or her cousins are over, she would normally tend to not use any electronic device. She would want to have physical conversations. They will try to maneuver for them to watch a series or whatever, but she likes to talk so she likes physical interaction”.*

This inclination towards talking and physical interaction is not just about avoiding screen time; it is a vital part of the child’s social and emotional development. Through actively participating in conversations and prioritising face-to-face interactions with friends and family, the child can develop crucial communication skills like articulation, attentive listening, and interpreting non-verbal cues. Furthermore, the child’s preference for physical engagement highlights the significance of real-time interpersonal connections in nurturing emotional well-being and overall social competence. Lev Vygotsky’s social development theory asserts that social interaction is crucial for cognitive development, with physical engagement with peers and caregivers being essential for learning and developing social competence (Card, 2014:167; Vélez-Agosto et al., 2017:904).

#### **4.3.2.4 Utilisation of screen time for entertainment**

Research shows that children aged eight to ten often use YouTube to indulge in content aligned with their hobbies and interests (Paciga & Koss, 2021:13-32). Moreover, children can use online gaming and social media platforms to connect with friends and peers, collaborate in games, share content, and participate in virtual communities. All participants noted that their children used screen time for entertainment, such as playing video games, watching YouTube videos, and doing TikTok dances. This is illustrated by the following quotes:

*“She is currently using it for games, making Tik Tok videos, and watching videos”.* (Participant 2)

*“She loves YouTube and Netflix; that’s the two things she enjoys when she uses screen time”.* (Participant 3)

*“There are games, or they have Netflix, so they watch movies. They’re on TikTok, so they dance and stuff”.* (Participant 4)

*“They then play games on their cell phones wherever they are ... Rather than googling educational stuff during the weekend, they Google the latest trends, songs, or anything that interests them”.* (Participant 1)

The benefits of screen time have become increasingly evident, particularly in the context of the COVID-19 pandemic. The following theme explores this.

### **4.3.3 THEME 3: THE IMPACT OF COVID-19 ON CHILDREN'S SCREEN TIME**

The COVID-19 pandemic altered the dynamics of interaction between children and caregivers, leading to increased reliance on screens for activities like homeschooling, shopping, work, and social events conducted through video conferencing platforms such as Zoom (Desai & Burton, 2022:113; Mesce et al., 2022:255; Pandya & Lodha, 2021; Pandey and Pal, 2020:2; Wiederhold, 2021:481). The following section examines how the COVID-19 pandemic impacted children in middle childhood’s screen time.

#### **4.3.3.1 Increased screen time during COVID-19**

COVID-19 necessitated increased screen time across all age groups due to remote work, online learning demands, and heightened reliance on digital platforms for socialising and entertainment amid social distancing measures (Buthaina & Mohamed, 2020:164-165; Kanekar and Sharma, 2020; Rich & Roman, 2022; Pandya & Lodha, 2021). Children’s screen time increased and has continued post-COVID-19, as indicated earlier in the chapter. Participants noted that children had utilised increased screen time for educational purposes, connecting with family and friends, and keeping themselves occupied. The six participants indicated the following:

*“During COVID, we would all just stay inside the house and would sometimes get frustrated. So, playing outside got a bit boring, and they drifted to the television.”*

*Watching television replaced playing outside or spending time together a lot”.*  
(Participant 1)

*“During the time they were at home, they slept late and watched TV the whole day”.* (Participant 2)

*“Because COVID restricted face-to-face interaction, I think they’ve become more inclined with their cell phones [sic]. So, they would prefer watching TV over having a conversation ... So, during COVID they had to do everything online, like I said, and especially the activities that the teacher would send”.* (Participant 5)

*“This was definitely the time where she used screen time the most because all of the work was via WhatsApp. So, we were on the phone more than usual”.*  
(Participant 3)

*“It changed due to her being more on the phone and in front of the TV”.*  
(Participant 2)

It is evident from the participants’ responses that due to the COVID-19 pandemic; their children’s screen time has increased. This increase in screen time underscores the pivotal role digital tools played in maintaining children’s social interactions during the pandemic. Post-COVID-19, children continued spending increased amounts of time on screens, perpetuating habits established during the pandemic. The next section explores the effects of screen time.

#### **4.3.4 THEME 4: EFFECTS OF SCREEN TIME**

The literature shows both positive and negative effects of screen time on children’s development (Allen, Walter & Swann, 2019; Hu et al., 2020:183-185; Mesce, et al., 2022; Munsamy, Chetty & Ramlall, 2022:3; Rahman et al., 2020; Ruangdaraganon et al., 2009:33; Sigman, 2012:935). To comprehend the specific effects of screen time, it is important to differentiate between passive and active screen time.

Active screen time refers to a child’s engagement in digital activities that require cognitive or physical participation. In contrast, passive screen time involves

consuming screen-based content in a more inactive or passive manner, such as watching videos or browsing information without active interaction (Dunckley, 2015; Sweetser et al., 2012). The participants indicated that screen time had positive and negative effects on their children`s social interaction. When inquired about their feelings about their children`s screen time, the participants had different views. Out of the six participants, three indicated that they viewed their children`s screen time as positive.

*“For my child, it is positive because we as parents still have control over it. We haven’t found something to worry about yet”.* (Participant 1)

*“I would say it’s positive. I always check what she watches, and the stuff that she’s interested in are positive things”.* (Participant 3)

*“I think it can go both ways; it depends on how you look at it, but I definitely feel it’s positive because everything nowadays and going forward will be technology-wise.”* (Participant 5)

However, two of the six participants viewed their children`s screen time negatively.

*“I feel it has a negative effect on the child due to the amount of time she spends on it”.* (Participant 2)

*“When it comes to my children, I feel it is negative because I feel like it’s too much screen time. It’s too much screen time and not enough other activities”.* (Participant 6)

#### **4.3.4.1 Positive effects of screen time**

Various authors highlight the positive effects of screen time, such as its educational value, expansion of vocabulary, exposure of children to various experiences, cultural and linguistic diversity, and keeping them engaged in a safe manner (Balton, Uys, & Alant, 2019:1-14; Jordan, 2005:523-538; Rideout & Hamel, 2006). The six participants indicated that screen time provided a valuable information source for their children and a means of connection with their peers. This is illustrated by the following quotes:

*“So, I think it’s positive because sometimes children get information through screen time that we are not even up to date with, then they come and ask us for information, or they get informed”.* (Participant 1)

*“I believe you can use it for something positive, like if they do homework on it or watch positive things, they can really learn from screen time”.* (Participant 3)

*“It was positive. During COVID, they were separated from each other. We, as people, want to see each other, and we want to talk to each other, but in COVID, we couldn’t have that. That is how new communication started with each other, through screen time and phones”.* (Participant 4)

*“... but I definitely feel it’s positive because everything nowadays and going forward will be technology-wise. I think it’s a great advantage to them”.* (Participant 5)

These statements emphasise a positive view of screen time, noting its role in providing access to information and maintaining communication (Kietzman et al., 2011) while recognising its potential as a learning tool. The opinion that children can utilise screen time effectively for tasks such as homework or viewing educational content indicates confidence in its educational value. Furthermore, the participant who mentioned that everything is shifting toward technology implies recognition of screen time’s growing significance in contemporary life and education.

#### **4.3.4.2 Negative effects of screen time**

Research indicates that screen time can negatively impact emotional regulation, increase attention deficit symptoms, reduce parent-child interaction, and lower social-emotional understanding (Napier, 2014:18-25; Radesky & Christakis, 2016; Scairpon, 2021). Furthermore, too much screen time is correlated with difficulty in following directions, inability to finish tasks, and difficulty sitting still (Scairpon, 2021; Twenge & Campbell, 2018:271-283).

The six participants observed that when their children were engaged in screen time activities, they often became distracted, irritated, exhibited overindulgence in usage,

procrastinated, and showed signs of disconnection and antisocial behavior. This is illustrated by the following quotes:

*“Sometimes, when I talk to her, she doesn’t listen nor hear me because she’s on her phone”.* (Participant 2)

*“Because of the screen time, they’ve become shy more to interact with people out of their own free will, and they would shy away to rather have the cell phone. So, if we go out to a place where they don’t know the people, they will ask for my phone rather than interacting with the children there ... Yes, because oftentimes, when it’s homework time, they would prefer the screen first. So, that is quite a big challenge, because then the homework is not done yet, but they’re sitting on the phone or watching TV”.* (Participant 5)

*“I would call her, and she won’t react because she’s into the screen, and that’s not something that I like. Then she’ll be a little bit more irritated because she wants to finish the series or whatever, so she’s more irritated with me when she watches. And she doesn’t respond immediately like she would if she wasn’t on screen time”.* (Participant 3)

*“But I feel it’s negative when people are over at the house, and they’re on their tablets or their phones ... Tasks do not get done; homework doesn’t get done. Everything is dragged out and it takes longer. It’s just slow, and they’re very reluctant to do things. That’s the problem that I have with screen time ... I would say that if friends and family come over, and the tablets are available to them which is normally over a weekend, they would rather be on the tablet or when they’re with their cousins and friends, they’re on the tablet, interacting in that way”.* (Participant 6)

*“For negative, there are times when my child is so hooked on screen time that she doesn’t even react when I call her. Or she’s so interested in what she saw on the television that she’s not even focused on what I asked her ... Another challenge is that my child gets so interested in something she sees that she loses focus completely, which is important. So, when she would get homework to do over the*

*weekend, but she can watch television as well, she would try and manipulate me and ask for another hour or so". (Participant 1)*

Participant 1 spoke of sibling rivalry due to screen time:

*"The challenges are number one, especially over the weekends. She has an eight-year-old sister, and the shows that they watch are very different from each other. This causes a lot of conflict between them, and it's a conflict where they hurt each other or say mean words".*

These statements underscore fears about the detrimental effects of excessive screen time on children's behaviour and social interactions. They show how screen time can diminish responsiveness in conversations, heighten shyness in face-to-face interactions, and create distractions from critical tasks such as homework (Dunckley 2015:17,31; Munsamy, et al., 2022:2-4; Scairpon, 2021; Twenge & Campbell, 2018:271-283). The frustrations expressed highlight how screen time can overshadow social interactions and responsibilities, resulting in procrastination and diminished focus (Dunckley 2015:17,31; Muppalla et al., 2023; Qi et al., 2023; Scairpon, 2021; Twenge & Campbell, 2018:271-283; Webb 2023).

Several authors are of the view that children with excessive screen time behaviours are more likely to experience decreased emotional regulation, which can manifest as an inability to remain calm, increased irritability, and greater difficulty getting along with others (Twenge & Campbell, 2018:271-283; Scairpon, 2021). Overall, these observations emphasise the challenges parents encounter in navigating and moderating screen time, weighing its advantages against its negative impacts on children's behaviour and daily routines. The next section explores caregivers' perspectives on the measures that could be implemented to balance screen time.

#### **4.3.5 THEME 5: BALANCING SCREEN TIME**

Research indicates that extended screen time poses a detrimental risk to the development of children in the intermediate phase; therefore, balancing screen time is imperative (Domingues-Montanari, 2017:333-334; Gurvich, Thomas, Thomas, Hudaib, Sood, Fabiatos & Kulkarni 2021:545; Lodha & De Sousa, 2020:133;

Hudimova, 2021:3-5; Sigman, 2012:935; Munsamy, et al., 2022:2-4). Hastie (2022:21) and Ponti et al. (2017:461-468) refer to a family media action plan that consists of guidelines to limit the amount of screen time and to purposely select which media is to be consumed by children. While recognising the benefits and practicality of screen time, the participants emphasised the importance of managing it in moderation to enhance rather than replace essential offline activities crucial for overall development.

#### **4.3.5.1 Encouraging alternative activities**

Encouraging alternative activities involves promoting a range of physical pursuits like outdoor play, sports, and exercise, which contribute to physical health and development (Munsamy et al., 2022). Munsamy et al. (2022) are of the view that children should spend an average of two hours a day outdoors, comprising at least an hour of physical activity, for at least three days a week. It also includes nurturing hobbies such as arts, crafts, music, and reading activities that foster creativity and promote cognitive and emotional growth without relying on screens. Additionally, promoting offline social interactions encourages children to engage face-to-face with family, friends, and peers, crucial for developing social skills, empathy, and emotional intelligence (Pandya & Lodha, 2021).

Hastie (2022:21) and Ponti et al. (2017:461-468) refer to a media action plan where parents purposely choose media content with their children, explain their choices, and limit screen time during family routines like meals. This, they assert, is to enhance social learning and mindfulness of messages about gender, body image, violence, and social issues. A media action plan can assist to counter the negative effects of excessive screen time by positively influencing social development and providing a balanced experience that complements and offsets digital interactions (Hastie, 2022:21; Ponti et al., 2017:461-468; Webb, 2023). Three of the six participants mentioned that they promote alternative activities to maintain a balance in their child's screen time and to encourage social interaction.

*“I often tell them to go play outside and not sit on their phone the whole time. It’s usually an hour on the phone. Then we play outside. So that’s how I balance it and how it has been working”.* (Participant 5)

*“So, they have a calendar where they have all the dates and the times. Most of the time they have school and activities like playing outside, and then they have maybe an hour or two on their phone”. (Participant 4)*

*“She likes talking, so I don’t need to do that a lot. She will gravitate towards us. She likes doing activities, and she has extramural activities that also keep her busy and keep her excited. So, if I see she’s too much into screen time, I will bring some of that up, and she will then shift her focus and do something else”. (Participant 3)*

One participant indicated difficulty in maintaining a balance.

*“That’s a difficult one, to encourage them to go do other things. To go for a walk, maybe to go out for an ice-cream, even just to leave the house. Sometimes that could be very challenging for me. They’d rather be on the tablet, or maybe we’re out somewhere, and they want to come home and get back to the tablet ... I also encourage them to do other things, like just sitting outside or jumping on the trampoline or sitting outside on a chair and enjoy nature. Just doing something outside, I feel is very beneficial”. (Participant 6)*

#### **4.3.5.2 Time spent on screens**

With the help of parents and caregivers, children can learn how to manage their time on screens. All participants noted that their children have restricted screen time during the school week, while on weekends, no limits are imposed. However, during weekends, they adopt a more flexible approach to screen time, seeing it as a chance for relaxation, leisure, and social interaction online. This strategy not only ensures structured weekdays dedicated to learning but also recognises the importance of downtime and social connections during less regimented times. It demonstrates a well-rounded approach to screen time management that values both academic engagement and social-emotional well-being (Hastie, 2022:21; Ponti et al., 2017:461-468; Webb, 2023). This is exemplified by the following quotes:

*“The times change. During the school week, we naturally limit their time, and during the weekends, we just feel because it's weekend, they can get a bit more time”. (Participant 5)*

*“Because she gets home at five, there's little time for her to have screen time, so during the school week, she only gets an hour every day after school. She can either split the hour up or do a straight hour. From Friday to Sunday, she has more screen time”. (Participant 3)*

*“So, at school time, they don't have a phone at all. On weekends, they will use their phones just to watch movies or maybe talk to their cousins. But at school times, there are no phones, only when it's holidays”. (Participant 4)*

*“During the week, I don't allow screen time after eight pm. And then during weekends, they can have screen time a little bit later like 10 pm, or whenever they feel like going to sleep. Usually, it's around 10 pm when they go to bed, which are on Fridays and Saturdays”. (Participant 5)*

*“And they are not allowed to go on their tablets during the week, so only weekends”. (Participant 6)*

Two participants mentioned that they did not have established rules regarding their child's screen time.

*“Currently, there are no rules except for her not being allowed to take her phone to school”. (Participant 2)*

*“Like I said, during the week she has an hour where she can watch whatever she wants to, whether it's YouTube or Netflix. And then, if necessary, they do not always get homework, but if they do get assignments, then she will use it for that. There are no real rules because she's not overindulging, but if she would, then I will put rules in place. But for now, the hour a day for the week, that's the only rule that we have”. (Participant 3)*

The difference between having no rules and having strict rules emphasises the significant role of parental guidance in shaping children's screen time consumption and its influence on their emotional and social well-being. Not having rules about screen time because a child is not excessively using screens can be beneficial and potentially problematic, depending on the circumstances. If a child naturally limits their screen time, it indicates good self-regulation, but without any guidelines, the child might gradually increase screen time. Conversely, parents who enforce strict screen time rules often limit their children's device usage, promoting a healthier balance between screen time and other activities. This structured approach can result in better emotional regulation, improved social skills, and an enhanced ability to concentrate on non-digital tasks. Children in these environments may also develop healthier habits and a greater appreciation for offline activities and interactions.

Two participants mentioned designating a specific timeframe for their children's screen time schedule.

*“Yes, because we’re at home during weekends. So, while they are not being limited, they are aware that they should use their time wisely. We still usually limit it to two hours max”.* (Participant 1)

A couple of participants mentioned employing consequences and adjustments as their approach to managing screen time. Participants took away privileges as a disciplinary measure for incomplete homework, directly linking screen time to behaviour management. They also took a proactive approach during exams by physically removing access to the television to minimise distractions and prioritise academic focus.

*“My husband and I will punish them by maybe reducing television time if they fail to do something, or maybe take something away from them if they didn’t do their homework”.* (Participant 1)

*“What my husband and I did was remove the TV because we are currently going through exams, so we unplugged the TV and put it in another room”.* (Participant 6)

This approach supports children in prioritizing academic responsibilities and managing screen time effectively, reducing distractions during crucial periods like exams. By doing so, children can allocate more time and focus to face-to-face interactions and activities with peers, fostering improved social skills, communication abilities, and a healthier balance between online and offline interactions.

#### **4.3.5.3 Parental supervision**

Research indicates that parents play a crucial role in regulating their child's screen time by implementing behavioral control at home through monitoring and setting rules (Jones et al., 2020:5449; Saunders & Parent, 2017:1-6). In a self-reported questionnaire, parental supervision was defined as the practices parents use to manage their child's screen use, such as limiting screen time, overseeing content, and co-viewing. Co-viewing refers to interacting with the child while watching content together and discussing it (John et al., 2021:73).

A study by Gentile, Reimer, Nathanson, Walsh, and Eisenmann (2014) highlights four key types of parental supervision that promote healthy screen habits in children:

1. Co-viewing with the child,
2. Limiting screen time,
3. Restricting content, and
4. Active mediation.

This includes offering opinions on media content, educating about media purposes such as advertising, and encouraging the practical application of viewed content in daily life. Despite only two caregivers monitoring the content of screen time, participants emphasised their oversight of their children's screen time and its importance, employing strategies such as encouraging other activities, implementing restrictions, and offering incentives to foster a balanced lifestyle that supported overall development.

*“I always check what she watches, and the stuff she’s interested in are positive things”.* (Participant 3)

*“For my child, it is positive because we as parents still have control over it. We haven’t found something to worry about yet”.* (Participant 1)

Not applying parental supervision may suggest that participants trust their child's judgment regarding age-appropriate content or are unaware of the potential risks or benefits of specific content. It's crucial to monitor a child in middle childhood's screen time content to ensure they encounter age-appropriate material that matches their developmental stage. This oversight helps prevent exposure to inappropriate or harmful content, encourages responsible digital behavior, and fosters positive social and emotional growth.

#### **4.3.5.4 Helpful strategies**

The American Academy of Paediatrics (AAP) and the World Health Organisation (WHO) recommend limiting screen use to less than one hour daily for children aged two to five years. This emphasises the importance of selecting high-quality programmes, supervising viewing, and co-viewing with the child (John et al., 2021:73). Participants were asked what they considered as helpful strategies or resources that parents could use in the development of healthy screen habits and to maintain positive social interactions with friends and family. The following responses were received.

*“I would say that you need to be actively involved and not just leave your kid alone with whatever they are doing”.* (Participant 1)

*“I would suggest that parents create a schedule for their child that stipulates the time for being on the phone, studying, and watching TV”.* (Participant 2)

*“So, I think it starts from a young age to minimize screen time, and as they grow older, you can give them appropriate time limits for screen time. And I think communication is also very important. If you can communicate with your child in a positive way, they will understand the negative effects of screen time and be aware of that”.* (Participant 3)

*“You must have a programme for your kids, mostly the youngest”.* (Participant 4)

*“I definitely think that having a set of rules and a balanced screen time schedule helps”.* (Participant 5)

*“I think you have to make the rules, but you also have to implement it; you can’t just say let’s do this, and not implement it”.* (Participant 6)

Overall, participants unanimously agreed on the importance of establishing clear rules and maintaining a balanced screen time schedule, with participant five underscoring the critical need to establish and consistently enforce these rules. Participant three stressed the significance of an early start to reducing screen time and progressively introducing suitable limits as children mature. Creating a structured schedule reflects advice found in the literature that encourages establishing clear boundaries and routines for screen time to foster healthy habits and balanced use of digital devices (Hastie, 2022:21; Jones et al., 2020:5449; Parent, 2017; Ponti et al., 2017:461-468; Saunders & Webb, 2023).

#### **4.4 CONCLUSION**

This chapter outlines the primary discoveries of the research investigation, encompassing the biographical details of the participants as well as insights into participants’ experiences of how screen time affects their children in the intermediate phase’s social interaction. These observations were organized into themes and sub-themes, as explained in this chapter. In conclusion, the participants understood screen time, acknowledging its positive and negative effects. They used personalized strategies to regulate their children’s screen time, emphasising the importance of strong family bonds and healthy social interactions.

The COVID-19 pandemic notably impacted children’s screen time, prompting caregivers to adapt by using screens for educational purposes and maintaining social connections. Recognising these complexities, caregivers aimed to strike a balance that supports their children in middle childhood's growth and social interaction in the

digital era. Furthermore, the participants' responses emphasised effective approaches for managing children's screen time, promoting healthy media use habits, and fostering positive social interactions.

The subsequent chapter presents the conclusion and summary of findings, connecting these to the research aim and objectives. This is followed by a presentation of recommendations derived from the research.

## CHAPTER 5: KEY FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

### 5.1 INTRODUCTION

This chapter presents the conclusions drawn from the study. These were linked to the goals and objectives, highlighting whether these have been achieved and their relevance in answering the research question. The final section of this chapter provides recommendations for social work practice and future research into this topic.

### 5.2 SUMMARY

The following section provides a summary of the goal, objectives, and research question of the study, including the extent to which each of them was reached.

#### 5.2.1 Research goal

The study's goal was to explore and describe the experiences of South African caregivers of the effects of screen time on the social interaction of their children in the intermediate phase.

#### 5.2.2 Objectives of the study

The following section will evaluate the objectives of the study in terms of how each objective was reached.

##### **5.2.2.1 Objective 1: To explore and describe the positive and negative experiences of caregivers in Paarl of the effects of screen time on their children in the intermediate phase.**

As demonstrated in the literature review in Chapter 2, screen time has both positive and negative effects on children's social interaction in the intermediate phase. The positive effects of screen time include gaining exposure to new ideas and skills through TV programmes, as well as developing computer literacy skills by playing computer and video games. The negative effects of screen time on children are linked to attention deficits, behavioural issues, cognitive delays, and health problems like obesity and insomnia. It also increases the risks of cyberbullying, exposure to

explicit content, internet addiction, mental health issues, such as anxiety, and reduces valuable real-life social interactions essential for skills development (Domingues-Montanari, 2017:333-334; Gurvich et al., 2021; Hudimova, 2021; Lodha & De Sousa, 2020; Munsamy et al., 2022:2; Sigman, 2012:935).

The research results in Chapter 4, Section 4.3.4, and subsections 4.3.4.1 and 4.3.4.2 prove that the objective was reached by focusing on the positive and negative effects of screen time from the perspective of six caregivers of children in the intermediate phase. The six participants experienced the following positive effects:

- Screen time is effective for tasks such as homework or viewing educational content, and
- Is a means of connection with their peers.

Conversely, the six participants observed these negative effects:

- Distraction, irritation, overindulgence in usage, procrastination, and
- Signs of disconnection and antisocial behaviour.

When examined through the lens of Bronfenbrenner's (1994) Ecological Systems Theory, these findings highlight the complex interplay between the child and their environment. Screen time influences the microsystem, particularly the immediate settings of home and school, where caregivers observe both constructive and disruptive behaviours. The mesosystem, the interaction between home and school, can be impacted when screen time affects academic performance and learning habits. The exosystem, including media and technology industries, indirectly influences the child through the content and platforms they consume, which caregivers have little control over. Finally, the macrosystem, encompassing societal norms and cultural values, reflects the growing normalisation of digital media in everyday life, which shapes how screen time is perceived and managed within families.

The findings regarding the negative impact of screen time on children align with the literature review discussed earlier. In consideration, the objective was reached.

### **5.2.2.2 Objective 2: To explore and describe how the use of screen time has affected the social interaction of children in the intermediate phase in Paarl.**

The literature review highlights that social interaction in middle childhood is crucial in helping children understand and navigate the complexities of social relationships. Research studies indicate that screen time in children is linked to social disconnection, as it reduces the time spent interacting in person with peers, siblings, and adults thereby compromising their social interactions and relationships (Louw & Louw, 2017:274; Paulich et al., 2021:1). Furthermore, the COVID-19 pandemic has profoundly affected how families and children engage with technology (Buthaina & Mohamed, 2020:164-165; Irwin et al., 2022; Kanekar & Sharma, 2020; Ruba & Pollak, 2020).

The research results in Chapter 4, Section 4.3.2, and subsections 4.3.2.3 and 4.3.3.1 prove that the objective was reached as the six participants described how screen time had affected the social interaction of their children. The participants indicated that their children used screen time to communicate with friends. Additionally, participants noted that due to COVID-19, their children's screen time has increased. The children were more inclined to use screens to connect with their friends, complete school tasks, and for entertainment purposes.

These findings align with Vygotsky's Social Interaction Theory, which emphasises that social interaction is fundamental to cognitive development. According to Vygotsky, learning occurs through meaningful interaction with more knowledgeable others in a social context. In this case, while screen time facilitated some level of social interaction, particularly during the COVID-19 pandemic, it also replaced valuable face-to-face interactions that are essential for social and emotional learning. The shift from in-person to digital interaction may limit opportunities for children to engage in the kinds of reciprocal, guided exchanges that foster social competence and higher-order thinking skills. Therefore, while digital communication can support social development to some extent, the findings underscore the importance of maintaining a balance, ensuring that screen-based interactions do not replace the rich, relational experiences crucial for holistic development in middle childhood. The findings on how screen time use impacts the social interactions of children in the

intermediate phase are consistent with the literature discussed earlier. In consideration, the objective was reached.

### **5.2.2.3 Objective 3: To explore and describe measures promoted by caregivers to engage children in the intermediate phase in social interaction with friends and family in Paarl.**

According to the literature review, caregivers are to take a more balanced approach to screen time, encouraging children to engage in other activities, such as outdoor play, socialising with friends and family, and hobbies and interests. Furthermore, the importance of setting limits on screen time, regarding both duration and content underscores the need for caregivers to be mindful of the negative effects associated with excessive screen time (Cohen, 2018; Hu et al., 2020; Munsamy, et al., 2022; Pandya & Lodha, 2021; Sigman, 2012:938).

The research results in Chapter 4, Section 4.3.5, and subsections 4.3.5.1 to 4.3.5.4 prove that the objective was reached. The six participants indicated that they encouraged their children to participate in alternative physical and social activities, and managed time spent on screens by establishing clear rules and maintaining a balanced screen time schedule for their children. These findings reflect proactive caregiver involvement in fostering real-life social interaction, aligning closely with both Vygotsky's and Bronfenbrenner's theoretical frameworks.

From Vygotsky's Social Interaction Theory perspective, caregivers play a crucial role as mediators in children's learning and development by creating environments rich in social interaction. By limiting screen time and encouraging interpersonal engagement, caregivers support the kind of meaningful, guided interaction that Vygotsky saw as essential for cognitive and social development within a child's Zone of Proximal Development (ZPD).

Similarly, Bronfenbrenner's Ecological Systems Theory highlights how the various layers of a child's environment interact to shape development. The caregiver's role within the microsystem, the child's immediate environment, proves central in moderating screen time and promoting real-world engagement. Moreover, caregiver strategies are influenced by and also influence other systems, such as the

mesosystem (e.g., home–school dynamics) and macrosystem (e.g., cultural norms regarding technology use). The alignment between caregiver practices and the broader system of influences reinforces the importance of contextual, system-aware approaches to managing screen time in children’s lives.

In light of these findings, it is evident that the strategies employed by caregivers not only address concerns raised in the literature but also support the child’s social and cognitive development in ways that are consistent with both Vygotsky’s and Bronfenbrenner’s theories.

### **5.2.3 Research question**

The research question is as follows:

*“How do caregivers in Paarl, Western Cape experience the effects of screen time on the social interactions of their children in the intermediate phase?”*

The research question was answered by conducting empirical research through semi structured qualitative one-on-one interviews with caregivers caring for children in the intermediate phase in Paarl, Western Cape. Interviews were conducted with six participants who met the inclusion criteria. The collected data was analysed and is detailed in Chapter 4 of this study. Key findings, conclusions and recommendations regarding each theme are also provided in section 5.3.4 below.

## **5.3 KEY FINDINGS, CONCLUSIONS AND RECOMMENDATIONS**

The following section provides the key findings, conclusions, and recommendations relating to all the themes that emerged from the study. Please refer to Table 2 for a list of all the themes and sub-themes identified during data analysis.

### **5.3.4.1 Social interaction**

The first theme focused on the social interaction of children in the intermediate phase.

#### **5.3.4.1.1 Key findings**

The key findings indicate that all participants valued quality family time as essential for nurturing strong bonds and supporting their children's social development. Children from households with multiple siblings often engaged in shared activities, which served as a natural environment for learning and social growth. Participants also noted that their children had active social lives, interacting with peers at school, during play dates, and at home. These social interactions involved a range of activities, including pretend play, sports, drawing, and dancing. Additionally, even during peer gatherings, children continued to engage in screen-based activities such as watching movies, playing video games, and using social media or educational applications, reflecting a blend of physical and digital play.

#### **5.3.4.1.2 Conclusions**

The researcher concluded that children's social development was supported through family bonding, sibling interaction, and diverse peer activities, with screen time complementing both physical and social play.

#### **5.3.4.2 Utilisation of screen time**

This theme focused on how children in the intermediate phase utilised screen time.

##### **5.3.4.2.1 Key findings**

Participants indicated that their children used screen time to assist with and complete schoolwork and found it to be a valuable educational tool. They further indicated that their children used screen time to connect with friends, and they, in turn, were able to connect with their children when they were apart from each other. Furthermore, participants highlighted screen time as a primary source of entertainment for their children.

##### **5.3.4.2.2 Conclusions**

The researcher concludes that screen time serves as a valuable tool for children's education, social interaction, and entertainment. They also find that it helps maintain parent-child connections when physically apart.

### **5.3.4.3 The impact of COVID-19 on children's screen time**

This theme focused on the impact of COVID-19 on children in the intermediate phase screen time.

#### **5.3.4.3.1 Key findings**

Participants had to home-school their children during the COVID-19 pandemic. They indicated that their children used screen time mainly to complete schoolwork and to communicate and connect with friends during the COVID-19 pandemic. The caregivers noted that because their children had to stay indoors and had limited activities, they used screen time to keep busy and entertain themselves. They observed an increase in their children's screen time during the COVID-19 pandemic. Their children were watching television more and spending increased time on their cell phones chatting with peers. Participants indicated that children preferred watching television or spending time on their phones to having conversations with their parents.

#### **5.3.4.3.2 Conclusions**

The researchers conclude that during the COVID-19 pandemic, screen time increased significantly as children relied on it for education, social connection, and entertainment. However, caregivers observed a shift in children's preferences toward screens over direct family interaction.

### **5.3.4.4 Effects of screen time**

This theme focused on the effect of screen time on children in the intermediate phase.

#### **5.3.4.4.1 Key findings**

The caregivers experienced both the positive and negative effects of screen time. Participants observed that when their children were engaged in screen time activities, they often became distracted, irritated, exhibited overindulgence in usage, procrastinated, and showed signs of disconnection and antisocial behaviour. Additionally, some children preferred screen interactions over face-to-face

socialisation, particularly in unfamiliar settings, leading to increased shyness and social withdrawal.

#### **5.3.4.4.2 Conclusions**

The researchers conclude that while screen time offered certain benefits, caregivers also observed negative effects such as distraction, overuse, and reduced social interaction. These behaviours contributed to increased shyness, social withdrawal, and a preference for screen-based interactions over face-to-face engagement. These findings highlight the importance of mindful screen time management and the need for balanced digital habits to support healthy emotional and social growth in children.

#### **5.3.4.5 Balancing screen time**

This theme focused on measures that caregivers put in place to assist their children in balancing their screen time use.

##### **5.3.4.5.1 Key findings**

The key findings reveal that participants employed various strategies to manage their children's screen time effectively. Three of the six participants promoted alternative activities to encourage social interaction and maintain balance. All participants restricted screen time during the school week, while adopting a more flexible approach on weekends, viewing it as an opportunity for relaxation and online social engagement. Some caregivers linked screen time to behaviour management by removing privileges for incomplete homework or limiting access to screens during exams to reduce distractions. While only two participants monitored content, all emphasised the importance of oversight, using a mix of restrictions, incentives, and activity alternatives. There was unanimous agreement on the value of establishing clear, consistent rules and structured routines, with particular emphasis on starting early and gradually introducing appropriate limits to foster healthy and balanced screen use.

##### **5.3.4.5.2 Conclusions**

The researcher concludes that technology, particularly screen time, is becoming an integral part of the lives of children. Screen time plays a significant role not only in

education but also in how children engage with the world socially and recreationally. With screen time becoming increasingly embedded in the daily lives of children, there is a growing need for awareness and guidance for parents, caregivers, and educators to manage its use effectively. Furthermore, effective screen time management necessitates active parental involvement.

## **5.4 RECOMMENDATIONS**

Based on the key findings and conclusions, this section provides recommendations for social work services in supporting South African families with children in the intermediate phase to manage screen time and improve social interactions. It provides recommendations for policy development addressing screen time management for children and recommendations for future research.

### **5.4.1 RECOMMENDATIONS FOR SOCIAL WORK SERVICES IN SUPPORTING SOUTH AFRICAN FAMILIES WITH CHILDREN IN THE INTERMEDIATE PHASE TO MANAGE SCREEN TIME AND IMPROVE SOCIAL INTERACTION**

Social work services should create and offer educational programmes for parents and caregivers that focus on the effects of screen time and provide practical management strategies. These programmes should cover topics like setting screen time limits, choosing appropriate content, and balancing digital and non-digital activities, while also providing a platform to address the social and developmental needs of children.

Social work services can provide families with the resources and tools for monitoring and managing screen time, including applications for tracking usage, guidelines for content selection, and recommendations for engaging in non-digital activities. Additionally, social work services can offer individual counselling to families facing screen time challenges, focusing on tailored strategies to address their specific issues and needs. This may involve assisting families in creating structured routines that balance digital and non-digital activities and strengthening family relationships and bonds.

Social work services can collaborate with schools to incorporate screen time management into the curriculum and ensure consistent messaging to students and parents about the importance of balanced technology use. Furthermore, social work services can conduct community outreach to increase awareness about the effects of screen time and support community-based initiatives that foster active and social lifestyles for children in the intermediate phase.

#### **5.4.2 RECOMMENDATIONS FOR POLICY DEVELOPMENT ADDRESSING SCREEN TIME MANAGEMENT FOR CHILDREN IN THE INTERMEDIATE PHASE**

Policy development should include provisions for creating and enforcing national or regional guidelines on screen time limits and content appropriateness for children in the intermediate phase. These guidelines should be evidence-based and consider the developmental needs of children. The policy should integrate screen time management education into the school curriculum to enhance children's awareness of healthy technology use.

Additionally, policy development should allow schools to offer resources and training for both learners and parents. The researcher recommends a policy framework that regulates the types of content accessible to children and enforces age restrictions on digital media. Additionally, the framework should support the development of programmes and resources for parents and caregivers, including workshops, toolkits, and counselling services focused on effective screen time management. Furthermore, the policy framework should emphasise the importance of combining screen time with physical activity, social interaction, and academic responsibilities. Policy development should encourage collaboration between government agencies, educational institutions, healthcare providers, and technology companies to develop comprehensive strategies for managing screen time and supporting children's well-being.

#### **5.4.3 RECOMMENDATIONS FOR FUTURE RESEARCH**

Additional research is necessary to examine the long-term impact of excessive screen time on the social-emotional development of children in the intermediate

phase, as well as family dynamics. Gaining insight into these effects will aid in creating more effective strategies for managing screen time to support healthy development. Furthermore, since this study involved a small sample, future research should include samples from diverse populations from various socio-economic backgrounds, urban and rural areas, and different cultural settings to obtain a comprehensive understanding of the effects of screen time on the social interactions of children across different contexts in South Africa.

### **5.5 LIMITATIONS OF THE STUDY**

A significant limitation of this study is the small sample of six participants, including only one male, all from the same town. This restricts the study's ability to capture broader contextual and population-specific differences across South Africa and does not adequately reflect the country's diversity, limiting the generalizability of the results.

### **5.6 FINAL CONCLUDING REMARKS**

In conclusion, this study highlights the complex role of screen time in children's lives, encompassing educational, social, and recreational dimensions. While caregivers recognise the benefits of digital engagement for learning and social connection, they also acknowledge the challenges related to overuse, behavioural impacts, and reduced face-to-face interactions. Effective management strategies, including clear rules, structured routines, and promotion of alternative activities, are essential to fostering a balanced approach that supports children's overall development. Ultimately, establishing early and consistent boundaries around screen use can help maximise its positive potential while minimising negative effects, ensuring that screen time remains a healthy and integrated part of children's daily lives.

## REFERENCES

Adler, E.S., & Clark, R. 2015. *An invitation to social research - how it is done*. 5<sup>th</sup> ed. Cape Town: Cengage Learning.

Aigba, S. R., Paul, O., Lamarque, M., & Sall, B. 2020. *African children vulnerabilities in COVID-19 era: A review*. *African Journal of Reproductive Health*, 24(2), 154–171. <https://doi.org/10.29063/ajrh2020/v24i2s.19>.

Allen, M. S., Walter, E. E., & Swann, C. 2019. Sedentary behaviour and risk of anxiety: A systematic review and meta-analysis. *Journal of Affective Disorder*, 242:5–13.

Anuradha, B. 2019. Screen time. *Journal of Tropical Paediatrics*, 65(2):105-106.

Arnett, J.J., & Maynard, A.E. 2013. *Child development. A cultural approach*. 1<sup>st</sup> ed. Boston: Pearson.

Ashton, J., & Beattie, R. M. 2017. *Screen time in children and adolescents: is there evidence to guide parents and policy?* *The Lancet Child & Adolescent Health*, 1(2):77-79.

Babbie, E. 2017. *The basics of social research*. 7th ed. Boston, MA: Cengage Learning.

Babbie, E., & Mounton J. 2001. *The practice of social research*. 9<sup>th</sup> ed. Oxford: South Africa.

Balton, S., Uys, K., & Alant, E. 2019. *Family-based activity settings of children in a low-income African context*. *African Journal of Disability*, 8, 1–14. doi: <https://doi.org/10.4102/ajod.v8i0.364>

Beech, M. 2022. *COVID-19 pushes up internet use 70% and streaming more than 12%, first figures reveal*. doi:

<https://www.forbes.com/sites/markbeech/2020/03/25/covid-19-pushes-up-internet-use-70-streaming-more-than-12-first-figures-reveal/?sh=52f8d7843104> Accessed on: 25 April 2024.

Bergmann, H. Bergmann, G., Castro, L., & Soriano, R. 2021. *Young children's screen time during the first COVID-19 lockdown in 12 countries*. *European Journal of Paediatrics*, 180(9):2721-2727.

Berk, L.E. 2018. *Development through the lifespan*. 7th ed. Hoboken, NJ: Pearson Education.

Bless, C., Higson-Smith, C. & Sithole, S. L. 2013. *Fundamentals of social research methods: An African perspective*. 5th ed. Cape Town: Juta & Company.

Braun, V., & Clarke, V. 2006. *Using thematic analysis in psychology*. *Qualitative research in psychology*, 3(2): 77-101.

Bronfenbrenner, U. 1994. *Ecological model of human development*. *International Encyclopaedia of Education*, vol.3, 2<sup>nd</sup> ed. Oxford: Elsevier.

Bruce, B., & Hansson, K. 2011. *Promoting peer interaction. Autism Spectrum Disorders - From genes to environment*. doi: <https://doi.org/10.5772/20034>.

Buthaina, A.B., & Mohamed, E.M. 2020. *The impact of COVID-19 on children – Parent's perspective*. *International Journal of Nutrition, Pharmacology, Neurological Diseases* 10(3):164-165.

Candilas, K.S. & Casas, K.C. 2023. *Google Classroom: Defining its role as learning management system*. *British Journal of Multidisciplinary and Advanced Studies: Engineering and Technology*, 4(4), pp.58–74.

Cao, H., Qian, Q., Weng, T., Yuan, C., Sun, Y., Wang, H., & Tao, F. 2011. *Screen time, physical activity and mental health among urban adolescents in China*.

Preventive Medicine, 53(5–6), 316–320. doi:  
<https://doi.org/10.1016/j.ypmed.2011.09.002>

Card, M. 2014. *Developmental psychology*. Hampshire, United Kingdom. Cengage Learning.

Carr, A. 2017. Social and emotional development in middle childhood. In: Skuse, D., Bruce, H., & Dowdney, L. (Ed.). *Child psychology and psychiatry- frameworks for clinical training and practice*. 3<sup>rd</sup> ed. John Wiley & Sons, Ltd.

Chapman, G. & Pellicane, A. 2020. *Screen kids: 5 relational skills every child needs in a tech-driven world*. Moody Publishers.

Chauhan, P., Sharma, N., & Sikka, G. 2021. *The emergence of social media data and sentiment analysis in election prediction*. *Journal of Ambient Intelligence and Humanized Computing*, 12:2601-2627.

Cherry, K. 2022. *What Is Sociocultural Theory?*. <https://www.verywellmind.com/what-is-sociocultural-theory-2795088> Accessed on: 21/02/2023.

Chung, J. M., Hutteman, R., van Aken, M. A. G., & Denissen, J. J. A. 2017. *High, low, and in between: Self-esteem development from middle childhood to young adulthood*. *Journal of Research in Personality*, 70:122–133.

Clair, B. 2023. *Reconsidering screen time: Research, reason, & real life*. [https://www.lucieslist.com/guides/Screen\\_time-kids-research/#gref](https://www.lucieslist.com/guides/Screen_time-kids-research/#gref) Accessed on: 22/02/2023.

Clarke, V., Braun, V. & Hayfield, N. 2015. Thematic analysis. In Smith, J.A. (Ed). *Qualitative psychology: a practical guide to research methods*. 3<sup>rd</sup> ed. London: SAGE.

Cohen, D. 2018. *How the child's mind develops*. 3<sup>rd</sup> ed. New York: Routledge.

Cooper, K., & White, R.E. 2012. *Qualitative research in the post-modern era: Contexts of qualitative research*. Dordrecht: Springer.

Corlett, S., & Mavin, S. 2018. Reflexivity and researcher positionality. In Cassell, C., Cunliffe, A.L., & Grandy, G. (Eds). *Handbook of qualitative business and management research methods*. London: SAGE Publications.

Council on Communications and Media. 2016. *Media and young minds*. Paediatrics, 138(5):1-6.

Cresswell, J.W. 2013. *Qualitative inquiry and research design. Choosing among five approaches*. London: SAGE.

Crowe, S., Cresswell, K., Robertson, A., Huby, G., Avery, A. & Sheikh, A., 2011. The case study approach. *BMC medical research methodology*, 11(1):1-9.

Cummings, E. M., & Karraker, K. H. 2016. Life-span developmental psychology: Personality and socialization. In R. M. Lerner (Ed.). *Handbook of child psychology and developmental science, cognitive processes*. 7<sup>th</sup> ed. Hoboken: John Wiley & Sons.

De Vos, A.S., Strydom, H., Fouche, C.B., & Delpont, C. 2011. *Research at grass roots: For the social science and human services professions*. Pretoria: Van Schaik Publishers.

Department of Basic Education. 2012. *Regulations pertaining to the National Curriculum Statement Grades R-12*. (Notice 1114 of 2012). Government Gazette, 36041, 28 Dec.

Department of Basic Education. 2021. *Initial teacher education*. <https://www.education.gov.za/Informationfor/Teachers/InitialTeacherEducation.aspx>  
Accessed on: 20/02/2023.

Department of Social Development. 2021. *Revised White Paper on Families in South Africa*. Polokwane: Department of Social Development.

Desai, R., & Burton, P. 2022. Child adolescent mental health and the digital world: A double-edged sword. In Tomlinson, M., Kleintjies, S., & Lake, L. (Eds.). *South African Child Gauge 2021/2022*. Cape Town: Children's Institute, University of Cape Town.

Domingues-Montanari, S. 2017. *Clinical and psychological effects of excessive screen time on children*. *Journal of Paediatrics and Child Health*, 53(4):333-338.

Dooms, T. & Chutel, L.E., 2023. *Coloured : How classification became culture*. Johannesburg: Jonathan Ball Publishers.

Dunckley, V. L. 2015. *Reset your child's brain: A four-week plan to end meltdowns, raise grades, and boost social skills by reversing the effects of electronic screen time*. New World Library.

Education Statistics in South Africa in 2014. Published in March 2016. <https://www.education.gov.za/Portals/0/Documents/Publications/Education%20Statistics%202014.pdf?ver=2016-05-13-144159-067> Accessed on:06/04/2023.

Erikson, E. H. 1950. *Childhood and society*. New York: W. W. Norton & Company.

Gentile, D. A., Choo, H., Liau, A., Sim, T., Li, D., Fung, D. & Khoo, A., et al. 2011. *The effects of pathological video-game use on adolescent health*. *Pediatrics*, 127(2), pp. e319-e329. doi: <https://doi.org/10.1542/peds.2010-1353>.

Gentile, D. A., Nathanson, A. I., & Rasmussen, E. E. 2011. *Media content and parental mediation: Predicting children's aggression and empathy*. *Journal of Applied Developmental Psychology*, 32(6), 340-351. doi: <https://doi.org/10.1016/j.appdev.2011.10.002>

Gentile DA, Reimer RA, Nathanson AI, Walsh DA, Eisenmann JC. 2014. *Protective effects of parental monitoring of children's media use: a prospective study*. JAMA Pediatr.;168(5):479–84.

Guernsey, L. 2007. *Into the minds of babes: How screen time affects children from birth to age five*. New York: Basic Books.

Gurvich, C., Thomas, N., Thomas, E. H., Hudaib, A. R., Sood, L., Fabiatos, K., & Kulkarni, J. 2021. *Coping styles and mental health in response to societal changes during the COVID-19 pandemic*. *International Journal of Social Psychiatry*, 67(5):540-549.

Hastie, M. 2022. *Setting limits on screen time for children (6-to-12 years): The integral role of parents and educators*. F1000Research, 11(1), 21. doi: <https://doi.org/10.12688/f1000research.75661.1>.

Henderson, D. A., & Thompson, C. L. 2016. *Counselling children*. 9<sup>th</sup> ed. Boston, MA: Cengage Learning.

Hilton, T.D., Fawson, P.R., Sullivan, T.J. & DeJong, C.R. 2019. *Applied social research: A tool for the human services*. 10th Ed. New York: Springer Publishing Company.

Hollingsworth, H. L., & Buysse, V. 2009. *Establishing friendships in early childhood inclusive settings: What roles do parents and teachers play?* *Topics in Early Childhood Special Education*, 29(3):163-173.

Holmes, A.G.D. 2020. *Researcher positionality - A consideration of its influence and place in qualitative research - A new researcher guide*. *Shanlax International Journal of Education*, 8(4):1-10.

Hoppler, S.S., Segerer, R., & Nikitin, J. 2022. *The six components of social interactions: Actor, partner, relation, activities, context, and evaluation*. *Frontiers in Psychology*, 12. doi:10.3389/fpsyg.2021.743074.

Howe, N., Recchia, H., Kinsley, C. 2023. *Sibling Relations and Their Impact on Children's Development*. Department of Education and Centre for Research in Human Development, Concordia University, Canada, 2nd rev. ed.

Hu, B.Y., Johnson, G.K., Teo, T. & Wu, Z. 2020. *Relationship between screen time and Chinese children's cognitive and social development*. Journal of Research in Childhood Education, 34(2):183-207. doi: 10.1080/02568543.2019.1702600.

Huang, S., Lai, X., Zhao, X., Dai, X., Yao, Y., Zhang, C., & Wang, Y. 2021. *Beyond screen time: Exploring the associations between types of smartphone use content and adolescents' social relationships*. International Journal of Environmental Research and Public Health, 18(9):4521.

Hudimova, A. 2021. *Adolescent involvement in social media: Before and during Covid-19 pandemic*. International Journal of Innovative Technology in Social Science, 1(29).

Irwin, M., Lazarevic, B., Soled, D., & Adesman, A. 2022. *The COVID-19 pandemic and its potential enduring impact on children*. Curr Opin Pediatr, 34(1):107-115.

John, J.J., Joseph, R., David, A., Bejoy, A., George, K.V. & George, L. 2021. *Association of screen time with parent-reported cognitive delay in preschool children of Kerala, India*. BMC Pediatrics, 21, p.73. doi: <https://doi.org/10.1186/s12887-021-02585-7>.

Jones, R.A., Hinkley, T., Watson, E.D., Twine, R., Kahn, K., Norris, S.A. & Draper, C.E. 2020. *Screen time and sleep of rural and urban South African preschool children*. International Journal of Environmental Research and Public Health, 17(15), p.5449. doi: <https://doi.org/10.3390/ijerph17155449>.

Jordan, A.B. 2005. *Learning to use books and television: An exploratory study in the ecological perspective*. American Behavioral Scientist, 48(5), 523–538. doi: <https://doi.org/10.1177/0002764204271513>.

Kanekar, A., & Sharma, M. 2020. *COVID-19 and mental well-being: Guidance on the application of behavioral and positive well-being strategies*. *Healthcare*, 8(3):336.

Kaye, L., Orben, A., Ellis, D., Hunter, S., & Houghton, S. 2020. *The conceptual and methodological mayhem of “screen time.”* *International Journal of Environmental Research and Public Health*, 17(10):3661.

Kramer L. 2014. *Learning emotional understanding and emotion regulation through sibling interaction*. *Early Education and Development*. 25(2):160-184. doi:10.1080/10409289.2014.838824.

Kumar, R. 2011. *Research methodology: a step-by-step guide for beginners*. 3<sup>rd</sup> ed. London: SAGE.

Kuss, D. J., & Griffiths, M. D. 2017. *Social networking sites and addiction: Ten lessons learned*. *International Journal of Environmental Research and Public Health*, 14(3), 311. doi: <https://doi.org/10.3390/ijerph14030311>.

Lamb, M. E., & Lewis, C. 2011. *The role of parent-child relationships in child development*. In: Lamb, M. E. (Ed.). *Social and personality development: An advanced textbook*. New York: Psychology Press.

Leedy, P.D., & Ormrod, J.E. 2013. *Practical research: planning and designing*. 10<sup>th</sup> ed. New Jersey: Pearson Education.

Liben, L. S., Müller, U., & Lerner, R. M. 2015. *Handbook of child psychology and developmental science: Cognitive processes* (7th ed.). John Wiley & Sons, Inc..

Lietz, C.A., & Zayas, L.E. 2010. *Evaluating qualitative research for social work practitioners*. *Advances in Social Work*, 11:188-202.

Little, W. 2016. *Introduction to Sociology*. 2<sup>nd</sup> Canadian edition. Canada: Bc campus.

Lodha, P., & De Sousa, A. 2020. Mental health perspective of Covid-19 and the emerging role of digital mental health and telepsychiatry. *Archives of Medicine and Health Sciences*, 8(1):133.

Louw, D., & Louw, A. 2014. *Child and adolescent development*. Bloemfontein: Psychology Publications.

Louw, D., & Louw, A. 2017. *Child and adolescent development*. 2<sup>nd</sup> ed. Psychology Publications: University of Free State.

Louw, D. & Louw, A. 2019. *Human development for students in South Africa*. Haga: Psychology Publications.

Mahaye, N.E. 2020. The impact of COVID-19 pandemic on education: Navigating forward the pedagogy of blended learning. *Academia.edu*. doi: [https://www.academia.edu/42842598/The\\_Impact\\_of\\_COVID\\_19\\_Pandemic\\_on\\_Education\\_Navigating\\_Forward\\_the\\_Pedagogy\\_of\\_Blended\\_Learning](https://www.academia.edu/42842598/The_Impact_of_COVID_19_Pandemic_on_Education_Navigating_Forward_the_Pedagogy_of_Blended_Learning).

Makofane, M.D.M., & Shirindi, M.L. 2018. The importance of data collection for qualitative research in social work. In Shokane, A.L., Malhubele, J.C., & Blitz, L.V. (Eds.). *Issues around aligning theory, research, and practice in Social Work education (Knowledge pathing: multi-, inter-, and trans-disciplining in Social Sciences Series Volume 1)*. Cape Town: AOSIS.

Maree, K. (Ed.). 2019. *First steps in research*. 3rd ed. Pretoria: Van Schaik Publishers.

Mbedzi, P. P. 2019. Ecosystems. In Van Breda, A., & Sekudu, J. (Eds.). *Theories for decolonial social work practice*. Cape Town: Oxford University Press.

Mesce, M., Cerniglia, L., & Cimino, S. 2022. *Body image concerns: The impact of digital technologies and psychopathological risks in a normative sample of adolescents*. *Behavioral Sciences*, 12(8):255.

Miltsov, A., 2022. Researching TikTok: Themes, methods, and future directions. In: A. Quan-Haase & L. Sloan, eds. *The SAGE Handbook of Social Media Research Methods*. 2nd ed. SAGE, pp.664–676. doi: <https://doi.org/10.4135/9781529782943.n46>.

Munsamy, A.J., Chetty, V., & Ramlall, S. 2022. *Screen-based behaviour in children is more than meets the eye*. *South African Family Practice*, 64(1).

Muppalla S, Vuppalapati S, Reddy Pulliahgaru A, et al. 2023 Effects of Excessive Screen Time on Child Development: An Updated Review and Strategies for Management. *Cureus* 15(6): e40608. DOI 10.7759/cureus.40608.

Murray, J., Hoh, A., & McDonald, R. 2010. *Preschoolers' total daily screen time at home and by type of child care*. *The Journal of Pediatrics*, 158(2), pp.297–300. doi: <https://doi.org/10.1016/j.jpeds.2010.08.005>.

Napier, C. 2014. *How use of screen media affects the emotional development of infants*. *Primary Health Care* (2014+), 24(2), 18. doi: <http://dx.doi.org/10.7748/phc2014.02.24.2.18.e816>

Newcomer, K.E., Hatry, H.P., & Wholey, J.S. 2015. *Conducting semi-structured interviews*. *Handbook of practical program evaluation*. New York: Wiley.

Ngogi, E. 2020. *The Impact of COVID-19 Pandemic on Education: Navigating Forward the Pedagogy of Blended Learning*

Nieuwenhuis, J. 2016. *Analysing qualitative data*. In Maree, K. (Ed). *First steps in research*. 2<sup>nd</sup> ed. Pretoria: Van Schaik.

Nieuwenhuis, J. 2019. *Introducing qualitative research*. In Maree, K. (ED). *First steps in research*. 3<sup>rd</sup> ed. Pretoria: Van Schaik.

Nieuwenhuis, J. 2019. *Qualitative research designs and data-gathering techniques*. In Maree, K. (ED). *First steps in research*. 3<sup>rd</sup> ed. Pretoria: Van Schaik.

Nowell, L.S., Morris, J.M., White, D.E., & Moules, N.J. 2017. Thematic analysis: Striving to meet the trustworthiness criteria. *International journal for qualitative methods*, 16(1):1-13.

October, K.R., Petersen, L.R., Adebisi, B., Rich, E., & Roman, N.V. 2022. COVID-19 daily realities for families: A South African sample. *International Journal of Environmental Research and Public Health*, 19:221.

Olson, J.R., & Goddard, H.W. 2010. An ecological risk/protective factor approach to understanding depressive symptoms in adolescents. *The Journal of Extension*, 48(3): 1-10.

Oswald, T. K., Rumbold, A. R., Kedzior, S. G. E., & Moor, V. M. 2021. *Psychological impacts of “screen time” and “green time” for children and adolescents: A systematic scoping review*. *International Journal of Environmental Research and Public Health*, 18(3):1163.

Paciga, K., Koss, M. 2021. *Exploring Screen Time in Children’s Literature: Portrayals of the Child, the Content, and the Context*. *Illinois Reading Council Journal* 49(4):13-32  
49(4):13-32. DOI:10.33600/IRCJ.49.4.2021.13

Pandey, N., & Pal, A. 2020. *Impact of digital surge during Covid-19 pandemic: A viewpoint on research and practice*. *International Journal of Information Management*. 55: 102171.

Pandya, A., & Lodha, P. 2021. *Social connectedness, excessive screen time during COVID-19 and mental health: A review of current evidence*. *Frontiers in Human Dynamics*, 3 (684137).

Parish, M. 2014. *Social work perspectives on human behaviour*. 2<sup>nd</sup> ed. Berkshire: Open University Press.

Parker, E.C. 2016. *The experience of creating community: An intrinsic case study of four midwestern public school choral teachers*. *Journal of Research in Music Education*, 64(2):220-237.

Paulich, K.N., Ross, J.M., Lessem, J.M., & Hewitt, J.K. 2021. Screen time and early adolescent mental health, academic, and social outcomes in 9- and 10- year old children: Utilizing the Adolescent Brain Cognitive Development SM (ABCD) Study. *PLOS ONE*, 16(9).

Ponti, M., Bélanger, S., Grimes, R., Heard, J., Johnson, M., Moreau, E., Norris, M., Shaw, A., Stanwick, R., Van Lankveld, J., & Williams, R. 2017. *Screen time and young children: Promoting health and development in a digital world*. *Paediatrics & Child Health*, 22(8):461–468.

Priya, R.P., & Veena-Kumari, M. 2021. Screentime in primary school children and its associations: A cross sectional study. *International Journal of Contemporary Paediatrics*, 8(9):1528–1538.

Radesky, J. S., & Christakis, D. A. 2016. Increased screen time: Implications for early childhood development and behavior. *Pediatric Clinics*, 63(5), 827-839. <https://doi.org/10.1016/j.pcl.2016.06.006>.

Rahman, M. A., Hoque, N., Alif, S, M., Salehin, M., Islam, S. M. S., Banik, B., Sharif, A., Nazim, N. B., Sultana, F., & Cross. W. 2020. Factors associated with psychological distress, fear and coping strategies during the COVID-19 pandemic in Australia. *Globalization and Health*, 16. DOI: 10.1186/s12992-020-00624.

Ramos, A.M., Shewark, E.A., Reiss, D., Leve, L.D., Natsuaki, M.N., Shaw, D.S., Ganiban, J.M., Neiderhiser, J.M. and the Early Growth and Development Study, 2022. *Family interactions in toddlerhood influence social competence in preschool age: Accounting for genetic and prenatal influences*. *Frontiers in Psychology*, 13, p.975086. doi: <https://doi.org/10.3389/fpsyg.2022.975086>.

Rideout, V.J., & Hamel, E. 2006. *The media family: Electronic media in the lives of*

*infants, toddlers, preschoolers and their parents*. Henry J. Kaiser Family Foundation.

Ruangdaraganon, N., Limprasert, P. & Sura, T. 2009. *Television viewing in Thai infants and toddlers: Impacts on language development and parental perceptions*. *BMC Pediatrics*, 9, p.33. doi: <https://doi.org/10.1186/1471-2431-9-33>

Ruba, A.L., & Pollak, S.D. 2020. *Children's emotion inferences from masked faces: Implications for social interactions during COVID19*. *PLOS ONE*, 15(12).

Saunders, M.N.K. & Parent, R. 2017. *The influence of social media on the development of children and adolescents*. *Journal of Child and Adolescent Behavior*, 5(2), pp.1–6. doi: <https://doi.org/10.4172/2375-4494.1000370>.

Scairpon, D. A. 2021. *Digital screen time: The effects on social and emotional development of four and five-year-old children*. Pro Quest Dissertations.

September, S. J., Rich, E. G., & Roman, N. V. 2016. The role of parenting styles and socio-economic status in parents' knowledge of child development. *Early Child Development and* , 186(7):1060-1078.

Shonfeld, M., & Meishar-Tal, H. 2017. *The voice of teachers in a paperless classroom*.

*Interdisciplinary Journal of e-Skills and Lifelong Learning*, 13(1), 185–196. doi: <https://doi.org/10.28945/3899>.

Sigman, A. 2012. *Time for a view on screen time*. *Archives of Disease in Childhood* 97(10):935-942.

Singh, A., & Verma, R. 2021. *Peer relation and socialization process among children with special needs*. *International Journal of Recent Scientific Research*, 12(7):42489-42493.

Skalická, V., Hygen, B. W., Stenseng, F., Kårstad, S. B., & Wichstrøm, L. 2019. *Screen time and the development of emotion understanding from age 4 to age 8: A community study*. *British Journal of Developmental Psychology*, 37(3), 427-443. doi: <https://doi.org/10.1111/bjdp.12283>.

[org/10.1111/bjdp.12283](https://doi.org/10.1111/bjdp.12283).

South African Government. 2005. *The Children's Act No. 38 of 2005*. Pretoria: Government Printer.

Strydom, H. 2002. *Ethical aspects of research in the social sciences and human professions*. In De Vos, A.S., Strydom, H., Fouche, C.B., & Delpont, C.S.L. *Research at grass roots: For the social sciences and human service professions*. Pretoria: Van Schaik Publishers.

Strydom, H., & Delpont, C.S.L. 2011. *Sampling and pilot study in qualitative research*. In: De Vos, A.S., Strydom, H., Fouché, C.B., & Delpont, C.S.L. (Eds.). *Research at grass roots. For the social services and human service professions*. 4th ed. Pretoria: Van Schaik.

Sweetser, P., Johnson, D., Ozdowska, A., & Wyeth, P. 2012. *Active versus passive screen time for young children*. *Australasian Journal of Early Childhood*, 37(4), 94–98. doi: <https://doi.org/10.1177/183693911203700413>.

Taylor, G., Monaghan, P. & Westermann, G., 2017. *Investigating the association between children's screen media exposure and vocabulary size in the UK*. *Journal of Child Media*, 12(1), pp.1–15. doi: <https://doi.org/10.1080/17482798.2017.1365737>.

Tolan, P.H., Gorman-Smith, D., & Henry, D.B. 2003. *The developmental ecology of urban males' youth violence*. *Developmental Psychology*, 39(2):274–291.

Trainor, A., & Graue, M.E. 2013. *Reviewing qualitative research in the social sciences*. New York: Routledge.

Tsur, H., Wichstrøm, L., & Belsky, J. 2016. *Screen time and the development of emotion understanding from age 4 to age 8: A community study*. *Developmental Psychology*, 52(5), 819–830. <https://doi.org/10.1037/dev0000114>.

Twenge, J. M., & Campbell, W. K. 2018. *Associations between screen time and lower psychological well-being among children and adolescents: Evidence from a population-based study*. *Preventive medicine reports*, 12(1), 271-283.

Van Breda, A. D. 2018. *A critical review of resilience theory and its relevance for social work*. *Social Work/Maatskaplike Werk* 54(1):70-88. doi: <http://dx.doi.org/10.15270/54-1-611>.

Vélez-Agosto, N.M., Soto-Crespo, J.G., Vizcarrondo-Oppenheimer, M., Vega-Molina, S., & García Coll, C. 2017. *Bronfenbrenner's bioecological theory revision: Moving culture from the macro into the micro*. *Perspectives on Psychological Science* 12(5):900–910.

Verschueren, K. 2015. Middle childhood teacher–child relationships: Insights from an attachment perspective and remaining challenges. In Bosmans, G., & Kerns, K. A. (Eds.). *Attachment in middle childhood: Theoretical advances and new directions in an emerging field*. *New Directions for Child and Adolescent Development*. Hoboken: Wiley.

Wang, L., Bruce, C., & Hughes, H. 2011. *Sociocultural theories and their application in information literacy research and education*. *Australian Academic & Research Libraries* 42(4):296–308.

Weinstein, N. 2017. *A large-scale test of the Goldilocks hypothesis: Quantifying the relations between digital-screen use and the mental well-being of adolescents*. *Psychological Science*, 28(2), pp.204–215. doi: <https://doi.org/10.1177/0956797616678438>.

Wells, G. 2008. *Talking with children: The complementary roles of parents and teachers*. *English in Education* 12:15 - 38.

Wiederhold, B. K. 2021. *Children's screen time during the COVID-19 pandemic: Boundaries and etiquette*. *Cyber psychology, Behavior, and Social Networking* 24(7):481-482.

Yang, Y. 2020. Reasons for teenagers' habitual use of social media: A case study of TikTok. In: *SHS Web of Conferences*, 155, p.02006. EDP Sciences. doi: <https://doi.org/10.1051/shsconf/202315502006>.

Yin, R. K. 2018. *Case Study Research and Applications: Design and Methods* (6th ed.). Sage Publications.

## APPENDIX A: ACVV PERMISSION LETTER

**ACVV Hoofkantoor / Head Office**  
ACVV-Sentrum / Centre, Caledonstraat 61 / 61 Caledon Street  
Posbus / P O Box 3834, Kaapstad / Cape Town, 8000  
Tel: (021) 461 7437, 461 1109  
E-pos/email: [info-hk@acvv.org.za](mailto:info-hk@acvv.org.za)  
[www.acvv.org.za](http://www.acvv.org.za)



002 834 NPO  
930004921 PBO

Dr J Chiba  
Department of Social Work and Criminology  
Faculty of Humanities  
University of Pretoria  
0028

[Jenita.chiba@up.ac.za](mailto:Jenita.chiba@up.ac.za)

Dear Dr Chiba

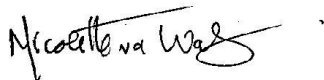
PERMISSION TO CONDUCT RESEARCH: Ms M de Jager, Student number u15259120

Our office was approached by the above-mentioned student, Ms Meagan de Jager, to conduct research at three of our social work offices in Paarl, Western Cape to *explore and describe the experiences of caregivers on how screen-time effects the social interaction of their intermediate phase children*. The research includes having access to relevant caregivers who may be interested to share their experiences with the student.

We hereby give permission for Ms De Jager to contact our offices, i.e. Noorder Paarl, Paarl Vallei and Paarl and request them to hand out Participant Information Sheets to prospective participants and/or attend a parental guidance session where she can share information on the proposed research.

Please note that it is our Policy to not allow direct access to our clients/beneficiaries without prior Ethical Clearance by a student. It would be required that the student produces such ethical clearance prior to personal contact with participants.

Kind regards



**Nicolette van der Walt**  
National Manager Child Protection

021 461 7437 | 071 880 1408

*ACVV lewer maatskaplike dienste aan kwesbare kinders, gesinne, vroue en ouer persone /  
ACVV renders social services to vulnerable children, families, women and older persons*

• SAAM IN DIENS VAN DIE GEMEENSAP • TOGETHER IN SERVICE OF THE COMMUNITY •  
• SIKUNYE KWIINKONZO ZOLUNTU • RE MMOGO MO DITIRELONG TSA LOAGO •

## APPENDIX B: PERMISSION LETTER TO ACCESS RESEARCH PARTICIPANTS



### Faculty of Humanities

Fakulteit Geesteswetenskappe  
Lefapha la Bomotho

Department of Social Work & Criminology



2023/04/25

Our Ref: Dr. J. Chiba  
E-mail: [Jenita.chiba@up.ac.za](mailto:Jenita.chiba@up.ac.za)

To Whom It May Concern

#### PERMISSION FOR ASSISTANCE TO ACCESS RESEARCH PARTICIPANTS

Dear Sir/Madam

I, Meagan De Jager, am a Masters student, student number u15259120, in the Department of Social Work/Criminology at the University of Pretoria.

As part of the requirements to fulfil my MSW degree in Play-based intervention, it is required that I conduct research. The research project which I will be working on relates to caregivers experiences on the effect Screen-time has on social interactions of South African children in the intermediate phase. The goal of the research is as follows:

To explore and describe the experiences of caregivers on how screen-time effects the social interaction of their intermediate phase children.

Given that your organisation works with families, I would like to request permission for assistance to access research participants who may be interested in sharing their experiences with me.

Given the POPI Act, I understand that you will not be able to give me access to contact details of potential participants. However, I would be grateful if you could share a Participant Information Sheet with caregivers or parents who you think will be interested in participating in this research. The Participant Information Sheet will provide details of what the study is and how the potential research participant can make contact with me. Since this is a mini-dissertation and I am only seeking to approach 6-8 research participants.

Should you require any further information with regards to the research, you are welcome to contact the programme manager for the Masters in Play-based intervention either via email ([Jenita.chiba@up.ac.za](mailto:Jenita.chiba@up.ac.za)).

I look forward to your response.

Warm Regards,

Meagan De Jager

## APPENDIX C: LEAFLET FOR RECRUITING RESEARCH PARTICIPANTS

# RESEARCH PARTICIPANTS NEEDED



### Ms. Meagan De Jager

MSW student investigating caregivers experiences on the effect Screen-time has on social interactions of South African children in the intermediate phase.

### OUR GOAL

To explore and describe the experiences of caregivers on how screen-time effects the social interaction of their intermediate phase children.

### WHO DO WE NEED:

- Participants should be caregivers who provide care for children aged between nine and twelve years of age.
- Participants should be residing with the child.
- Participants should be over the age of majority.
- Participants should be residents of South Africa



### WHAT THE STUDY INVOLVES:

A 60 minute interview consisting of a series of questions



### TIMELINE

Interviews will be held in July and August



### WOULD YOU LIKE TO VOLUNTEER?

Please contact the independent person:

Meagan De Jager  
mia19862@gmail.com  
0735118288

## APPENDIX D: SEMI-STRUCTURED INTERVIEW SCHEDULE

**Semi-structured interview schedule**  
**Topic of research: Caregivers experiences on the effect screen-time has on social interactions of South African children in the intermediate phase**

### SECTION A: BACKGROUND INFORMATION

Gender		
Age		
Home language		
Ethnicity		
Who lives in the family/household? (List people in the household and their relationship to the children such as children, mother, father, uncle, aunt, cousin etc; indicate which person is the caregiver) <sup>1</sup>	Relationship	Age
Participant's position in the family (e.g., parent, sibling, extended family member, friend, etc.)		
Age of intermediate phase child		

### SECTION B: CHILD AND FAMILY SOCIAL INTERACTION

1. Please tell me about your family and children.
2. Can you share with me some of the things that you do as a family together (on weekends)?
3. Can you tell me a bit about your child and their friends?
  - How often do they play together?
  - What would they typically play with (outside, computer games, etc.)?
4. Can you share with me your child's experience at school? (What Grade is your child in? What do they enjoy about school? Do they get along well with friends at school? Do they participate in any extramural activities – sport or cultural?)
5. With COVID many things changed for children. Can you share with me some of the changes that you have observed in your child with regards to how they interact with their friends, cousins, family and with you as a caregiver?

### SECTION C: CHILDREN'S SCREEN-TIME USE DURING COVID

1. One of the biggest things that changed for children in COVID, was when they had to school from home. Can you share how your child may have experienced this? (What was challenging? What did they enjoy about this? Were they able to keep up with the work?) Please motivate your answer.
2. During this time what changes did you notice with regards to your child's use of screens (How did they make use of screens?).

### SECTION D: CHILD SCREEN-TIME EXPOSURE AND USE

1. How would you describe what screen-time is?

<sup>1</sup> Note that all bracketed comments are prompts for the researcher

2. Please tell me how does your child currently make use of screen-time (for schoolwork, games, YouTube, WhatsApp)?
  - Are there differences in use during the week and weekends? If yes, please explain the differences.
3. What are your feelings about your child making use of screen-time? Do you feel it is positive or negative? Please explain.
4. What observations have you made about your child's use of screen-time? How has it affected their interactions with friends and family (positive or negative – please elaborate)?
5. How do you manage your child's use of screen-time? (How do you set limits on the use of screen-time? What are the household rules about use of screen-time? What are some of the challenges that you experience with your child's use of screen-time?)
6. How do you encourage your child to balance screen-time with other activities (including interacting with friends and family)?

**SECTION E: SUPPORT AND STRATEGIES**

1. Please share with me if you have had any discussions with other caregivers or with teachers about the use of screen-time and your child's interactions with others? Could you please elaborate on this?
2. Can you share what you consider to be helpful strategies or resources which could assist in developing healthy screen habits and maintain positive social interactions? Have you used any of these strategies with your child? (If yes, please share. If no, would you consider using some of these strategies?)

Any other responses or comments that you would like to share about your child and their use of screen-time and interacting with others?

.....  
.....  
.....

**Thank you for your participation**

## APPENDIX E: ETHICAL CLEARANCE LETTER



### Faculty of Humanities

Fakulteit Geesteswetenskappe  
Lefapha la Bomotho



11 August 2023

Dear Mrs ME de Jager

Project Title: Caregivers experiences on the effects of screen-time on social interactions of South African children in the intermediate phase  
Researcher: Mrs ME de Jager  
Supervisor(s): Ms J Chiba  
Department: Social Work and Criminology  
Reference number: 15259120 (HUM044/0523)  
Degree: Masters

I have pleasure in informing you that the above application was **approved** by the Research Ethics Committee on 11 August 2023. Please note that before research can commence all other approvals must have been received.

Please note that this approval is based on the assumption that the research will be carried out along the lines laid out in the proposal. Should the actual research depart significantly from the proposed research, it will be necessary to apply for a new research approval and ethical clearance.

We wish you success with the project.

Sincerely,



**Prof Karen Harris**  
**Chair: Research Ethics Committee**  
**Faculty of Humanities**  
**UNIVERSITY OF PRETORIA**  
**e-mail: tracey.andrew@up.ac.za**

**Research Ethics Committee Members: Prof KL Harris (Chair); Mr A Bizos; Dr A-M de Beer; Dr A dos Santos; Dr P Gutura; Ms KT Govinder Andrew; Dr E Johnson; Dr D Krige; Prof D Maree; Mr A Mohamed; Dr I Noomé; Dr J Okeke; Dr C Puttergill; Prof D Reyburn; Prof M Soer; Prof E Taljard; Ms D Mokalapa**

Room 7-27, Humanities Building, University of Pretoria, Private Bag X20, Hatfield 0028, South Africa  
Tel +27 (0)12 420 4853 | Fax +27 (0)12 420 4501 | Email pghumanities@up.ac.za | www.up.ac.za/faculty-of-humanities

## APPENDIX F: COUNSELLING AGREEMENT LETTER

**Merle Danhouse**

SACCP NR: 1012122

Runellie Street 32

Paarl East

7646

28 April 2023

Dear Mrs De Jager

**Counselling support to Participants from research study:** Caregivers experience on the affect screen- time has on the social interactions of South African children in the intermediate phase.

I am a fourth year Phd student at the university of the Western Cape and a social worker for almost 34 years (SACCP nr: 1012122). I do understand the risks that may evolve from participating in a research study; for example, when traumatic experiences could be triggered and lead to emotional turmoil. I therefore am willing to support and provide the opportunity for debriefing of these participants when need be or when referred by the researcher.

This service will be provided without any remuneration.

Kind regards

Merle Danhouse

Social worker

## APPENDIX G: INFORMED CONSENT



2023/05/09

### Principal investigator

Our Ref: Meagan De Jager  
Tel: 073 511 8288  
E-mail: mia19862@gmail.com

### LETTER OF INFORMED CONSENT

#### TITLE OF THE STUDY

Caregivers experiences on the effect Screen-time has on social interactions of South African children in the intermediate phase.

#### GOAL OF STUDY

To explore and describe the experiences of caregivers on how screen-time effects the social interaction of their intermediate phase children.

#### INTERVIEW SCHEDULE PROCEDURE

The procedure for the research will entail individual interviews with a duration of 45-60 minutes. With your permission, the interview will be audio-recorded by the researcher. The interview will be held at ACVV Paarl-Vallei, Paarl.

#### RISKS AND EFFECTS OF INTERVIEW

No risks and discomforts/emotional harm are foreseen. Should you experience any emotional discomfort prompted by sharing your experiences of caring for children in middle childhood, you should inform the researcher. The researcher has prepared for psychosocial support from Mrs. Merle Danhouse (Social Worker).

#### BENEFITS

As a research participant, you confirm that you understand that this study has no immediate benefit for you. However, the results of the study could contribute to enhancing the knowledge and techniques that social workers can use to help caregivers manage their children's screen-time in a way that promotes positive social interactions.

#### COMPENSATION

You confirm that you will receive no financial compensation for your participation in the study.

#### VOLUNTARY PARTICIPATION

You will not be coerced into participating in the interview. You will participate of your own free will and can withdraw from participating at any given time without reason. Withdrawing will not affect any relations between you and the organisation or the researcher. If you withdraw during the interview, the data gathered will be destroyed or provided to you to keep.



#### **INTERVIEWEE'S RIGHTS**

You can withdraw within the interview, when feeling uncomfortable, at any point. You may decline to answer any questions you feel uncomfortable answering.

All information obtained will be treated confidentially. To protect the identity of the participant, the researcher will use a pseudonym. Neither the data nor the conclusions reported will include any information which may lead to the identification of the participant, unless required by law. ACVV Paarl-Vallei will also not be identified as the participating organisation in the study.

The documentation will be accessed by the researcher and authorised University of Pretoria research team. The researcher, with assistance from the University of Pretoria, will keep all documentation collected from the interviews in a safekeeping cabinet for 10 years post-study. The electronic documents will be stored in a password protected format at the Department of Social Work and Criminology for a minimum of 10 years. Data might be used in future research studies.

#### **PUBLICATION OF INFORMATION GATHERED FROM INTERVIEWEE**

The findings gathered from the study will be published as a research report and articles in scientific journals and conference papers. The terms of confidentiality will be kept to throughout these engagements or publications.

The study will be conducted under the supervision of Dr J Chiba, Department of Social Work and Criminology, University of Pretoria (jenita.chiba@up.ac.za).

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## Faculty of Humanities

Fakulteit Geesteswetenskappe  
Lefapha la Bomotheo

Department of Social Work & Criminology



### INTERVIEWEE CONSENT

I, \_\_\_\_\_  
(*full name*) have had the researcher explain the Informed Consent form and understand my rights in participating in the study. I voluntarily consent to participate in the study, with the insight into the purpose of the study and what the data gathered will be used for. I will be provided a pseudo name for the study and all information shared will be handled with confidentiality, unless requested otherwise by myself. All information shared will be kept at the University of Pretoria for safekeeping for 10 years. I will be provided with a copy of my signed consent form.

\_\_\_\_\_  
**Interviewee's signature**

\_\_\_\_\_  
**Date**

\_\_\_\_\_  
**Researcher's signature**

\_\_\_\_\_  
**Date**