Caregivers' views on screen time and its effect on social interactions among children in the intermediate phase in Knysna, South Africa

by

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ABSTRACT

Caregivers' views on screen time and its effect on the social interactions among children in the intermediate phase in Knysna, South Africa

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This study investigates caregivers' views of screen time's effects on the social interactions of South African children in the intermediate phase (ages 9-12). The research is driven by concern regarding increased screen time exacerbated by the COVID-19 pandemic.
An interpretivist approach was employed, utilising a descriptive and explorative design to gain an in-depth understanding of caregivers' views. Data were collected using qualitative methods, including semi-structured interviews with a purposively selected sample of caregivers. The thematic analysis was guided by the principle of trustworthiness, encompassing credibility, transferability, dependability, and confirmability. Ethical considerations were rigorously complied with to ensure participants' safety and the integrity of the research.

The key findings highlight the complicated dynamics of screen time within families. While digital devices offer children educational content, communication mechanisms, and entertainment, caregivers noted significant challenges. These include reduced family interaction, conflict, and potential screen time addiction. Particularly during the pandemic, screen time played a dual role in facilitating learning and maintaining social connections, but also contributed to weakened family bonds and over-reliance on devices.

The study underscores the critical role of caregivers in screen time management. Caregivers suggested structured routines, participation in extracurricular activities, and establishing clear house rules to balance screen time and other social and developmental activities. Effective screen time management supports healthier relationships within families and ensures children's social skills are nurtured despite their engagement with technology.

In conclusion, the findings suggest a balanced approach that promotes screen time while reducing its negative effects. By offering guidance on strategies for screen time management, this study provides a valuable resource for social workers, educators, and caregivers aiming

to enhance children's social interactions in the digital age. Future research should explore how socio-economic factors influence screen time dynamics and the long-term implications for children's development.

Keywords:
Caregiver
Intermediate phase learner
Screen time
Social Interaction

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CHAPTER 1: INTRODUCTION

1.1 INTRODUCTION

Social interaction is the way people influence each other through direct, face-to-face conversations, where they exchange ideas, feelings, and experiences, all while learning from one another (Little 2016:913). Hoppler, Segerer, and Nikitin (2022:1-2) indicate that it is a process of interaction and reaction between two or more individuals, using culturally accepted communication methods to exchange information and respond in ways that support social roles. Furthermore, Cummings and Karraker (2016:471) suggest that social interaction plays a vital role in human development, facilitating individuals to communicate, collaborate, and build relationships. It takes place in diverse settings, including families, schools, workplaces, and social gatherings. Social interaction, both verbal and nonverbal, is crucial for the development of social, emotional, and cognitive skills (Cummings & Karraker, 2016:471).

A critical time for social interaction and development for children occurs during middle childhood, a developmental stage typically defined as ranging from ages six to 12 (Louw & Louw, 2019:8). Within the South African education system, this period partially overlaps with the intermediate phase, which includes grades four to six, with children generally ranging in age from nine to 12 years (Department of Basic Education, 2021). It is during this stage that children experience major growth across social, cognitive, physical, and emotional domains. They begin to shift from being primarily dependent on their families to gaining independence as they explore their interests and identities (Lamb & Lewis, 2011:275). This period is characterised by improvements in problem-solving, logical thinking, social skills, emotional regulation, and physical coordination (Lamb & Lewis, 2011:275). Erikson's (1950:247) psychosocial development theory suggests that children in this age group enter the "industry vs. inferiority" stage, where they work on developing a sense of competence and belonging. This phase aligns with the development of key social and academic skills essential for future success (Lamb & Lewis, 2011:275).

In recent years, the use of digital devices has significantly increased both worldwide and within individual countries. This growing reliance on digital technology and screen time has influenced children's development and social interactions (Hu, Johnson, Teo & Wu, 2020:183). Screen time refers to using digital media for the purposes of entertainment, excluding activities like video chatting and platforms for online learning (Council on Communications and Media, 2016). It is also understood as time expended in front of a device, with an electronic screen for example a television (TV), cell phone, tablet, or computer (Dunckley, 2015:19; Ponti,

Bélanger, Grimes, Heard, Johnson, Moreau, Norris, Shaw, Stanwick, Van Lankveld & Williams, 2017:461). This includes using screens for work-related activities, school, or leisure.

The following key concepts are understood as follows, in this study:

- **Caregiver:** The Children's Act 38 of 2005 defines a caregiver as anyone, apart from a parent or guardian, who takes care of a child. This includes foster parents, community caregivers, or even the eldest child in a child-headed household. A caregiver can be described as someone responsible for meeting a child's basic and physical needs (The White Paper on Families, 2021:180). In this research, a caregiver refers to an adult, such as a parent, grandparent, or relative, who provides for the educational, basic safety, and social needs of a child in the intermediate phase.
- **Intermediate Phase Learner/Child:** The Department of Basic Education (2012) indicates that children who are considered in the intermediate phase are in grades four to six, typically aged between nine and 12. From a psychosocial development perspective, Erikson's (1950:247) theory classifies children in this age range as being in middle childhood. In this study, an intermediate phase child is a learner in grades four to six.
- **Screen time:** In this research, screen time refers to the duration a child spends using or viewing electronic devices with screens, such as smartphones, tablets, computers, or TVs. This includes activities related to entertainment, education, internet browsing, texting, chatting, gaming, and social media or other digital communication platforms (Priya & Veena-Kumari 2021:1529).
- **Social interaction:** In this study, social interaction encompasses both in-person communication between individuals and digital interactions facilitated by electronic devices such as smartphones.

1.2 PROBLEM STATEMENT AND RATIONALE

The noticeable increase in screen time in recent years, a trend accelerated by COVID-19, altered children's engagement with digital media platforms (Clair, 2023). This raised concerns about the impact of screen time on aspects of children's development, specifically social interaction (Domingues-Montanari, 2017: 333). The integration of screens into daily living has become evident - many children are spending more time in front of screens and less time interacting with others in person or engaging in play (Domingues-Montanari, 2017: 334). This trend has raised concerns and sparked ongoing research into how screen time might be affecting the way children build friendships, communicate, and connect with those around them.

Although this is a global concern, it is equally relevant in South Africa and smaller towns like Knysna. Therefore, it was essential to investigate the impact of increased screen time on intermediate phase children's social interactions in Knysna, South Africa. The literature reveals a dearth of South African research on the relationship between screen time and children's social interactions, highlighting this as an under-researched area in the local context. While numerous international studies have explored the effects of increased screen time on individuals, including children, there is limited understanding of how these effects are perceived and experienced in South Africa and, more specifically, in Knysna. This study, therefore, aims to explore and describe caregivers' perspectives on the impact of screen time on social interactions among intermediate phase children in Knysna, South Africa.

The global COVID-19 pandemic led to a rapid increase in the use of digital technology for work, schooling, and maintaining social connections. Even in the post-COVID-19 period, screen time remains high across populations, including among children. As noted in the literature review, existing research offers valuable insights into the potential risks of excessive screen time, its impact on children's social interactions, and strategies for supporting positive social development. Findings from this study may benefit social workers, who are at the forefront of providing services and interventions to children and families (Wiederhold, 2021:481-482).

The study's main research question is:

"How do South African caregivers, living in Knysna, view the effects of screen time on children's social interactions in the intermediate phase?"

1.3 GOAL AND OBJECTIVES FOR THE STUDY

The study aimed to explore and describe caregivers' views regarding the impact of screen time on children's social interactions during the intermediate phase, living in Knysna, South Africa.

To achieve the goal, the objectives were to explore and describe:

- The views of caregivers on screen time usage by their children in the intermediate phase in Knysna, South Africa.
- How screen time has affected children's social interactions in the intermediate phase in Knysna, South Africa.

- Ways in which caregivers engage with their children in order to promote social interaction with friends and family.

1.4 OVERVIEW OF RESEARCH METHODOLOGY

The study adopted a qualitative research approach, allowing the researcher to explore and describe the views of South African caregivers regarding the impact of screen time on children's social interactions in the intermediate phase (De Vos, Strydom, Fouche & Delport, 2019:96; Leedy & Ormrod, 2013:94-97). The instrumental case study design provided an opportunity to examine a small number of cases in detail, offering rich insights into the real-world context of the research topic (Nieuwenhuis, 2019:90). The study participants were selected based on specific criteria (Bless, Higson-Smith & Sithole, 2013:7). To be eligible, participants:

- Had to be caregivers responsible for children aged from nine to 12 years.
- Were required to live with the child,
- Had to be over the age of 18,
- Needed to be able to speak English, and
- Had to reside in South Africa.

Research participants were recruited through Knysna Initiative for Learning and Teaching, a non-government organisation (NGO) that provided services to caregivers and children. A purposive sampling method, a form of non-probability sampling, was used to choose participants who fit the study's criteria. To fulfil the study's objectives, the researcher conducted semi-structured interviews. This approach allowed participants to openly share their views, opinions, thoughts, and ideas without being influenced by the researcher's assumptions. (Nieuwenhuis, 2019:108). Using semi-structured interviews facilitated thorough probing by using follow-up questions (Maree, 2019:110). To ensure confidentiality, the researcher conducted face-to-face interviews in a private environment. With consent from the participants, the interviews were recorded and the recordings transcribed. The data gained from the recordings was analysed thematically, which allowed the researcher to identify, analyse, organise, describe, and report themes within the data (Braun & Clarke, 2006:77-101).

The research report is structured as follows:

1.5 CHAPTER OUTLINE

Chapter 1: Introduction

Chapter One introduces the study by providing background information and outlining the rationale for exploring the impact of screen time on the social interaction of intermediate phase children. It presents the problem statement, explains the research goal and objectives, and offers a brief overview of the research methodology used in the study. The chapter concludes with a chapter outline, highlighting the structure and content of the dissertation.

Chapter 2: Literature Review

Chapter Two presents a focused literature review on the relationship between screen time and social interaction in intermediate phase children. It begins by outlining the developmental characteristics of middle childhood and the importance of social interaction, including the role of peers, family, and teachers. The chapter then explores the effects of screen time—both passive and active—on attention, behaviour, language development, and physical health, with attention to changes brought on by the COVID-19 pandemic.

The review also considers the South African context, discussing how socio-economic, cultural, and educational factors influence screen use and social development. Finally, the chapter introduces the theoretical framework, drawing on Bronfenbrenner's ecosystems theory and Vygotsky's social interaction theory to explain the broader influences on children's development.

Chapter 3: Research Methodology

Chapter Three outlines the research methodology used to investigate the impact of screen time on intermediate phase children's social interaction. The chapter adopts a qualitative approach within the interpretivist paradigm, aiming to understand participants' experiences in depth. It is framed as applied research and follows a case study design to explore the phenomenon within a specific context.

The chapter details the research methods, including the use of non-probability sampling to select participants, semi-structured interviews for data collection, and thematic analysis for interpreting the data. Measures to ensure trustworthiness are discussed, along with the role of a pilot study in refining the research process.

The chapter also addresses key ethical considerations, outlines the limitations of the study, and concludes by summarising the methodological choices made to ensure the study's credibility and relevance.

Chapter 4: Research Findings

Chapter Four presents the analysis and findings of the study, focusing on how screen time influences the social interaction of intermediate phase children. The chapter begins with an overview of the participants' biographical details and family structures to provide context for the data.

It then explores the empirical findings, organised into four key themes:

1. Family dynamics and time management,
2. Screen time use and its effects,
3. Parental role and awareness, and
4. Childhood experience and developmental level.

Each theme is supported by participant responses and linked to the broader research aims. The chapter concludes by summarising the main insights drawn from the data analysis.

Chapter 5: Conclusions and Recommendations

Chapter Five presents the key findings, conclusions, and recommendations arising from the study. It begins by revisiting the research goal, objectives, and central research question, providing a foundation for the chapter's discussions.

The chapter then outlines the main conclusions drawn from the research methodology, literature review, theoretical framework, and biographical data. It further synthesises the key findings from the thematic analysis, offering related conclusions and practical recommendations.

The chapter also includes recommendations for social work practice and policy, with a focus on supporting children in middle childhood within the digital environment. Finally, it provides suggestions for future research and concludes the study with a summary of its overall contributions.

CHAPTER 2: LITERATURE REVIEW

2.1 INTRODUCTION

In recent years, children have gained increasing access to digital devices such as televisions, computers, mobile phones, tablets, and the Internet. Despite this growing trend, limited research, both globally and within South Africa, has focused specifically on screen time during middle childhood. This chapter presents a review of the literature on the effects of screen time on the social interactions of South African children in the intermediate phase, with particular attention to the context of Knysna.

The chapter begins by examining the developmental stage of middle childhood, highlighting key areas of growth and maturity. It then discusses the importance of social interaction during this period, including developmental aspects and interactions with various role-players such as family, peers, and teachers. This is followed by an exploration of screen time, where its different forms and potential effects on children's development are analysed.

In order to situate the discussion within the South African context, the review considers relevant socio-economic, cultural, and educational factors that may influence children's screen use and social development. Finally, the chapter outlines the theoretical framework underpinning the study, drawing on Bronfenbrenner's Ecological Systems Theory and Vygotsky's Social Interaction Theory to frame the complex interactions between screen time, social behaviour, and the broader environment.

2.2 MIDDLE CHILDHOOD

Middle childhood, typically ranging from ages six to twelve, marks a critical developmental phase bridging early childhood and adolescence. It encompasses the primary school years, where children gain increasing independence and begin establishing identities beyond their home environments (Carr, 2017:83; DelGiudice, 2018:95; Louw & Louw, 2019:225). Exposure to diverse social contexts – classrooms, peer groups, and structured extracurriculars – plays a crucial role in shaping their personalities and life skills (Carr, 2017:83). These environments not only encourage socialisation but also foster the development of a sense of competence and belonging (Eccles, 1999).

During this phase, children's physical development stabilises (Louw and Louw, 2019:225). However, profound cognitive, social, and emotional developmental changes occur. Their fine and gross motor skills advance, and they acquire enhanced psychomotor skills as they

become stronger, more coordinated, and gain muscular control of their bodies (Arnett & Maynard, 2017:296; Louw & Louw, 2019:225-227). They improve at running, jumping, skipping, riding a bike, and maintaining balance and coordination by using their larger muscle groups and whole-body movements (Arnett & Maynard, 2017:301; Louw & Louw, 2019:227). They also improve at writing, drawing, using scissors, and dressing themselves, including tying their shoelaces. These tasks contribute to developing fine motor skills (Arnett & Maynard, 2017:302-303). Research by Piek, Dawson, Smith, and Gasson (2008) confirms that proficiency in fine motor coordination during this stage is also predictive of academic performance and attention in the classroom, emphasising the functional significance of these physical milestones.

Environmental and lifestyle factors, including screen time, can influence sensory and physical development. For instance, excessive passive screen time – defined as viewing without cognitive engagement, such as watching videos – has been linked to reduced physical activity and a higher risk of developing myopia (near-sightedness) (Dirani, Tong, Gazzard, Zhang, Chia, Young & Saw, 2015). This is particularly concerning in urbanised or high-income settings where indoor, screen-based leisure is common. In contrast, active screen time, such as educational games requiring decision-making and physical interaction, may offer opportunities for cognitive stimulation but still lacks the physical benefits of outdoor play (Domingues-Montanari, 2017). These distinctions highlight the importance of balanced, developmentally appropriate use of technology during this sensitive stage.

Children in developing countries with well-developed vision can have a heightened risk of myopia (near-sightedness) during middle childhood (Arnett & Maynard, 2017:297; Louw & Louw, 2019:226). These risks are compounded by prolonged close-range screen viewing and insufficient daylight exposure, both of which are preventable factors (Lanca & Saw, 2020). At the same time, hearing usually improves during this stage, as structural changes in the inner ear tube reduce the likelihood of ear infections (Arnett & Maynard, 2017:297).

During middle childhood, children's cognitive development advances. They start reading and writing, exhibiting logical and concrete thinking abilities, and grasping new concepts, and their language use and understanding increase (Henderson & Thompson, 2016:37; Louw & Louw, 2019:229). Jean Piaget's theory of cognitive development categorises middle childhood in the concrete operational stage, which suggests advances in children's logical thinking and their ability to apply mental operations for problem-solving (Louw & Louw, 2019:229). Piaget's view, however, has been expanded upon by information processing theorists who argue that

development in working memory, processing speed, and executive functioning is equally important in understanding how children handle complex tasks (Best & Miller, 2010).

Cognitive flexibility develops significantly. This refers to a child's ability to adapt their thinking and approach when facing new situations or tasks (Buttelmann & Karbach, 2017:2). Children learn to adjust their priorities based on the demands of the situation, learn new skills as they develop, maintain one task, and start planning another simultaneously because they understand concepts such as past, present, and future (Buttleman & Karbach, 2017:2). Additionally, Buttelmann and Karbach (2017:2) posit that cognitive development during middle childhood is characterised by an improved attention span and memory and evolving academic skills. These skills are foundational for metacognition – the ability to think about one's own thinking, which emerges more robustly during this time and supports goal-setting and problem-solving (Roebers, 2017).

During middle childhood, children experience situations where they need to be aware of and manage their emotions, especially when dealing with others, rules, and boundaries. (Arnett & Maynard, 2017:324-325). Arnett and Maynard (2017:324) refer to middle childhood as the "golden age" of emotions. This is when children are emotionally stable and less prone to outbursts. They rarely experience extreme negative emotions, which return during adolescence. Children learn to emotionally self-regulate as they enter new environments like primary school, sports teams, and extracurricular groups (Arnett & Maynard, 2017:324-325). This aligns with research showing that emotion regulation during this stage predicts later social competence and resilience (Eisenberg, Spinrad & Eggum, 2010). Maturing helps children understand complex emotions like pride and shame, which they internalize to develop a sense of responsibility, and teaches them to cope with strong emotions independently (Louw & Louw, 2019:259-260).

Although children spend more time away from home and their focus shifts towards peer relationships, parents, caregivers, and educators play a crucial role during middle childhood by providing support and security throughout the developmental process (Louw & Louw, 2019:262). According to Bronfenbrenner's ecological systems theory, the mesosystem, which includes interactions between school and home, significantly influences emotional and social development (Bronfenbrenner & Morris, 2006). Children's motivation and social behaviour drastically change during middle childhood when they acquire cultural norms, increased moral reasoning and pragmatic abilities (gossiping, storytelling, and social comparison), and enhanced focus on social status (DelGiudice, 2018:95-96).

Children's self-concept changes during middle childhood from focusing on the external and physical perception of the self to internal and psychological evaluation (Arnett & Maynard, 2017:325; Louw & Louw, 2019:256). Children practice social comparison and differentiate themselves from others (Arnett & Maynard, 2017:325; Louw & Louw, 2019:257). This process is critical in forming identity and is influenced by both direct feedback and perceived peer acceptance (Rubin, Bukowski & Parker, 2015). Through this process, their self-esteem develops realistically as they learn to judge themselves in different areas of life, such as academics, social acceptance, sports skills, physical appearance, and relationships. These areas are combined into an overall psychological image and self-esteem (Arnett & Maynard, 2017:326; Louw & Louw, 2019:258). More recent studies have also noted the impact of digital self-presentation – for instance, how children might curate online profiles or compare their own lives with others on social media – which can shape self-esteem and peer relationships (Uhls, Ellison & Subrahmanyam, 2017).

2.3 SOCIAL INTERACTION

Louw and Louw (2019:274) describe social interaction as how children interact with their peers and adults within their social environment, navigate social relationships, and conform to social norms. Social interaction, especially in middle childhood, contributes to children's emotional competence, social development, academic achievement, attachment, and overall well-being (Louw & Louw, 2019: 274). According to Dean (2022), face-to-face contact, as a social interaction type, enhances learning and innovation. Online contact as a form of social interaction is prominent today. This includes using social media applications like Facebook and Instagram, online games, and instant messaging to meet new friends (Lenhart, 2015).

When children enter primary school, they experience a new social context. This transition places them in diverse settings where they form relationships with unfamiliar individuals. Children develop beyond their comfort zones and adapt to new social circumstances (Arnett & Maynard, 2017:329). As children spend a substantial amount of their day at school, they gain opportunities for social interaction with people other than family (i.e., peers and educators) (Arnett & Maynard, 2017:329).

Social interaction is a shared transaction of experience, knowledge, and concepts between individuals, which boosts children's communication and people skills, and their personalities (Reyt, Selivanova, and Rodina, 2017:251). In addition to shaping children's personalities, social interaction influences people's daily experiences and well-being (Alkire, Levitas, Warnell & Redcay, 2018:3928). School, extracurricular activities, and home provide opportunities for

children to have social interaction through relationships with peers, friends, siblings, teammates, teachers, and parents (Arnett & Maynard, 2017:329-337; Louw & Louw, 2019:263-276). The following section explores the types of social interaction and their related developmental aspects to help us fully understand social interaction in middle childhood. In addition, it explores technology's influence on social interaction.

2.3.1 Developmental Aspects

Theorists like Piaget, Freud, and Erikson emphasise social interaction in developing children, especially during middle childhood (Louw & Louw, 2019:20-26). Piaget believed that children intuitively attempt to understand their environment. He argued that children go through four stages of cognitive development, each representing a major change in how they interpret and organise their world. (Louw & Louw, 2019:25-26). In middle childhood, children work through the concrete operational stage, where they acquire the cognitive and social skills to facilitate their interaction with people, objects, and experiences (Louw & Louw, 2019:26; Parish, 2014:112). Children learn age-appropriate cognitive traits, including conversation skills, distinguishing between imagination and reality, improved concentration and memory capacity, and reversible thinking (Henderson & Thompson, 2016:37).

Freud's psychosexual theory proposes that children progress through a fixed sequence of stages, each cantered on a different erogenous zone of the body, driven by sexual instincts (Louw & Louw, 2019:21). During middle childhood, children acquire new social values as they progress through the latency stage characterised by the settling of sexual urges and development shifts toward social interaction with peers and adults (Arnett & Maynard, 2017:19-20; Louw & Louw, 2019:21-22). Lastly, Erikson suggested that human development occurs in sequential stages, each characterised by a challenge that individuals face at that specific age. For example, during middle childhood, children are in the industry versus inferiority stage, where they learn basic life and social interaction skills (Louw & Louw, 2019:22). Erikson focused on how children successfully and effectively adapt to new environments Their sense of competence grows as they learn to adapt to school, make friends, follow rules, and do well academically (Louw & Louw, 2019:256).

Bergen and Fromberg (2015:31) highlight play as a key form of interaction during middle childhood, emphasising its importance in helping children develop social skills, regulate emotions, think critically, and be creative. Play encourages social and emotional competence and builds self-confidence since children practice self-direction, self-organisation, self-control, and negotiation when playing in a group (Bergen & Fromberg, 2015:32-34). During this phase,

children develop the need for affiliation, fulfilled by a peer group that provides love and affection (Bergen & Fromberg, 2015:32-34; Louw & Louw, 2019:275). Carr (2017:86) adds that friendships in middle childhood provide the necessary social support, which is an opportunity to gain experience in relationship management.

2.3.2 Social Interactions with Various Role-players

2.3.2.1 Social interaction between caregivers and children

While children in middle childhood devote a considerable amount of time to school, their family continues to be the cornerstone of their lives, providing the stability and support essential for their growth and development (Louw & Louw, 2019:262). It is natural for caregivers to influence a child's development. During middle childhood, children start needing less help from their caregivers with tasks like homework, getting ready for school, studying, and interacting with friends (Louw & Louw, 2019:262). Arnett and Maynard (2017:329) describe this change in family dynamics as coregulation, where children begin to engage in independent, self-directed behaviour while their caregiver offers general guidance. As this shift towards coregulation occurs, a cooperative relationship between the caregiver and child develops, grounded in mutual respect and a balanced give-and-take approach (Louw & Louw, 2019:262).

2.3.2.2 Social interaction between educators and children

Educators are vitally important in shaping how children interact socially during their middle childhood years. Educators significantly influence children's social and emotional growth by fostering secure attachment relationships with their students (Verschueren, 2015:83). By being emotionally responsive, consistent, and creating an inclusive, supportive, and nurturing classroom, educators cultivate a sense of dependability and safety, leading to enhanced social competence in children (Hollingsworth & Buysse, 2009:295-296). Furthermore, educators can actively promote positive social interactions by facilitating cooperative learning activities and reinforcing social norms like sharing and turn-taking (Verschueren, 2015:84). Ultimately, a classroom culture that prioritizes positive social interactions equips children with crucial social skills that benefit them throughout their lives.

Promoting positive social interaction in classrooms faces several challenges. Educators must navigate individual differences in children's social and emotional development, address issues like bullying or exclusion (Verschueren, 2015:86), and remain mindful of their own biases, which can impact classroom inclusivity (Verschueren, 2015:86; Wells, 2008).
In the South African context, these challenges are compounded. The high learner-teacher ratios—29:1 in public schools and 18:1 in private schools (Education Statistics in South Africa,

2016:3)—make it difficult for teachers to identify and cater to individual developmental needs. Furthermore, while effective communication between caregivers and teachers is vital for a shared understanding of children's needs and fostering social engagement (Wells, 2008), regular meetings are often impractical in South Africa, limiting opportunities for children to practice social skills at home.

To foster positive social interactions in the classroom, key recommendations include cultivating strong teacher-learner relationships, offering ample opportunities for students to practice social skills, and employing positive reinforcement to encourage prosocial behaviour (Verschueren, 2015:86). Additionally, providing teachers with ongoing professional development in attachment theory and social-emotional development is highly beneficial (Verschueren, 2015:86). Other scholars recommend that teachers proactively foster friendships and facilitate children's interactions with peers by constructively arranging classroom seating plans (Hollingsworth and Buysse's (2009:296). Teachers can cultivate an environment conducive to developing positive social interaction skills in children by nurturing secure attachment relationships, encouraging constructive peer engagement, and actively modelling desirable social behaviours themselves.

2.3.2.3 Social interaction between children and peers

According to Louw and Louw (2019:274), children in middle childhood become motivated to interact with other children of the same age and gender for friendship, affection, and fellowship. As they interact with their peers, a sense of identity and self-awareness develops, which can have positive or negative effects (Bruce & Hansson, 2011:315; Louw & Louw, 2019:274). Various authors posit that social interaction between a child and their friends helps in refining social skills with other children rather than with adults (Louw & Louw, 2019:274; Singh & Verma, 2021:424).

Bruce and Hansson (2011:314-315) indicate that positive experiences from peer interaction are essential for language, cognitive, and social development. Being able to understand and make yourself understood is necessary for participating in peer interaction. Furthermore, social interactions with peers also offer opportunities to practice listening and comprehension, which form a basis for responsiveness and expressing oneself assertively, as well as developing the ability to understand interactive skills evident in other people's body language, gestures, and eye movements (Singh & Verma, 2021:424). However, a disconnection in peer social interaction may occur when the child does not have a relationship with other children (Louw & Louw, 2019:274). Research studies have shown that time spent on screens is

associated with social disconnection, as it decreases the time children spend in person with peers, siblings, and adults (Paulich, Ross, Lessem & Hewitt, 2021:1). Their social interactions and relationships with others suffer as a result.

2.3.2.4 Social interaction and COVID-19

COVID-19 safety measures had a significant impact on children's everyday lives and routines. In South Africa, this included strict lockdowns and quarantine periods for those who tested positive (Buthaina & Mohamed, 2020:164). As a result, unemployment rates rose, schools closed, and families were unable to visit or socialise with loved ones. The pandemic also worsened existing issues like inequality, poverty, food insecurity, and mental health challenges for both adults and children (Buthaina & Mohamed, 2020:164). With restrictions in place, children couldn't play freely with their friends, which impacted their social development (Irwin, Lazarevic, Soled & Adesman, 2022:110). The isolation from family and friends led to feelings of loneliness, which affected their self-esteem and motivation (Buthaina & Mohamed, 2020:164).

One of the regulations put in place to prevent the spread of COVID-19 was the compulsory wearing of masks. In South Africa, even as lockdown levels eased and places like schools reopened, both adults and children continued to wear masks (Irwin et al., 2022:111; Ruba & Pollak, 2020). A key part of communication involves understanding non-verbal cues, such as facial expressions (Buthaina & Mohamed, 2020:164). However, a study by Ruba and Pollak (2020) found that children are still able to accurately read emotions, even when parts of the face are covered by a mask. The study concluded that masks don't significantly hinder children's social interactions, as they are able to interpret emotions through other facial features, like the eyes (Buthaina & Mohamed, 2020:164; Ruba & Pollak, 2020).

Irwin et al. (2022:111) claim that mask-wearing could pose challenges for young children in communication and socialisation, as it conceals important facial features that convey emotional expressions. Additionally, children may generally have more difficulty in being able to recognise people and read emotions, because of their stage of development, when interacting with others (Irwin et al., 2022:111; Ruba & Pollak, 2020). In summary, it is important to maintain face-to-face conversations to preserve and develop essential social skills, empathy, and authentic human connections. Children’s screen time has increased and has continued post-COVID-19. The heavy lockdown levels and limited opportunities to interact with friends and family are further contributing factors to the increase in screen use. The

following section conceptualises screen time and explores its effects on children's development.

2.4 SCREEN TIME

Screen time is the time people spend in front of any electronic screen, whether for career, education, or recreation. (Anuradha, 2019:105; Dunckley, 2015:19; Kaye, Orben, Ellis, Hunter & Houghton, 2020:3661; Pandya & Lodha, 2021). Screen time broadly refers to the duration spent on activities such as texting, video calls, internet browsing, gaming, emailing, social media engagement, app usage, online shopping, writing and word processing, digital reading, and even scrolling through photos on a phone (Dunckley, 2015:19). The literature distinguishes between two types of screen time based on the engagement or interaction with the electronic device –i.e., active and passive screen time (Dunckley, 2015:19; Sweetser, Johnson, Ozdowska & Wyeth, 2012:95-96).

Active screen time refers to cognitive or physical engagement with screen-based activities, for example, playing video games or doing homework (Sweetser et al., 2012:95). Active screen time can promote learning, develop fine motor skills, and improve problem-solving abilities through purposeful interaction (Nikken & Schols, 2015). In contrast, Dunckley (2012:19) associates passive screen time with laziness, inactivity, and apathy. Passive screen time is characterised by minimal interaction, such as watching television or consuming video content without responding or engaging, leading to prolonged sedentary behaviour and limited mental stimulation (Sweetser et al., 2012:96; Tremblay et al., 2011). The distinction is crucial when examining the effects of screen time on children, as developmental outcomes are not uniform across different types of screen exposure.

Recent research highlights that while active screen time may facilitate specific cognitive or social sills (e.g., strategy formulation in educational games or communication during collaborative video games), excessive passive screen time correlates with negative behavioural and developmental outcomes, including attention difficulties, poor emotional regulation, and limited real-world social interaction (Domoff, Harrison, Gearhardt, Gentile, Lumeng & Miller, 2019). Furthermore, passive screen use tends to replace physical play or social engagements, which are critical for developing empathy, cooperation, and verbal communication, especially in middle childhood (Conye, Rogers, Zurcher, Stockdale & Booth, 2019).

South Africans spend more than half the amount of time daily watching screens (58.2%), a figure significantly higher than countries like Japan (21.7%) (Navarro, 2023). These high screen usage, in a context with vast socio-economic diversity and infrastructural inequality, raises specific concerns about children's well-being and developmental trajectories. Screen time's negative effects include sleeping problems, lower academic performance, a poor self-image, and a lack of outdoor playtime (Crider, 2022). These consequences are particularly pronounced when passive screen exposure replaces active play or parent-child interaction, both of which are essential for social and emotional development (Radesky & Christakis, 2016).

In this context, digital parenting emerges as a crucial factor influencing the developmental outcomes of children's screen use. Digital parenting refers to the ways in which parents manage, mediate, and engage with their children's digital lives, including screen time, content access, and online interactions (Livingstone, Mascheroni & Staksrud, 2017). Effective digital parenting involves setting boundaries, monitoring screen content, co-engaging with children's media use, and fostering open communication about digital risks and opportunities. Globally, studies show that authoritative parenting styles – characterised by warmth and firm limit-setting – are associated with healthier digital habits and reduced screen-related risks (Wartella, Rideout, Lauricella & Connel, 2014; Nikken & Schols, 2015).

In South Africa, where households experience varying levels of access to digital technologies, digital parenting practices are similarly varied. Factors such as digital literacy, economic status, and parental availability significantly influence how screen time is managed in the home (Le Mottee, Leoschut, Leoschut & Burton, 2018). For example, parents with lower digital competence may be less likely to co-engage with children's media or evaluate the educational value of apps and games. A study by Masuku (2021) found that many South African caregivers struggle to enforce screen limits due to competing work demands or limited awareness of digital parenting strategies. In these instances, screens may be used as digital babysitters, increasing the risk of passive screen overuse.

Ceder's (2020) review of the American Academy of Paediatrics' (AAP) guidelines for managing children's screen time reveals the importance of parental involvement and boundary-setting. Parents are encouraged to co-view content, discuss online experiences with their children, and model balanced screen habits. Parental mediation, particularly in early and middle childhood, has been associated with healthier screen use habits and fewer behavioural problems (Lauricella, Wartella & Rideout, 2015). Moreover, Ceder (2020) recommends that parents actively research and select developmentally appropriate educational applications

and games. This aligns with the global emphasis on active digital parenting, which not just includes supervision but also constructive guidance in navigating digital environments (Clark, 2013). Various authors define excessive screen time as more than two to three hours of exposure to technological devices, including TV, computers, or mobile phones (Neophyto, Manwell & Eikelboom, 2021:725; Lissak, 2018:148; WHO, 2019). According to the AAP (2016:2), excessive television viewing is associated with developmental delays in the cognitive, language, social, and emotional domains. It further decreases parent-child interaction, leading to poor family functioning (American Academy of Pediatrics, 2016:2).

Despite these concerns, digital technologies and moderate screen time usage have proven benefits for children. These include educational and skills development, and social networking opportunities. Digital technologies emerged as enablers to achieving quality education in the United Nations' Sustainable Development Goals Agenda 2030 (Haleem, Javaid, Qadri & Suman, 2022:275). Moderate exposure to high-quality educational programmes, particularly those encouraging interactivity and critical thinking, can support literacy, numeracy, and language acquisition (Linebarger & Vaala, 2010). Additionally, children who engage with digital media for school-related purposes have shown increased technological literacy and adaptability – skills that are essential in today's digital society (Livingstone & Helsper, 2007).

Digital technologies, or screen time, benefit the educational development of children by providing an immediate learning environment, faster evaluations, and increased engagement of children (Haleem et al., 2022:275). However, it is the content, context, and type of screen engagement that influence outcomes. For example, watching a documentary with a parent may have a vastly different impact than binge-watching entertainment videos in isolation. As Strasburger, Jordan and Donnerstein (2010:756–767) warn, the "dose" of screen time matters – but so does the "nutrition" of what is being consumed. Consequently, engagement, where adults help children make sense of content and develop responsible digital habits (Livingstone et al., 2017:1103–1122).

The following section examines how technology influences cognitive processes and shapes developmental milestones.

2.4.1 Effects of Screen Time

Louw and Louw (2019:247) recognise the importance of digital devices and media during middle childhood as a significant tool for cognitive socialisation. Cognitive socialisation is the "internalisation process by which cultural tools influence the development of cognitive

processing skills" (Louw & Louw, 2019:247). As children grow through middle childhood, electronic devices, social media, internet access, and TV or computer games become increasingly important (Louw & Louw, 2019:247). They note that electronic gaming enhances three skills (Louw & Louw, 2019:247):

- Firstly, spatial representational skills or visual processing, i.e., the ability to determine speed and distance, visually manipulate objects, and understand two-dimensional and three-dimensional objects.
- Secondly, the ability to comprehend images such as infographics and pictures, known as iconic representational skills (Louw & Louw, 2019:247).
- Thirdly, gaming improves attention by requiring players to be aware of multiple events on the screen simultaneously (Louw & Louw, 2019:247).

Additional studies support the notion that high-quality, educational screen content can enhance vocabulary acquisition, comprehension, and verbal communication skills, particularly when it encourages active engagement and caregiver mediation (Neophtou et al., 2021:725; Lauricella, Wartella & Rideout, 2015:1249). For example, programmes that promote participation through problem-solving tasks, questions, or interactive storytelling have shown promise in supporting language development and cognitive flexibility (Fisch, 2004:1). However, these benefits appear contingent on the nature of the content, the level of interactivity, and the presence of supportive adult co-engagement (Domhoff et al., 2019:282).

Despite these potential advantages, researchers caution against excessive or unmoderated screen use, particularly in the form of passive or entertainment-focused media. Neophyto et al. (2021: 724-726) found that excessive screen time can affect the child's developing brain, influencing cognitive and motor development, learning, memory, and emotional regulation. It is noteworthy that early and prolonged exposure to digital devices can make it more likely for children to develop psychiatric symptoms such as hyperactivity, attention problems, heightened anxiety, and depression (Neophyto et al., 2021: 725). Domingues-Montari (2017:334) and Lissak (2018:150) similarly stress that screen time exerts both positive and negative effects on cognitive development, depending on its duration, context, and content.

Lissak (2018:149) further documents several physiological concerns associated with screen overuse, including sleep disturbances, elevated blood pressure, obesity, stress dysregulation, insulin resistance, and impaired vision. These physical health outcomes are particularly concerning when screen time displaces physical activity, healthy sleep routines, or face-to-face interactions. Blue light exposure in the evening has been found to interfere with circadian rhythms and melatonin production, reducing sleep quality and duration (Hale & Guan,

2015:129). Poor sleep, in turn, affects mood, concentration, and academic functioning (Radesky & Christakis, 2016:836).

There is also growing awareness of the impact of screen time on social and emotional development. Ren (2023:2110) highlights the importance of developing children's social skills as it lays the foundation for learning and relationship building. Excessive passive screen use has been linked to diminished social-emotional competence, including reduced empathy and difficulty with peer engagement (Ren, 2023:2112). Children who spend large amounts of time watching screens may miss opportunities for face-to-face interaction, cooperative play, and problem-solving with peers (Louw & Louw, 2019:249). This displacement effect may contribute to weaker communication skills, increased behavioural issues, and a reliance on digital platforms for social validation (Twenge & Campbell, 2018:6).

Importantly, children are also increasingly exposed to online risks, including cyberbullying, inappropriate advertising, and traumatic or sexually explicit content. Desai and Burton (2022:113) and Mesce, Cerniglia, and Cimino (2022:255) draw attention to the potential psychological and developmental harm caused by such exposure. These risks are exacerbated when children engage in screen use without adequate supervision or guidance. Furthermore, the architecture of many apps and platforms – designed for maximum engagement through persuasive design techniques – can foster compulsive or addictive behaviours, especially among children with less developed impulse control (Alter, 2017: 221; Domoff et al., 2019:282).

Emerging frameworks such as the Differential Susceptibility to Media Effects Model (DSMM) provide a useful lens for interpreting these varied outcomes. According to Valkenburg and Peter (2013:221–243), media effects are not uniform but depend on individual, developmental, and contextual factors. Children with pre-existing vulnerabilities – such as emotional regulation difficulties or adverse family environments – may be more susceptible to the negative effects of screen time, while others may benefit from tailored, educational content (Kaye et al., 2020:2195; Livingstone & Helsper, 2007:676). Similarly, children from higher socio-economic backgrounds may have greater access to age-appropriate content and effective parental mediation strategies, highlighting disparities in digital parenting practices (Livingstone & Franklin, 2018:8).

Ultimately, while screen time has the potential to contribute to children's development when thoughtfully integrated, its adverse effects, especially when overused or poorly supervised, cannot be ignored. The emphasis should therefore shift away from rigid time-based limits

towards a more contextualised understanding that considers content quality, user engagement, developmental stage, and family interaction patterns (Radesky et al., 2020:89).

2.5 SOUTH AFRICAN CONTEXT

Understanding the impact of screen time on children's social development requires a contextualised approach that accounts for the complex and multifaceted realities of South African society. While global research provides valuable insights, the local context introduces unique socio-economic, cultural, educational, and technological dynamics that shape how children engage with screens and how these interactions affect their social development. South Africa's historical inequalities, diverse cultural practices, varied educational infrastructure, and digital disparities must all be considered in order to evaluate the nuanced ways in which screen time intersects with the developmental experiences of intermediate phase learners. This section explores four interrelated dimensions of the South African context – socio-economic factors, cultural norms, educational conditions, and digital access – to provide a comprehensive understanding of the localised influences on screen time and children's social development.

2.5.1 Socio-Economic Factors

South Africa is a country marked by socio-economic inequalities, with profound implications for children's development, access to technology, and screen time patterns. These disparities are deeply rooted in the historical legacies of apartheid, which have left a persistent divide in access to infrastructure, education, and digital technologies (Mlaba, 2021). For many South African families, especially those living in rural areas or informal settlements, access to digital devices and reliable internet remains limited or inconsistent. As a result, children's screen use is often shaped by their household's economic resources, geographic location, and parents' digital literacy (Mlaba, 2021).

In high-income urban households, children typically have greater access to a variety of digital tools, including smartphones, tablets, laptops, and smart TVs, often in their bedrooms (Le Mottee, Leoschut, Leoschut & Burton, 2018). This facilitates more screen exposure and interaction, both for educational and recreational purposes. On the other hand, in lower-income households, devices are often shared among family members, and usage may be limited by data costs, load shedding, or the lack of a stable internet connection (Le Mottee et al., 2018; Mlaba, 2021). These limitations can reduce the educational benefits of screen time and restrict children's ability to engage in meaningful online learning or social interaction.

Moreover, screen time practices in lower-income households may reflect practical survival strategies. With many South African parents working long hours or multiple jobs, screens often serve as digital babysitters, allowing caregivers to attend to daily responsibilities while children are occupied (Le Mottee et al., 2018). However, this reliance on unsupervised screen use can contribute to excessive passive screen time, with limited adult mediation or engagement. Research shows that such practices are more prevalent in under-resourced communities where parents may lack the time, digital skills, or support systems to engage actively with their children's screen use (Masuku, 2021:35; Le Mottee et al., 2018).

At the same time, mobile technology has emerged as a critical access point for digital content across socio-economic groups. Even in lower-income households, mobile phones are often the primary tool for accessing the internet, including educational content, social media, and entertainment platforms (Chigona, 2015:326). The affordability and portability of mobile devices have made them ever-present. Although this also means that children's screen engagement may be fragmented, sporadic, and difficult to regulate. According to Ojong (2025), data affordability and access to Wi-Fi hotspots can significantly shape how learners from different socio-economic backgrounds interact with digital content.

The COVID-19 pandemic further amplified these disparities, as remote learning initiatives revealed the deep digital divide among South African learners. Schools in affluent areas transitioned relatively smoothly to online platforms, while learners in poorer communities faced prolonged educational disruptions due to inadequate access to devices or connectivity (Haffejee, Simelane & Mwanda, 2014). This situation reinforced existing inequalities and highlighted the role of socio-economic status in shaping children’s digital engagement and developmental outcomes.

Given the complex interplay between economic access and digital engagement, screen time in South Africa cannot be understood in isolation from broader structural issues such as poverty, unemployment, and unequal service delivery. These socio-economic factors influence not only the quantity of screen exposure but also the quality and context of use, with important implications for children's cognitive, emotional, and social development during middle childhood.

2.5.2 Cultural Context

South Africa's rich cultural diversity plays a significant role in shaping parenting practices, child-rearing norms, and children's everyday experiences, including their interaction with technology. Cultural values influence how families perceive digital media, the level of parental control over screen time, and the types of content children are permitted to consume (Lemphane & Prinsloo, 2014). In many South African communities, particularly in rural or traditional settings, emphasis is placed on communal upbringing, intergenerational interactions, and respect for elders, which may contrast with individualised screen-based activities that often isolate children from social participation (Omidire, Aluko & Mampane, 2021).

While digital devices are increasingly present in both urban and rural households, their usage is filtered through culturally embedded routines and expectations. For example, in isiXhosa-speaking households in the Eastern Cape, there is often a strong emphasis on oral storytelling and face-to-face family communication, which may either complement or conflict with digital engagement practices (Bam & Ntshinga, 2019:89). These culturally anchored traditions can act as protective factors, fostering in-person interaction and language development, while also potentially limiting children's exposure to the independent, exploratory learning styles promoted by some forms of screen media.

Furthermore, cultural perceptions of technology are shaped by broader societal narratives. In some communities, digital devices are viewed as essential educational tools, enabling children to succeed academically and socially in a globalised world (Prinsloo & Walton, 2008:175). In others, screen use is seen with suspicion, particularly when it interferes with household responsibilities, communal participation, or traditional values (Le Mottee et al., 2018). These differing perceptions may lead to inconsistent digital parenting strategies and contribute to intra-household conflicts over screen time boundaries.

Additionally, language diversity and representation in digital content are notable cultural factors influencing screen time engagement in South Africa. Many local and international apps, games, and online videos are predominantly produced in English, which may limit their accessibility for children whose first language is isiZulu, isiXhosa, Setswana, or another indigenous language (Makalela, 2021). This language gap can impede learning, cultural identity development, and inclusivity, highlighting the need for more culturally and linguistically responsive digital resources.

Religious and spiritual beliefs also intersect with screen time practices. For instance, in some Christian households, screen content is evaluated based on moral or ethical values, and children may be encouraged to avoid violent or inappropriate media (Van den Berg & Makusha, 2018). Similarly, in Muslim and Hindu households, media consumption is often guided by religious principles, with a focus on discipline, modesty, and respect, shaping the type and duration of screen interaction children are permitted (Uecker & McClure, 2023).

The diversity of cultural norms across South Africa's socio-linguistic and religious communities means that screen time practices are far from uniform. It is therefore essential to examine screen use through a culturally sensitive lens, recognising that digital engagement is mediated not only by economic and technological access but also by the cultural scripts that govern family life and child development (Le Mottee et al., 2018).

2.5.3 Educational Context

The educational system in South Africa plays a crucial role in shaping children's social development and exposure to digital technologies, especially during the intermediate phase (Grades 4–6). According to the Department of Basic Education (2011), the intermediate phase curriculum prioritises the development of communication, collaboration, and problem-solving skills, all of which are vital for children's social interaction and broader life competencies. Schools serve as key environments for children to learn social norms, build relationships, and engage in both structured and informal interactions with peers and teachers.

The integration of Information and Communication Technology (ICT) into the curriculum has been a growing focus in South African education, especially following initiatives such as the White Paper on e-Education (2004) and the more recent National Digital and Future Skills Strategy (Department of Communications and Digital Technologies, 2020). These policies aim to prepare learners for the demands of a digital society by enhancing their technological competencies and digital literacy. In practice, however, the implementation of ICT in schools has been uneven due to infrastructural and resource disparities, particularly between urban and rural schools (Nkula & Krauss, 2014).

In better-resourced schools, learners may have regular access to computers, tablets, and internet-connected smartboards, allowing them to develop the digital skills necessary for academic success and social interaction in online environments. In contrast, many township and rural schools face significant barriers, such as a lack of electricity, outdated hardware, and limited teacher training in digital pedagogy (Graham, Stols & Kapp, 2020). These disparities

contribute to a “digital divide” that affects not only academic outcomes but also children’s ability to engage meaningfully with screen-based social and learning platforms (Mphahlele, Mokwena & Ilorah, 2021).

Despite these challenges, the school environment remains a critical site for fostering children’s social competence. Social skills such as turn-taking, empathy, conflict resolution, and verbal expression are explicitly taught through Life Skills curricula and implicitly modelled in classroom dynamics (Department of Basic Education, 2011:9). Extracurricular activities, including sports, drama, and cultural clubs, also provide opportunities for social learning, which may be diminished if screen time replaces these peer-interactive settings (Louw & Louw, 2019:229).

Furthermore, the COVID-19 pandemic has accelerated the use of digital technologies in education, as schools were compelled to adopt remote and hybrid learning models. This shift highlighted both the possibilities and the limitations of screen-based learning for intermediate phase children. While some learners adapted well to online platforms like MS Teams, WhatsApp, and Google Classroom, others, particularly those in under-resourced areas, faced exclusion due to a lack of connectivity or digital devices (Haffejee, Simelane & Mwanda, 2014). This not only widened educational inequalities but also disrupted peer interaction and social development, especially in children without access to digital social alternatives.

Teachers also play a key role in mediating digital engagement within the educational context. Educators who model responsible screen use, encourage critical thinking about digital content, and create collaborative learning environments can help children develop healthy screen habits and social skills (Desniyanti, 2025:583). Conversely, overreliance on passive screen-based instruction may reduce classroom engagement and limit opportunities for interpersonal interaction.

In summary, while South African schools have the potential to promote digital literacy and social competence among intermediate phase learners, systemic challenges such as unequal access to technology, inadequate teacher training, and curricular limitations continue to hinder these outcomes. Bridging these gaps requires not only policy innovation but also sustained investment in educational infrastructure and culturally responsive teaching that considers the social realities of South African children.

The literature provides the foundation for understanding the developmental stages, social interactions, and the potential influence of screen time on children's social interactions in the intermediate phase, living in Knysna. The literature further indicates a knowledge gap on the effects of screen time on South African children in the intermediate phase. To better understand these findings, the following section introduces the theoretical frameworks that shaped this study. It takes a closer look at how children interact with their surroundings and what role screen time plays in the shaping of social development.

2.6 THEORETICAL FRAMEWORK

Bronfenbrenner's Ecological Systems Theory and Vygotsky's Social Interaction Theory were used to guide the study. These frameworks provided a thorough perspective of human development, highlighting the reciprocal relationship between children and their environment. It also assisted the exploration of how screen time affects children's social interactions during the intermediate phase (Bronfenbrenner, 1994:38).

2.6.1 Bronfenbrenner's Ecosystems Perspective

Bronfenbrenner's Ecological Systems Theory draws attention to the interconnected systems in which child development takes place, which expose children to various risk and protective factors (Bronfenbrenner, 1994:38). This theory conceptualises development as occurring within five nested environmental systems – the microsystem, mesosystem, exosystem, macrosystem, and chronosystem – each exerting direct or indirect influences on the child's growth and behaviour. These systems interact dynamically, creating a web of reciprocal relationships that shape children's experiences, including their social interactions and use of screen-based technologies.

This framework is particularly useful when exploring the nuanced effects of screen time on social development in middle childhood. The ecological risk model, derived from Bronfenbrenner's theory, highlights both the protective and risk factors that may influence developmental outcomes (Olson & Goddard, 2010:1-2; Tolan, Gorman-Smith & Henry, 2003:276-277). These factors span across different ecological layers, revealing how children's screen use is not merely an individual choice but is shaped by a network of interacting systems.

Mbedzi (2019:87-93) highlights how different systems in a child's life are deeply connected and influence their development. He explains that when one part of this system is thrown off balance, it creates a ripple effect, leading to psychological strain and social challenges in other

areas. This is particularly relevant in the context of excessive screen time, which may begin within the microsystem but ultimately manifests consequences across other systems. By applying Bronfenbrenner's theory, this study aims to uncover how the social environments children navigate – both physical and virtual – mediate their social interactions and developmental outcomes.

2.6.1.1 The Microsystem: Immediate Contexts of Development

The microsystem comprises the settings in which children engage in face-to-face interactions, such as their homes, classrooms, peer groups, and digital environments (Vélez-Agosto, Soto-Crespo, Vizcarrondo-Oppenheimer, Vega-Molina & García Coll, 2017:902). As children grow, digital technologies increasingly permeate these microsystems, altering the nature and frequency of social interaction. For example, mobile devices and tablets are now commonly used in both homes and classrooms, often displacing time spent in conversation, play, or physical activity (Radesky et al., 2020:2).

Within the family microsystem, screen time can become a substitute for active engagement between parents and children. Studies have shown that when parents frequently use digital devices during interactions, the quality of parent-child communication diminishes, potentially weakening the child's social and emotional development (Hiniker et al., 2016:1138). This phenomenon, often referred to as "technoference", undermines opportunities for children to learn vital social skills through co-regulation, joint attention, and reciprocal dialogue (McDaniel & Radesky, 2018:576).

In peer contexts, digital engagement may have both enriching and limiting effects. On one hand, online games and social platforms can foster peer connection, particularly among children who experience social anxiety or difficulty forming in-person relationships (Granic, Lobel & Engels, 2014:69). On the other hand, overreliance on digital interaction can reduce children's confidence in navigating face-to-face social situations, impairing the development of empathy, conflict resolution, and nonverbal communication skills (Uhls et al., 2014:387).

2.6.1.2 The Mesosystem: Interrelations Among Microsystems

The mesosystem represents the interconnections between various microsystems – such as the relationship between school and home or between peer groups and family contexts. The quality of these relationships significantly affects how children interpret and manage their screen experiences. For example, when parents and teachers collaborate to promote

balanced screen use, children receive consistent messages and support, which can enhance their ability to self-regulate and prioritise social engagement over screen time (Wang et al., 2022:321).

Conversely, a lack of alignment between settings can lead to confusion or inconsistent boundaries around screen use. For instance, when parents enforce strict limits at home, but children have unrestricted access at school or during peer interactions, conflicting norms may emerge. This can create behavioural tension, hinder the development of internalised self-discipline, and strain relationships within the mesosystem (Chandrasekaran, Kamath, Ashok, Kamath, Hedge & Devaramane, 2017).

Moreover, social capital – defined as the quality of relationships and networks within a child's mesosystem – can be diminished by excessive screen time. Children who spend prolonged hours engaging with screens may be less likely to participate in extracurricular activities or community programs, reducing their access to supportive adult relationships and peer groups (Livingstone, Mascheroni & Staksrud, 2017:1103–1122). These losses can compromise the development of prosocial behaviour and emotional resilience.

2.6.1.3 The Exosystem: Indirect Environmental Influences

The exosystem encompasses systems that do not directly involve the child but still influence their development, such as parental workplaces, media industries, and national policies on education and technology (Mbedzi, 2019:96-97). For example, if parents work long hours in digitally connected jobs, their screen habits may influence children's perceptions of normalised screen use, often resulting in more permissive screen time behaviours within the home (Minges & Owen, 2015:5).

Likewise, the digital design strategies employed by tech companies, such as autoplay features, reward loops, and personalised content recommendations, shape children's screen use without direct involvement of caregivers or educators. These features are intentionally designed to prolong engagement, often at the expense of offline social interaction and play (Radesky & Christakis, 2016:836). This manipulation of digital environments illustrates how the exosystem can indirectly influence children's attention spans, emotional regulation, and capacity for social reciprocity.

Furthermore, policy-level decisions regarding technology integration in education also belong to the exosystem. While digital tools can enhance learning, an overreliance on screen-based

instruction – especially in early and middle childhood – can reduce opportunities for cooperative learning, physical movement, and classroom-based peer interaction (Wartella et al., 2014:13). Teachers may also face pressure to meet digital curriculum goals, limiting their ability to foster interpersonal skills through traditional teaching methods.

2.6.1.4 Macrosystem: Cultural and Societal Norms

The macrosystem consists of the overarching cultural values, societal norms, and belief systems that shape perceptions of childhood, technology, and social development. In today's digital age, the cultural emphasis on technological proficiency and instant access to information often overshadows traditional values of relational connection and community (Jordan & Donnerstein, 2010:144). As such, children may internalise messages that prioritise digital engagement over in-person interaction.

Moreover, the normalisation of screen time as both entertainment and education has led to blurred lines between productive and excessive use. Cultural discourses often frame digital literacy as a necessary skill for future success yet neglect the importance of balancing screen exposure with unstructured play, physical activity, and interpersonal bonding (Tremblay et al., 2011:6). These messages shape how families, schools, and communities manage screen time, with wide variations across socioeconomic and cultural contexts.

For example, in high-income urban contexts, screen time may be perceived as a safe and convenient means of occupying children indoors, whereas in low-income or rural contexts, limited access to digital devices may be associated with reduced educational opportunities (Masuku, 2021:34). These cultural narratives influence how caregivers and children themselves justify and engage with digital media, contributing to inequities in social development.

2.6.1.5 The Chronosystem: Temporal Changes Over Time

The chronosystem adds a temporal dimension to Bronfenbrenner's model, acknowledging that environmental influences and developmental processes evolve over time. Children's engagement with screens today is fundamentally different from a decade ago due to the rapid acceleration of digital innovation. The COVID-19 pandemic, in particular, catalysed a significant shift in screen habits, with remote schooling, virtual socialising, and digital leisure activities becoming the norm for many children (Wiederhold, 2020:1).

This historical context underscores the importance of viewing screen time as a dynamic, evolving aspect of children's developmental ecosystems. Prolonged disruptions to routine, such as those caused by lockdowns, have amplified the psychosocial effects of digital dependency, especially for children in the intermediate phase of development. Many experienced increased loneliness, irritability, and difficulty re-engaging in offline social activities after periods of digital isolation (Ren, 2023).

Critically, the chronosystem encourages reflection on how developmental transitions, such as moving from middle childhood to adolescence, interact with digital habits. For instance, children who develop screen-related coping mechanisms during stressful periods may carry these patterns into adolescence, potentially affecting their ability to form and maintain healthy relationships in the long term.

2.6.1.6 Ecological Principles: Energy, Adaptation, and Interdependence

In addition to the five environmental systems, Bronfenbrenner's ecological theory is enriched by principles such as energy, adaptation, and interdependence (Mbedzi, 2019:91:92). Energy refers to the motivational forces that drive activity within the ecosystem. Screen-based technologies often redirect children's energy toward passive consumption rather than active engagement with their environment or peers. This redirection can stifle the development of initiative and collaborative problem-solving, particularly when screen time replaces group play or co-learning experiences (Domingues-Montanari, 2017:335).

Adaptation speaks to a child's capacity to adjust to environmental changes. While moderate screen use can foster digital literacy and adaptability, excessive or unmonitored use may hinder self-regulation and interpersonal adjustment. For example, children accustomed to fast-paced media may struggle with the slower pace of in-person dialogue or classroom learning, leading to frustration or disengagement (Neophytou et al., 2021:725).

Finally, interdependence acknowledges that actions in one part of the ecosystem impact all other parts. Excessive screen use by one family member may disrupt shared routines or reduce quality interaction time for the entire household. Conversely, collaborative efforts between parents, educators, and community leaders to promote healthy screen habits can create a more supportive environment for children's social development (Van Breda, 2018:13).

Van Breda (2018:13) highlights the ecological perspective as a valuable approach for understanding the complex and dynamic interactions between individuals and their

environments, as well as recognising the influence of different systems and contexts on individual development and well-being. He reiterates the significance of the social environment in shaping individual functioning, demonstrating how factors such as family dynamics (mesosystem), community norms (exosystem), and cultural values (macrosystem) impact screen use (microsystem). Additionally, Van Breda (2018:13) emphasises resilience from an ecological standpoint—the ability of individuals and communities to adapt and thrive despite adversity. This perspective prompts consideration of how children develop resilience in response to screen-related challenges such as cyberbullying, as well as how they balance screen time with natural communication or alternative socialisation methods (Olson & Goddard, 2010:1).

Ultimately, ecosystem theory offers an in-depth framework for analysing the effects of screen time on children's social interactions. By recognising the links between different systems, the ever-changing nature of human development, and the potential for resilience when facing challenges, researchers and practitioners can better understand the impact of screen time on social development. This understanding, in turn, can inform strategies to foster positive change and enhance the well-being of both children and their communities.

2.6.2 Vygotsky's Social Interactions Theory

Vygotsky's Social Interaction Theory maintains that individuals are fundamentally shaped by social activities, emphasising the crucial role of social and cultural factors in learning and development (Card, 2014:167). The theory views development not as a solitary, internal process but as a socially mediated activity where learning precedes development. According to Vygotsky, higher mental functions develop through interpersonal interactions and are then internalised by the individual. As such, the development of cognition is inseparable from the social context in which it occurs (Louw & Louw, 2014:168).

Vélez-Agosto et al. (2017:904) describe Vygotsky's theory as a rich, interconnected framework that considers biological, social, cognitive, and emotional factors. Unlike Piaget's theory, which focuses on stages of individual cognitive development, Vygotsky's approach foregrounds the relational and cultural dimensions of learning. In his view, learning is inherently collaborative; children develop their understanding and skills through guided interaction with more knowledgeable others, such as parents, teachers, siblings, and peers.

A central concept in Vygotsky's theory is the Zone of Proximal Development (ZPD). This zone refers to the gap between what a child can accomplish independently and what they can

achieve with guidance and support from others (Cherry, 2022; Louw & Louw, 2014:168). Within this zone, learning is optimally supported when a child is assisted by someone with a greater level of competence. This process is referred to as scaffolding, where the support provided is gradually withdrawn as the child becomes more competent. Vygotsky thus shifts the focus from what a learner knows to what they can become capable of doing through social mediation.

By exploring the role of caregivers in supporting children's learning and development, this research aims to shed light on how caregivers can enhance children's social interaction skills, particularly in the context of screen time. Caregivers often serve as primary scaffolds in a child's development, providing the tools and interactions necessary to navigate complex social situations. As such, screen time should not be viewed in isolation but assessed in relation to the broader sociocultural environment, including the presence or absence of guided interaction.

The emphasis on collaboration in Vygotsky's theory is highly relevant when evaluating the quality of digital interactions in children's lives. Unlike traditional face-to-face interactions, screen-based engagements vary widely in their potential to foster meaningful social exchanges. For instance, co-viewing educational content or engaging in interactive video calls with family members may support learning within the ZPD. In contrast, passive consumption of entertainment media, especially in isolation, is less likely to support social and cognitive development (Lauricella et al., 2015). The quality, context, and purpose of screen time thus become critical factors in determining its developmental impact.

Moreover, Vygotsky's notion that children build knowledge through interactions with others also extends to the concept of self-directed speech, which emerges from social dialogue and gradually becomes internalised as a tool for self-regulation (Louw & Louw, 2014:169). In many digital environments, opportunities for self-directed speech may be limited, especially in cases where children passively consume content without verbal engagement or reflection. Therefore, the extent to which screen time allows for active participation, verbal expression, and reciprocal interaction is essential in evaluating its alignment with Vygotskian principles.

Vygotsky's Social Interaction Theory is particularly relevant when studying the impact of screen time on children aged nine to twelve, a developmental phase characterised by growing autonomy and peer relationships. During middle childhood, children begin to form more complex social identities and increasingly engage in group activities and peer-based learning (Berns, 2016). Vygotsky's theory helps to conceptualise how digital media use intersects with

these developmental tasks. For example, online multiplayer games and collaborative educational platforms can provide children with opportunities for social negotiation, problem-solving, and mutual goal-setting, all of which are consistent with the values of the ZPD.

However, such opportunities are not inherent in all digital activities. Vygotsky's theory underscores the importance of guided participation, where an adult or experienced peer helps the child navigate a learning task. In digital contexts, such guidance is often absent, leaving children to interact with technology without the scaffolding that supports developmental gains. This absence may lead to the formation of habits and behaviours that do not necessarily align with pro-social development. Therefore, it becomes crucial for caregivers and educators to intentionally integrate co-engagement strategies into children's screen time routines, such as co-playing, co-viewing, and reflective discussion.

In addition to scaffolding, Vygotsky placed a strong emphasis on cultural tools—symbols, language, technology, and artefacts that mediate cognitive functions. Wang, Bruce, and Hughes (2011:298) argue that digital technologies have evolved into powerful cultural tools that shape how children think, communicate, and learn. These tools include not only tangible devices such as smartphones and tablets but also intangible systems such as digital games, social media platforms, and communication apps. Vygotsky's theory allows for a critical examination of how these tools influence development by mediating social interaction and access to knowledge.

Language, as the most fundamental cultural tool in Vygotsky's theory, plays a pivotal role in the development of higher mental functions. Through dialogue with others, children acquire the vocabulary and conceptual frameworks necessary for complex reasoning and problem-solving. In digital contexts, interactions that support expressive language use, such as video chats, collaborative writing apps, and online discussion forums, may contribute positively to development. Conversely, interactions that are primarily visual or limited to reactive input (e.g., liking or swiping) may not offer the same cognitive benefits. This distinction between active and passive digital engagement aligns with recent research highlighting the differential impacts of screen time on child development (Neumann, 2015).

Vélez-Agosto et al. (2017:904) and Wang et al. (2011:298) note that Vygotsky's theory is deeply embedded in the understanding that children's cognitive development is shaped by socially and culturally constructed tools and concepts. Therefore, the child's social, cultural, and historical context is not peripheral but central to development. In today's context, where digital technology is pervasive, it becomes part of this cultural milieu. As such, technology

must be studied not only as a medium but also as a participant in the developmental process—one that offers both affordances and constraints for social interaction.

Importantly, Vygotsky's theory urges us to view development as a dynamic, dialectical process rather than a linear acquisition of skills. Children do not simply absorb knowledge from digital content—they co-construct understanding through interaction with people and tools. Therefore, the role of screen time in social interaction cannot be fully understood without considering the interplay between the child, their caregivers, their peers, and the digital tools they use. This ecological perspective within a Vygotskian framework resonates with Bronfenbrenner's bioecological model, reinforcing the need for an integrated view of development that considers both individual and contextual influences.

In conclusion, Vygotsky's Social Interaction Theory offers a robust lens through which to examine the relationship between screen time and social interaction in middle childhood. It highlights the importance of guided participation, cultural mediation, and socially embedded learning processes. When applied to the digital age, this theory challenges us to look beyond mere screen time duration and instead focus on the nature and quality of digital interactions. It calls for a nuanced understanding of how digital tools can either support or hinder children's social and cognitive development, depending on how they are used, with whom, and for what purpose. Caregivers, educators, and policymakers must thus critically assess digital content and engagement patterns, ensuring that screen time experiences are enriching, interactive, and developmentally appropriate.

By integrating Bronfenbrenner's Ecological Systems Theory and Vygotsky's Social Interaction Theory of Learning, this research provides a comprehensive framework for examining the impact of screen time on children's social interactions in the intermediate phase. It explores strategies caregivers can use to enhance children's social skills, evaluates the risks and benefits of screen time for social interactions, and highlights the role of caregivers in supporting children's learning and development.

2.7 CONCLUSION

The literature examines the significance of social interactions during middle childhood, focusing on the impact of screen time on social interactions. This chapter also explores Bronfenbrenner's Ecological Systems Theory and Vygotsky's Social Interaction Theory, which serve as frameworks for understanding how screen time affects children's social development. These theories emphasise the importance of context, environment, and social engagement in

shaping a child's developmental outcomes, offering valuable insights for this study. With the theoretical and literature-based foundations in place, Chapter 3 outlines the research methodology, research design, data collection methods, and analysis procedures employed in this study.

CHAPTER 3: RESEARCH METHODOLOGY

3.1 INTRODUCTION

This chapter discusses the research design and methodology implemented in the study. The chapter highlights the research question and explains the interpretivist approach, which seeks to understand human interactions. The focus shifts to applied research as a type of research. The study used a descriptive and exploratory approach to better understand how caregivers in Knysna, South Africa, perceive the impact of screen time on the social interactions of children in the intermediate phase. The chapter describes the research methods, sampling approach, data collection, and analysis processes employed in this study. The chapter discusses trustworthiness, a measure of data quality encompassing credibility, transferability, dependability, and confirmability. The chapter concludes by discussing the pilot study, and the ethical considerations adhered to during the research.

3.2 RESEARCH APPROACH

This research is grounded in the interpretivist paradigm, which focuses on gaining a deep understanding of human behaviour by studying individuals in their natural settings (Maree, 2019:66-68). Interpretivism suggests that we can gain richer insights when we explore the meanings people attach to different experiences (Maree, 2019:66-68). Nieuwenhuis (2019:67) explains that researchers immerse themselves in participants' perspectives to better understand how they interpret events around them. This approach proved valuable as it allowed the researcher to gather detailed data by exploring how South African caregivers perceive the impact of screen time on their children's social interactions in the intermediate phase (Maree, 2019, pp. 58-59). While the qualitative research process was time-intensive, the flexibility of the interpretivist approach enabled the researcher to gain a deeper understanding of caregivers' views related to the research question (Cooper & White, 2012:6; Lietz & Zayas, 2010:189; Trainor & Graue, 2013:129).

In alignment with the interpretivist paradigm, the study adopted a qualitative research approach. A qualitative research approach allows researchers to collect rich, descriptive data that captures participants' lived experiences and personal meanings. It is suitable for studies, like this one, that aim to explore human perspectives in depth, rather than generalise findings to a larger population (Cresswell & Poth, 2018:7). In this study, qualitative methods such as semi-structured interviews were used to explore the views of caregivers regarding the effect of screen time on children's social interactions. This approach allowed the researcher to adapt

to participants' responses, probe for deeper insights, and interpret the meanings caregivers assigned to their children's behaviour and development.

3.3 TYPE OF RESEARCH

The study makes use of applied research to collect data on caregivers' views on their children's screen time and its impact on social interactions. Applied research focuses on using data to expand our understanding of a specific issue. It is particularly valuable in the humanities, where research findings can directly influence individuals, organisations, and communities (Bless et al., 2013:7). This knowledge is then applied by practitioners and policymakers, enabling them to make informed decisions and deliver services effectively (Hilton, Fawson, Sullivan & DeJong, 2019:8). The findings of this research can be used to develop programmes that help social workers assist caregivers in managing their children's screen time to promote positive social interactions.

3.4 RESEARCH DESIGN

The research followed a case study design, which is a qualitative research approach that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between the phenomenon and context are not clearly evident (Yin, 2014:16). Case studies are particularly useful for exploring complex social issues through rich, detailed data from multiple perspectives (De Vos, Strydom, Fouche & Delport, 2019:96).

Within this design, the researcher made use of an instrumental case study, which involves examining a specific case not primarily for its own sake, but to gain insight into a boarder issue or phenomenon (Cresswell & Poth, 2018:96). In this study, the case was used to explore South African caregivers' views on the effects of screen time on the social interactions of their children in the intermediate phase (De Vos, Strydom, Fouche & Delport, 2019:96; Leedy & Ormrod, 2013:94- 97). The instrumental case study design enables research within real-world contexts to obtain in-depth information about the effects of screen time on social interaction (Nieuwenhuis, 2019:90). To ensure a fair and accurate analysis, the researcher remained mindful of each participant's unique experience, actively working to minimise potential bias often associated with case study research.

3.5 RESEARCH METHODS

This section explains how participants were recruited, the sampling method used, and the steps taken to collect and analyse the data. It also explores the measures put in place to

ensure the data is reliable and trustworthy. Trustworthiness encompasses credibility, transferability, dependability, and confirmability. The section concludes with a discussion of the pilot study.

3.5.1 Study population and sampling

The study's target population was South African caregivers of children between nine and 12 years. Caregivers were interviewed because they were in the best position to provide information on the effects of screen time on their children's social interactions in the intermediate phase. The sample was drawn using non-probability methods, specifically purposive sampling. This entails the researcher selecting participants with specific features relevant to the research (Strydom & Delport, 2019:392). This sampling method was advantageous as it ensured the collection of rich data about phenomena (Nieuwenhuis, 2019:93). Furthermore, this sampling method allowed the recruitment of participants with common traits, which enhanced the transferability of the findings (Nieuwenhuis, 2019:93).

The researcher approached Knysna Initiative for Learning and Teaching (KILT), Western Cape, a welfare organisation that helps children and families in Knysna. KILT permitted the researcher to access research participants via the organisation (see Appendix A). The recruitment process involved distributing posters and leaflets within the organisation and sharing them on WhatsApp (see Appendix B). The research participants were selected based on set criteria (Bless et al., 2013:177), i.e., participants had to

- Care for children between nine and twelve years of age.
- Reside with the child.
- Be over the age of majority.
- Be able to speak English.
- Be residing in Knysna, South Africa.

The researcher interviewed six participants and stopped when the data became saturated. Data saturation occurs when the data no longer provides new insights (Makofane & Shirindi, 2018:34).

3.5.2 Data collection

The researcher conducted semi-structured interviews to achieve the study's objectives (see Appendix C for the interview schedule). Semi-structured interviews allowed participants to freely express their views, opinions, thoughts, and ideas without being influenced by the

researcher's assumptions (Nieuwenhuis, 2019:108). This format also gave the researcher the opportunity to ask follow-up questions or clarify points, resulting in a deeper exploration of the topic (Maree, 2019:110). The interviews were held in person at KILT's boardroom to maintain privacy and confidentiality.

A drawback of semi-structured interviews is that they are time-intensive, requiring significant effort to arrange and conduct. Additionally, transcribing the recordings verbatim is necessary (Maree, 2019:110). However, the benefits outweighed the challenges, as the open-ended questions allowed the researcher to ask probing questions, facilitating a deeper understanding of the phenomenon (Newcomer, Harty & Wholey, 2015:494).

3.5.3 Data analysis

The completed interviews were transcribed verbatim in preparation for data analysis. Thematic analysis enabled the researcher to identify, analyse, organise, describe, and report themes within the data (Braun & Clarke, 2006:77-101). The process was guided by the following steps suggested by Cresswell (2013:182-188):

- **Step 1 - Familiarisation:**

According to Braun and Clarke (2006:77-101), the familiarisation phase is a crucial first step in thematic analysis, where the researcher immerses themselves in the data to gain a comprehensive understanding. This is done through activities such as repeated reading of the data, noting initial ideas, and listening to recordings. For this study, the researcher familiarised themselves with the data by carefully reading and re-reading the transcripts, along with listening to the audio recordings. This process enhanced the researcher's understanding of the data.

- **Step 2 – Coding:**

The coding phase involves systematically organising the data into meaningful groups and is essential for identifying significant features relevant to the research question (Clarke, Braun & Hayfield, 2015:230; Braun & Clark, 2006:77-101). Codes are often assigned to data extracts that appear relevant or interesting, creating the foundation for theme development. The first step in identifying patterns in the data was coding, which laid the groundwork for recognising and comparing themes (Clarke et al., 2015:230; Nieuwenhuis, 2016:116). The researcher categorised related data segments and gave a code to each data unit.

- **Step 3 – Searching for themes:**

This stage involves sorting codes into potential themes and collating relevant data extracts within those themes. According to Braun and Clarke (2006:77-101), this step moves the analysis from codes to broader interpretive categories. The researcher identified themes by grouping codes that shared common patterns (Clarke et al., 2015:236). To organise this process, an Excel spreadsheet was used, where each potential theme was listed as a heading, with the related codes arranged in tables underneath.

- **Step 4 – Reviewing themes:**

Reviewing themes is about refining and evaluating the coherence of the themes in relation to both the coded extracts and the entire dataset (Braun & Clarke, 2006:77-101). This ensures the themes accurately reflect the meanings evident in the data. The researcher carefully reviewed the themes to ensure they were relevant to the study's focus (Braun & Clarke, 2006:77-101). This process helped reveal connections between the themes and the overall story emerging from the data (Braun & Clarke, 2006:77-101).

- **Step 5 – Defining themes:**

According to Clarke et al. (2015), defining and naming themes involves a detailed analysis of each theme to determine its scope and focus. The process includes developing clear definitions and identifying the essence of what each theme represents. The researcher carefully defined, refined, and named the identified themes. By repeatedly reviewing the transcripts, she organised the extracts into clear and consistent narratives (Braun & Clarke, 2006:77-101; Clarke et al., 2015:240).

- **Step 6 – Producing the report:**

Braun and Clarke (2006) explain that the final phase of thematic analysis involves weaving together analytic narratives and data extracts to present a compelling account of the data. This step should offer insight into the research question while grounding claims in participants' voices. Chapter 4 highlights the key findings, focusing on the themes that reflect participants' experiences regarding the impact of screen time on children's social interactions in the intermediate phase (Braun & Clarke, 2006:77-101; Nowell, Morris, White & Moules, 2017:10). These findings are supported by direct quotations from the participants to enhance authenticity and provide thick description, a strategy used to provide rich contextual detail and support transferability of the findings (Kumar, 2011:185).

Throughout the data analysis process, the researcher employed peer debriefing to improve the credibility of the study. Peer debriefing involves engaging with an impartial colleague to review emerging codes and themes, helping to uncover potential biases and ensure that interpretations are grounded in the data (Lincoln & Guba, 1985:308; Nowell et al., 2017).

3.5.4 Data quality

To ensure the trustworthiness of the study, the researcher focused on applying the four established principles of qualitative research: credibility, transferability, dependability, and confirmability (Bless et al., 2013:236; Nieuwenhuis, 2019:143). With these strategies, the researcher aimed to enhance the reliability and validity of the research findings.

- **Credibility**

Credibility refers to the degree to which the findings are a true reflection of participants' experiences and perspectives (Nieuwenhuis, 2019:144). To ensure credibility, the researcher used peer debriefing, a process that involves discussions with a knowledgeable peer to test and refine interpretations and reduce researcher bias (Lincoln & Guba, 1985:308). During this study, the researcher engaged in several peer debriefing sessions with the supervisor, during which the coding process, emerging themes, and interpretations were discussed to validate the findings.

- **Transferability**

Transferability is achieved by providing a thick description, which refers to rich, detailed accounts of the research context, participants, and findings to allow readers to determine whether the results are applicable to other settings (Kumar, 2011:185). The use of semi-structured interviews allowed participants to elaborate on their experiences, and these in-depth responses were included as direct quotes in the findings chapter to support transferability.

- **Dependability**

Dependability focuses on the consistency and traceability of the research process. It is achieved by providing an audit trail, which includes comprehensive documentation of all procedures, decisions, and reflections throughout the study (Babbie & Mounton, 2001: 278; Nieuwenhuis, 2019: 145). The researcher kept a detailed journal of data collection activities, analytical decisions, and methodological reflections to ensure transparency and accountability.

- **Confirmability**

Confirmability refers to the extent to which the findings are shaped by the participants and not influenced by the researcher's personal biases (Nieuwenhuis, 2019:145; Kumar, 2011:185). To ensure confirmability, the researcher presented findings supported by participants' verbatim quotes. The themes were also triangulated with relevant literature, strengthening the interpretation and grounding the analysis in both the data and existing knowledge.

3.5.5 Pilot study

To refine the semi-structured interview schedule and address any potential gaps in the research process, the researcher carried out a pilot study. This pilot confirmed that semi-structured interviews were the most suitable method for gathering data. The interview schedule provided the essential information needed to answer the research question (Bless et al., 2013:394). During the pilot, the researcher interviewed one participant, collecting valuable and detailed data that enhanced the understanding of the study topic. As a result, the data from the pilot interview was included in the overall research findings.

3.6 ETHICAL CONSIDERATIONS

Ethical considerations were carefully adhered to, given that the study involved human participants. Permission to proceed with the study was granted by the identified organisation (KILT) and the Research Ethics Committee of the Faculty of Humanities at the University of Pretoria (see Appendix D).

The following ethical considerations were adhered to during this study:

- **No harm or deception**

The study was designed and carried out with the ethical principle of beneficence in mind – ensuring participants were protected from harm and that their well-being was prioritised (Babbie, 2017:62; Hilton et al., 2019:73). Before participation, individuals were briefed on the purpose, questions, procedures, and potential outcomes of the study. The researcher used sensitive, non-judgmental language during interviews to minimise the risk of emotional distress.

To support participants in the event of emotional discomfort, a qualified counsellor, Nandi Calitz, was appointed to provide optional follow-up counselling and psychosocial support (see Appendix E). While none of the participants reported distress, each interview ended with a

short debriefing session in which the researcher checked on participants' well-being, reaffirmed confidentiality, reminded them of available support, and invited final reflections or questions.

- **Voluntary participation and informed consent**

Participation in the research was completely voluntary, and no individual was pressured to partake (De Vos et al., 2019:116). The researcher made it clear to all participants that they had the right to withdraw from the study at any point (Maree, 2019:48). An informed consent letter (see Appendix F) was provided to each participant, outlining the study's focus, objectives, participants' roles and responsibilities, ethical considerations, and the researcher's plans for the study. This ensured that participants were fully informed when making their decision to participate (Maree, 2019:48). The researcher also explained that the research data would be stored for ten years in line with the University of Pretoria's policy and the POPI Act. Those who agreed to participate voluntarily were asked to sign the consent form.

- **Privacy, anonymity, and confidentiality**

Participants' identities were protected through the use of pseudonyms and the removal of identifying information from transcripts (Maree, 2019:48). Audio recordings were made with explicit consent and stored securely. Electronic files were password-protected, and the physical documents were locked in a secure cabinet. Only the researcher and supervisor had access to the raw data. Data will be preserved for ten years in both electronic and hard copy formats, with the support from the University of Pretoria's archival procedures.

3.7 LIMITATIONS

This study has some restrictions that must be acknowledged. Firstly, the sample size was small and relatively homogeneous, which limits the transferability of the findings. Most participants were from similar socioeconomic backgrounds and shared a connection with the Knysna Initiative for Learning and Teaching (KILT). Recruiting participants solely through KILT may have introduced a selection bias, as caregivers affiliated with this organisation might share similar experiences, values, or levels of engagement with their children's education. As such, the insights gained are specific to this group and may not reflect the broader population of caregivers in different contexts across South Africa.

Secondly, the researcher's positionality must be considered. Holmes (2020:2) defines positionality as the values and beliefs shaped by factors such as political allegiance, religion, gender, sexuality, race, social class, and context. The researcher, a white female in her mid-

twenties and a social worker, recognises that this positionality could have influenced how participants responded. Some caregivers may have offered socially desirable responses, possibly downplaying concerns or challenges in order to avoid being perceived as inadequate or neglectful. To minimise these influences, the researcher engaged in reflexivity, a process of identifying and addressing personal biases, and took active steps throughout the research to remain mindful of power dynamics and interpretative subjectivity (Corlett & Mavin, 2018:378).

3.8 CONCLUSION

In conclusion, this chapter provides a comprehensive overview of the research design and methodology. It articulates the research question and outlines an interpretivist approach to understanding the complex interactions between caregivers and children as they navigate screen time. The choice of applied research and a descriptive and explorative research design was crucial in exploring caregivers' experiences and perceptions. The detailed description of the study participants, sampling methods, data collection, and analysis procedures underscore the research methodology. The commitment to data quality was ensured through the principle of trustworthiness, encompassing credibility, transferability, dependability, and confirmability. Additionally, the pilot study provided valuable insights that refined the research process. Ethical considerations were adhered to, ensuring the study avoided potential harm to participants. The methodology chapter lays a solid foundation for the following chapter, which presents the research findings.

CHAPTER 4: ANALYSIS AND FINDINGS

4.1 INTRODUCTION

This chapter presents the key research findings generated through the qualitative data collection process. The study aimed to explore caregivers' views on the effects of screen time on the social interactions of their children in the intermediate phase of development. In line with this goal, semi-structured interviews were conducted with selected participants, audio-recorded with consent, and transcribed verbatim to ensure an accurate and detailed account of their perspectives. The data were analysed using thematic analysis, a method well suited to the interpretivist paradigm adopted in this study, as it allows for the identification of recurring patterns, meanings, and experiences across the data set. Through the process of coding and interpretation, four main themes and several associated sub-themes were identified. These themes reflect a range of insights into how caregivers perceive, experience, and manage their children's screen time in relation to their social development. The findings not only capture common challenges and strategies but also highlight the diverse realities faced by families in the South African context, particularly in the town of Knysna, where the study was conducted.

The chapter begins with a presentation of the participants' biographical information and family structures, which provides important context for understanding the findings. This is followed by a detailed discussion of each of the four themes:

- Theme 1: Family Dynamics and Time Management
- Theme 2: Screen Time Usage and Effects
- Theme 3: Parental Role and Awareness
- Theme 4: Childhood Experience and Development

By analysing these themes in depth, the chapter seeks to provide a comprehensive understanding of the complex and layered ways in which screen time influences the social lives of children in middle childhood. Each theme is supported by direct quotations from participants, highlighting their voices and giving authentic insight into their lived realities.

4.2 PARTICIPANTS' BIOGRAPHICAL INFORMATION AND FAMILY STRUCTURE

This sub-section provides an overview of the participants based on the biographical information presented in Table 1.

Table 1: Participant's biographical information and family structure

Participant Number:	**1**	**2**	**3**	**4**	**5**	**6**
Ethnicity of family	White	White	White	White	White	Aboriginal[1]
Type of family	Nuclear family	Extended family	Nuclear family	Nuclear family	Nuclear family	Nuclear family
Number of children in the family	4	2	1	3	2	7
Participant position in the family	Mother	Mother	Mother	Mother	Mother	Father
Gender of participant	Female	Female	Female	Female	Female	Male
Age of participant	38	40	40	39	38	39
Age of intermediate phase child in question	11	11	11	12	11	12
Gender of intermediate phase child in question	Female	Female	Male	Female	Female	Male
Does the child have a phone?	Yes	Yes	Yes	Yes	No	No

Five of the six participants were white females aged between thirty-eight and 40. The participants were mainly part of nuclear families. The average number of children per family was around three, leaning towards larger families. The identified children ranged between eleven and twelve years of age, with two being male and four female. One participant identified themselves as male and was thirty-nine years old. He identified his family as part of the Aboriginal cultural groupings and has a large nuclear family. This adds valuable diversity to the dataset, suggesting a potential variation in family dynamics across cultural lines. However, it should be noted that being an Aboriginal is not one of South Africa's official race categories (Tewolde, 2021: 54). Four out of the six families allowed their child in the intermediate phase to own a cell phone. This indicates a notable presence of technology among the children in this study.

[1] *The term "Aboriginal" is used here as it reflects the way Participant 6 self-identified during the interview. While "Indigenous" is more commonly used in South African contexts, the research honours participants' self-descriptions as part of ethical and culturally sensitive practice.*

4.3 EMPIRICAL FINDINGS: THEMES AND SUB-THEMES

This section outlines the findings regarding caregivers' views on the impact of screen time on children's social interactions in the intermediate phase. The table below provides a summary of the themes and sub-themes identified from the data. The next section will explore each theme and sub-theme in detail.

Table 2: Themes and sub-themes

THEMES:	SUB-THEMES:
1. Family dynamics and time management	• Family time • Full/busy schedule • House rules • Family/ community support
2. Screen time usage and effects	• Understanding of screen time • Advantages of screen time • Disadvantages of screen time • Screen time use and effects • Social interaction via screen time • Effects of COVID-19 on screen time usage
3. Parental role and awareness	• Parental control • Parental knowledge of screen time management • Knowledge/ capability of parents to educate
4. Childhood experience and development	• Childhood innocence/ fun • Social interaction with peers

4.3.1 Theme 1: Family dynamics and time management

This theme provides insights into the ways participants and their families spend time together to gain an understanding of family dynamics. Bronfenbrenner's (1979) Ecological Systems Theory emphasises the crucial role of family interactions in child development. As family is part of the microsystem, regular family activities and interaction provide a nurturing environment supportive of the child's social, emotional, and cognitive growth.

4.3.1.1 Family time

A consistent pattern across the data is that of families spending time together and engaging in various activities such as fishing, hiking, beach outings, and cooking. Caregivers serve as

role models by actively engaging with their children in physical activity and providing support through facilitation. This, in turn, decreases the likelihood of sedentary behaviour caused by screen time engagement (Korcz, Krzysztoszek, Łopatka, Ludwiczak, Górska, & Bronikowski, 2020: 1-2). Participant 1 noted the following:

"As a family, we go fishing, we go for walks, we go to the beach, building things together, working in the garden together. Their dad farms with doves so we are together in the dove cage.

For participant 2, spending family time also meant no screen time, as expressed below:

"I tell them [referring to children] that we will be doing something like going to the beach and that phones are not allowed. (Participant 2)

Elaborating on the diverse range of activities, participant 5 emphasized:

"We fish, or we hike, or we are at the beach ... during winter, when it's cold, we usually have game nights".

According to Albert Bandura's Social Learning Theory, cited in Nabavi and Bijandi (2012: 5-7), people learn through observations, imitation, and modelling. When children participate in these shared experiences with family (or peers), they observe and learn social interaction skills and behaviours, which can reduce their dependence on screen time (Nabavi & Bijandi, 2012:5-7).

Looking from Bronfenbrenner's perspective, these family experiences occur within the microsystem, where immediate relationships and daily interactions, such as those between parents and children, have a direct influence on development. When caregivers model positive engagement and set boundaries around screen time, they actively shape the child's behavioural patterns and preferences. These practices also influence the mesosystem, as a positive interaction between home and recreational settings can reinforce social values and healthy time management. Another possibility is that positive interactions within the micro- and mesosystems can encourage children to engage less in screen time activities and more with family to promote healthier development and overall subjective well-being (Savahl, Adams, Florence, Casas, Mpilo, Isobell & Manuel, 2019: 3-14).

In addition, Vygotsky's Social Interaction Theory highlights the role of guided participation in cognitive and social development. Shared family activities such as fishing, gardening, and playing games offer natural opportunities for scaffolded learning, where caregivers provide the

social context for children to develop communication, cooperation, and problem-solving skills. These interactions represent a form of co-construction of knowledge, where learning happens through meaningful engagement rather than passive digital consumption.

4.3.1.2 Full/busy schedule

The data presented below suggests a possible link between a busy schedule filled with extracurricular activities such as sports, cultural activities, and academics, and reduced screen time among participants' children. When mentioning the children's involvement in various activities, it is accepted that these commitments occupy their (and caregivers') time and interests, leading to less time spent using screens. This suggests that a schedule filled with activities will undoubtedly limit screen time among children as they are engaged in fulfilling their interests.

The following quotations portray children's busy schedules:

> *"She does hockey, she does netball, tennis, and choir." (***Participant 1)**

> *"She loves sports, she loves netball, and she wants to try out hockey next year. She loves PT [physical training] when they do swimming and all those things***." (Participant 2)**

> *"My children like doing activities. They are involved in cultural activities, sports, academics, and everything. It keeps them very busy." (***Participant 5)**

From Bronfenbrenner's perspective, these activities take place across different systems – particularly the microsystem and mesosystem. These structured environments not only reduce idle time but also offer rich opportunities for social engagement, teamwork, and skill-building. The coordinated support between families and institutions like schools and sports teams reflects a well-functioning mesosystem that helps promote developmental goals while limiting the influence of excessive screen exposure.

In relation to Vygotsky's theory, extracurricular activities can be seen as social settings where children develop new skills through interaction and guided participation. Coaches, teachers, and peers often serve as more knowledgeable others who support learning through scaffolding, whether in sport, music, or academics. These interactions offer children opportunities for meaningful engagement within their zone of proximal development,

encouraging learning and social development in ways that passive screen time typically cannot.

Thus, while busy schedules may seem purely practical, they also reflect how children's development is shaped by structured social environments that actively support learning and reduce reliance on screen time.

4.3.1.3 House rules and routines

All participants mentioned the importance of house rules and routines, and implementing these consistently. The rules and routines mentioned were related to screen time usage. This highlights the structured approach needed to manage technology and age-appropriate responsibilities. This reflects the caregiver's role in setting boundaries that guide children's behaviour in a predictable and secure environment.

Participant 6 mentioned that a solid relationship with their children reduces the need for strict barriers regarding phone usage, suggesting that mutual trust and understanding facilitate rule adherence. According to Pinquart (2017), authoritative parenting, which is warm with consistent rules, is associated with improved adherence to rules among children. Similarly, other scholars associate supportive and positive parent-child relationships with lower levels of externalising problems and improved compliance with rules (Zhou, Eisenberg, Wang, and Reiser's (2019). Bronfenbrenner's microsystem is evident here, where the family plays a direct role in shaping the child's behaviours through structured routines and expectations. These daily patterns form part of the child's immediate environment and influence how they learn to manage their time and responsibilities. The consistent application of house rules around screen time also reflects mesosystemic interactions, where the relationship between home expectations is understood and respected.

Participant 1 highlighted the enforcement of consequences linked to rule-breaking, such as restricting phone access when chores or homework are not completed. This supports the notion that clear communication and consistent rule enforcement contribute to a harmonious household environment where expectations are understood and respected.

Vygotsky's Social Interaction Theory also provides insight into this dynamic. Through regular interaction with adults, children are gradually socialised into shared expectations and behavioural norms. The adult (caregiver) acts as a more knowledgeable other, scaffolding the child's development of self-regulation and responsibility over time. By involving children in

predictable routines and conditional access to screen time, caregivers are co-constructing knowledge about limits, structure, and personal accountability.

All participants mentioned implementing rules, routines, and boundaries regarding screen time, including limiting time spent using devices. These sentiments are expressed in the following quotations:

*"But household rules, when I give you work, and you didn't do it, then you are not allowed to get your phone." (***Participant 1)**

*"They do their homework first, and then get an hour or so; after that, they bathe and sleep. I try to stick to the old routine of bath, eating, and sleeping time. Weekends and when it rains, it's a bit more [referring to screen time]." (***Participant 2**

"He is only allowed to get his phone after he completes his homework and all his chores." **(Participant 3)**

*"Look, they must be in bed by a certain time. Then the phones are switched off and taken away. Or we block it." (***Participant 4)**

*"But that is usually for a limited time in the evening. It is usually after supper, after bath time, when everything has been concluded for the night, and their bags packed for the next day. Then they are allowed some time to do that [referring to screen time]." (***Participant 5)**

*"I give them certain times to watch. 2 hours. Okay. So, on weekends when they are at home, they can watch for 3 hours." (***Participant 6)**

Together, these insights show that screen time regulation is not only about enforcing discipline but also about cultivating developmentally appropriate autonomy through structured routines and guided social interaction. Both theoretical frameworks reinforce the importance of the caregiver's role in shaping healthy behavioural patterns within the child's ecological and social development.

4.3.1.4 Family/Community Support

Family and community support when raising children can significantly impact families, providing benefits and challenges. The phrase "it takes a village to raise a child" encapsulates

the idea that a collective effort is essential in nurturing children (Reupert, Straussner, Weimand & Maybery, 2022). This notion emphasises children benefiting from the care and guidance of various individuals, including parents, extended family members, neighbours, teachers, and community members. Bronfenbrenner's ecological theory demonstrates how these different connections weave together to create a complex social fabric profoundly impacting children's learning and development (Reupert et al., 2022). It is comparable to a web, where each strand represents a different relationship or support system (Bronfenbrenner 1994:38). These rich connections, influenced by factors such as culture, socioeconomic status, and language, not only shape the quality of child-rearing practices but also defines the breadth of children's social networks (Reupert, et al., 2022). This is closely connected to the South African philosophy of Ubuntu, which emphasises the interconnection between people and relationships shaping people (Paulson, 2019). The following quotes demonstrate how family members assist with child-rearing:

"Their grandmother is our neighbour, so they are with grandma more than at home." (**Participant 1)**

"Even with grandma and grandpa living here, they bake cookies with the kids. During COVID-19, the children learned to preserve things. We have a fig tree, the green ones and they learned to preserve these. They learned to bake bread." (**Participant 5)**

Participants 1 and 5 indicated that having family nearby provides children with enriching experiences and a profound sense of belonging. Being surrounded by family members who actively engage in activities such as baking, gardening, or simply spending quality time together creates a nurturing environment that fosters emotional well-being and resilience in children.

However, participant 3 noted that family members' differing views regarding parenting decisions, such as screen time usage, can lead to friction and discord within the family unit.

"It causes a lot of friction amongst the family members who are not used to that way of communication."

This highlights the importance of establishing clear communication channels and setting boundaries to navigate such challenges effectively (Reupert et al., 2022). Van Breda (2018:13) highlights that ecological systems recognise the social environment's impact on individual well-being. This relates directly to children's screen time and social interactions.

Thus, the ecological systems theory helps in understanding how screen usage (microsystem) is shaped by elements like family dynamics (mesosystem), community norms (exosystem), and cultural values and beliefs (macrosystem).

4.3.2 Theme 2: Screen time use and effects

Exploring screen time usage and its effects on children in the intermediate phase is vital in understanding the challenges caregivers face. This section explores the complex theme of screen time use and the advantages and disadvantages from caregivers' perspectives. Various sub-themes are discussed, including:

- Advantages and disadvantages of screen time,
- Educational and entertainment uses of screen time,
- How screen time is applied in social interactions, and
- The impact COVID-19 had on screen time and families.

These sub-themes are preceded by a discussion of caregivers' understanding of screen time.

4.3.2.1 Understanding of screen time

According to various authors, screen time encompasses various activities involving screens and the uses thereof (Anuradha, 2019:105; Dunckley, 2015:19; Kaye et al., 2020:3661; Pandya & Lodha, 2021). Dunckley (2015:19) states that screen time encompasses activities such as texting, video chatting, browsing the internet, gaming, emailing, engaging in social media, using applications, online shopping, writing and word processing, reading from a device, and scrolling through pictures on a phone. The data reveals a shared understanding among participants of the activities encompassing screen time. This includes traditional devices like TVs and computers, and newer technologies like smartphones and tablets, as expressed in the following quotes:

*"Screen time is being on the phone the whole time. Not only cell phones, but also TVs, laptops, tablets, and phones." (***Participant 1)**

*"Well, screen time is everything. I think these days, technology is so advanced that it's not only about watching TV, but it also includes phones, tablets, computers, etc. So, for me, any blue screen is screen time." (***Participant 2)**

*"I think it's anything that has a flickering light, whether it's a TV, a computer, a cell phone, or a toy." (***Participant 3)**

"Screen time is when they are on their phones because they watch TV minimally." (**Participant 4)**

"I think it's the amount of time that you sit in front of a screen, whether it's the television, whether it's a phone, a tablet, or games." (**Participant 5)**

"Screentime is research (sic)*."* (**Participant 6)**

4.3.2.2 Advantages of screen time

Screen time has numerous benefits for children, including access to educational resources, entertainment, and opportunities for skills development. All participants mentioned YouTube as a platform providing valuable educational tools, allowing children to explore, experiment, and learn independently. Active screen time refers to screen-based activities in which the user is actively engaged with an electronic device, such as work, education, and research (Dunckley, 2015:19). Data collected from the interviews show the potential value of screen time as an educational tool. Screen time can be useful for researching, learning problem-solving skills, and practicing academic skills, as captured by the following quotes:

"They would Google it, and they would learn something from it." (**Participant 1)**

"She explores and experiments, and there is nothing wrong with that. "They must learn life skills and if they are learning it in this way, why must I go against it and tell her that it's wrong?" (**Participant 2)**

Participants 3 and 4 noted that screen time aids communication by improving children's language skills and facilitating connections with family and friends, regardless of location. The following quotes capture the sentiment:

"I must say, his English has improved because of the phone." (**Participant 3)**

"It's positive because they can communicate with the family" (**Participant 4)**

Participants 2 and 6 also mentioned the importance of embracing technological advancements and recognising the evolving nature of learning in the digital age. However, they cautioned

caregivers to guide and supervise children to harness the advantages of screen time. The following quotes express this sentiment.

*"Life changes and things evolve, and today's children are more technologically savvy than we are." (***Participant 2)**

*"It's also good to let your child have screen time or work on the phone and learn how to work on computers because we are living in a world now of, you know, knowledge in computers and that, so, we can't keep the kids away from this." (***Participant 6)**

Therefore, the benefits of screen time centre on parental guidance and involvement. Caregivers are crucial in providing direction, support, and supervision as children navigate online resources and educational applications. By equipping children with the skills to effectively navigate screen time and promoting active engagement with educational content, parents can create lifelong learning habits and prepare children for success in an increasingly digital world.

4.3.2.3 Disadvantages of screen time

Many challenges are associated with excessive screen time, affecting family relationships. Some participants expressed concerns about fighting and conflicts among children attributed to screen time. For example, Participant 4 highlighted how phones have become pervasive in daily activities, leading to decreased interaction and communication within the family:

"They would do everything with that phone. Eat. Bath with it. Brush their teeth with it. They are on the phone the whole day, and that is my biggest problem … They spend less time with us because they prefer to sit in the room on the phone than to communicate with us or play with their little brother. "

Moreover, Participant 6 described the constant battles and addictive tendencies that arise when multiple children fight for control over screen time choices, exacerbating tension within the household:

"Because there are such a lot of kids, they are always battling about what to watch. There is always a battle".

Another participant referred to withdrawal symptoms and behaviours that emerge when screen time is restricted, indicating a possible addiction to digital devices. However, this can be seen as normal since peer relationships become increasingly important during middle childhood (Laursen & Hartl, 2013).

*"Then it's like they have withdrawal symptoms. They would burst into tears because they can't be without it." (***Participant 1)**

This dependency can lead to family bonds being neglected. Participant 4 observed that her child prefers seeking advice from friends rather than family members:

"But the phones do take away a lot. Because they would prefer to discuss it with their friend first, whereas previously, they would first discuss it with me."

4.3.2.4 Screen time's use for entertainment

The interviews highlight that screen time was used mainly for entertainment and leisure, and YouTube, Roblox, and TikTok were often mentioned in this regard. This type of screen time is referred to as passive screen time, which involves watching TV or other electronic devices (Dunckley, 2015:19). While screen time provides opportunities for relaxation and entertainment, caregivers are encouraged to maintain a balance between leisure activities and educational engagement, ensuring children maintain a balanced lifestyle. The following quotes highlight screen time's uses for entertainment purposes:

"We have a laptop mainly for watching movies, and that's about it. They don't play computer games. They would play games on the phone, Roblox". **Participant 1)**

*"They use it for games and YouTube and things like that, but I monitor it." (***Participant 2)**

*"They are not physically together but via telephone, but they talk, and they type (messages) to each other." (***Participant 3)**

*"So, her phone is mainly for us to locate her, and then she would use WhatsApp… TikTok… YouTube…" (***Participant 4)**

*"They are allowed to use YouTube sometimes… watch the praise and worship videos..." (***Participant 5)**

*"We have Netflix, so they usually watch these simple kids' programmes". (***Participant 5)**

*"They just want to play games and (*watch) *YouTube." (***Participant 6)**

4.3.2.5 Social interaction through screen time

Louw and Louw (2019:247) recognise the importance of digital devices and media during middle childhood, as they can be a significant tool for cognitive socialisation. They define cognitive socialisation as the "internalisation process by which cultural tools influence the development of cognitive processing skills" (Louw & Louw, 2019:247). As children grow through middle childhood, electronic devices, social media, internet access, and TV or computer games become increasingly important (Louw & Louw, 2019:247). These tools not only expose children to new forms of knowledge but also expand the ways in which they connect with others.

The COVID-19 pandemic marked a pivotal shift in the role of screen time in children's lives. With lockdowns and school closures, digital platforms became essential for both education and social interaction. Screen-based interactions, such as video calls, messaging apps, and shared gaming experiences, emerged as vital tools for maintaining relationships and facilitating learning at home.

Participants described how their children used platforms like WhatsApp to stay connected with friends, classmates, and teachers, often blending learning and socialisation:

*"But she does WhatsApp her one friend who does not live here anymore. It is how my children chat with that bunch [family that lives far away]. So, it's video calls and that type of thing". (***Participant 1)**

*"They were mostly using my phone to view any messages from the teacher where she would send work or explain something, and she would listen attentively to these messages." (***Participant 2)**

*"…play a game and simultaneously call [a friend] on WhatsApp and talk to him while you are playing the game together." (***Participant 3)**

*"They also converse with their class friends, but she mostly talks with her group [of friends]." (***Participant 4)**

These examples highlight how WhatsApp and similar platforms supported peer communication and continuity in social bonds. Digital interaction thus became a bridge between isolation and connection, complementing face-to-face relationships during a period when they were limited.

However, this shift also underscored how screen time can compete with in-person interaction. While beneficial for maintaining contact, excessive reliance on digital platforms may reduce opportunities for unstructured social play, real-time emotional exchanges, and the development of in-person social skills (Twenge & Campbell, 2018). Some caregivers expressed concerns about children preferring screen-based communication even when in-person interaction was available.

In this way, COVID-19 not only accelerated the integration of screen time into daily life but also complicated the social dynamics of childhood. It prompted caregivers to reflect on the balance between necessary digital connectivity and the irreplaceable value of face-to-face interaction.

4.3.2.6 Effect of COVID-19 on screen time use

Participants mentioned the negative and positive effects of COVID-19 on screen time usage. While COVID-19 necessitated increased screen time for homeschooling and maintaining social connections, participants highlighted challenges and concerns associated with a heightened dependence on digital devices. Children adapted to homeschooling and stayed connected with friends during lockdown through screen time. According to participants, screen time made home-schooling bearable for children and facilitated communication with friends when face-to-face interaction was limited. The following quotes capture these views:

*“It is easier to go back and watch the video [of class lesson] again if you are struggling.” (***Participant 1)**

*“But (chuckles) I used to download Cami Maths for them, and they would think they were playing a game, but they were doing Maths, actually (chuckles).” (***Participant 5)**

However, participants were concerned about the negative effects of increased screen time during COVID-19. Participant 3 noted that screens often act as “babysitters.”

*"A lot. He used it a lot. It was either TV or his cell phone. It was almost like the babysitter. And it probably still is because, I mean here I am, and he’s at home. There were people at home, but it became the babysitter." (***Participant 3)**

4.3.3 Theme 3: Parental role and awareness

This section discusses caregivers’ strategies to control and manage screen time and the ability to educate their children using screen time as a resource. The sub-themes discussed include parental control mechanisms, parents' and caregivers’ knowledge, their capacity to educate, and the definitions of screen time.

4.3.3.1 Parental control

Participants demonstrated various strategies to control screen time, including limit setting, routines, parental control applications, and family activities. During middle childhood, the dynamics between caregivers and children progress to co-regulation (Arnett & Maynard, 2017:329). This transition entails children becoming less dependent on caregivers for assistance with various tasks, including homework and peer interactions. With guidance from caregivers, children engage in independent and self-directed behaviours. This cooperative relationship fosters mutual respect and allows children to develop autonomy within the boundaries set by caregivers. Co-regulation is therefore a crucial strategy for screen time management, as it encourages shared responsibility and gradual internalisation of behavioural limits.

The following quotes highlight the importance of parental control in screen time management.

*"Well, we’ve downloaded an app now to stop the screen time… Other than that, we take the phones and lock them up in the safe." (***Participant 1)**

"They would watch TV, or I would put on a movie for them, but their viewing was also limited because we played outside most of the time…You must ensure that there is a routine

*and that you keep to the house rules and the designated times… Set up rules and stick to them, be firm, and don't give in" (**Participant 2)***

*"But I do intervene. I check the phone regularly to see how they communicate with each other…I limit him to 6 o'clock at night." (***Participant 3)**

*"We have Family Link on which we block their phones, just for a little time-out." (***Participant 4)**

*"…keep to the routine… But I also think that parents should be positive role models to their children. So, be aware of what your children watch. Be aware of what is happening on the phones and what they are dealing with." (***Participant 5)**

*"So, I got Wi-fi, so it is controlled watching. You need to type in what you want to watch." (***Participant 6)**

From Bronfenbrenner's perspective, these strategies are deeply embedded within the microsystem, where parents and caregivers directly influence the child's developmental outcomes through daily interaction, limit setting, and supervision. The structure and consistency provided by these control mechanisms help regulate children's behaviour and decision-making in relation to screen use. Furthermore, the mesosystem is also relevant here, as effective communication between school expectations, household routines, and parental strategies can collectively shape screen time norms and reinforce appropriate use across settings.

Vygotsky's Social Interaction Theory adds another layer of understanding. In this framework, the caregiver functions as the more knowledgeable other who actively scaffolds the child's ability to self-regulate. By checking phones, setting digital boundaries, and encouraging offline activities, caregivers are engaging in guided participation, helping children internalise social norms and expectations around technology use. These interactions support children in acquiring self-control, digital responsibility, and eventually independent regulation of screen behaviour.

By establishing clear boundaries, consistently enforcing them, and actively engaging with their children, parents not only guide their children toward developing healthy screen habits but also foster independence, accountability, and decision-making within a secure and responsive

family structure. This dual influence of structure and responsiveness is central to both theories and reflects best practices in supporting children through the transition of middle childhood.

4.3.3.2 Parental knowledge on screen time management

Vygotsky's Zone of Proximal Development highlights the collaborative nature of learning and development (Louw & Louw, 2014:168). It suggests that children can achieve tasks that go beyond their current abilities with the support of adults or more experienced peers (Louw & Louw, 2014:168). This collaborative approach, which focuses on scaffolding and conversation, helps children build their knowledge within a social setting. Ceder (2020) emphasises the role of parents in managing screen time, aligning with Vygotsky's focus on guidance and collaboration. Parents are encouraged to set boundaries around screen use and engage with their children both online and offline to foster meaningful interactions. The interviews also highlight the varying levels of parental awareness regarding effective screen time management.

*"I understand that things can also go wrong. You must remember that you are dealing with a child, and they need guidance and their parents. If you maintain the boundaries, they will keep to it, and it will become routine." (***Participant 2)**

*"When I talk to him, I try putting away my phone because there's respect. I must respect his words. I think it's positive. One must first look at oneself before looking for the negative in screen time." (***Participant 3)**

*"So, expose him and make him aware… So, I give him age-appropriate facts." (***Participant 3)**

Participants recognised the benefits and risks associated with digital media, stressing the importance of parental guidance in navigating these complexities.

*"Positive and negative because when we are on the road, it keeps them occupied. Negative, when they are on the screens too much and it's sometimes a fight to get them off it and to get them to do something else (laughs). " (***Participant 1)**

*"On the other hand, with everything happening outside, one must always preach and explain to them. But at least they are in a place where they understand." (***Participant 4)**

*"So, I think there is a balance, and it's also good because they also need to learn. So, when I give them the phone to go to YouTube, they also know the dangers. I have explained to them what can happen and what may pop up. One must be careful even if you have any form of protection or Family app on your phone. The dangers are always there, and one must be aware of these." (***Participant 5)**

*"Some parents love it when the children just sit in front of the TV because they leave the children in front of the TV or the phone so they can be quiet. But they don't know that they are damaging this child's brain, you know." (***Participant 6)**

Parents can effectively guide their children in developing healthy screen time habits by adopting a proactive approach, setting rules, modelling responsible behaviour, and allowing open communication. This aligns with Vygotsky's notion of learning as a socially mediated process within a collaborative environment. The following quotes support this view.

*"But you are an adult. You must support and control your children. They must know their boundaries." (***Participant 2)**

*"And perhaps first explore screen time together instead of just giving them a device and telling them this is what you may do." (***Participant 5)**

4.3.3.3 Knowledge/ capability of parents to educate

The COVID-19 pandemic necessitated homeschooling, highlighting the differences in caregivers' abilities to support their children's education. While some caregivers had the knowledge and capacity to provide effective academic support, others found themselves underprepared, lacking teaching experience, familiarity with the curriculum, or time due to work commitments. These differences significantly shaped how screen time was used in each household, especially for educational purposes.

Participant 2, a qualified teacher, was well-positioned to support her child's learning and create a structured, collaborative home learning environment. Her professional training not only enabled her to guide her child effectively but also fostered enjoyment and routine in their homeschooling experience. This reflects Vygotsky's sociocultural theory, which emphasises the importance of guided participation and scaffolding in promoting children's cognitive development (Louw & Louw, 2014:168). Her reflections illustrate how parental expertise can transform screen time into a meaningful educational resource:

*"Because Mommy is a teacher, she enjoyed doing things with me at home although her teacher sent the work … I think it must have been very difficult for other children, especially when parents do not have the training to present the activities to their children at home. That must have had a huge impact on the children. At least I had that advantage and a background in education, that's why she enjoyed it. Together we decided to work out a roster because it was almost like home schooling." (***Participant 2)**

*"We broke up their work, and they were able to get to everything. They caught up when they were behind with their work. They were able to keep up with the work." (***Participant 1)**

In contrast, Participant 4 shared that she often struggled to understand the work herself, stating,

*"…not everyone was destined to be teachers … There were many times that I did not understand something" (***Participant 4)**

Similarly, Participant 6 expressed his frustration with unfamiliar content:

*"Hmm, the challenging part is where they get new work, and they didn't practice it in class yet, and they were asking me, and I had like no idea." (***Participant 6)**

Although these caregivers were not illiterate, their lack of training in teaching and unfamiliarity with curriculum content made it difficult to facilitate learning at home. Chopel and Choeda (2021) identify five key factors influencing parental involvement in education, one of which is educational background. These findings illustrate that even literate and engaged caregivers may feel unequipped when faced with teaching responsibilities, reinforcing the importance of targeted support for parents during remote schooling.

Participant 3 could not assist the child with homework due to work commitments. This reflects the difficulties many caregivers face in balancing professional obligations with parental duties, leading to increased reliance on screen time for childcare during remote schooling, as shown in the following quote.

"I think it was bad for him because I was at work the whole time. So, I think he did not necessarily enjoy it, and I think that's what contributed to him spending a lot of time on the phone … I paid her [neighbour] so that he could do his assignments and homework. He could

not refuse to do his homework. This was a different person assisting him because children don't necessarily always listen to their parents when it comes to doing their homework." (**Participant 3)**

These diverse accounts highlight the unequal terrain of home education, where caregiver knowledge, time availability, and support networks all intersect to shape how screen time was utilised and how effectively children could engage in academic tasks.

4.3.4 Theme 4: Childhood experience and developmental level

Exploring childhood experiences and the development of children in the intermediate phase provides an understanding of screen time engagement. This section describes how screen time shaped the experiences and development of children in this phase. Considering the innocence and fun associated with childhood, this section highlights the importance of play in shaping social interactions. The section further explores social interaction with peers as an important sub-theme.

4.3.4.1 Childhood innocence/ fun

Children attain age-appropriate cognitive traits during the intermediate phase, including conversation skills, the ability to distinguish between imagination and reality, improved concentration and memory capacity, and reversible thinking skills (Henderson & Thompson, 2016:37). Play remains a vital part of children's development in the intermediate phase. It supports social interaction, emotional regulation, advanced cognitive processing, and creativity (Bergen & Fromberg, 2015:32-34). Play encourages social and emotional competence as children engage in self-directed activities, organisational skills, self-control, and negotiation within a group setting, fostering self-confidence. According to participants, children prioritise outdoor play, imaginative games, and creative activities over screen time, emphasising the importance of unstructured play for development. They observed the following:

*"When they are at my house, they play with the two little sisters, and they play with dolls. Sometimes they play apart from each other, but mostly they play together, applying make-up to each other, doing each other's hair, and modelling. They don't play big kid stuff; it's still very innocent, child-like play… They love playing outside ... They love riding their bikes and jumping on the trampoline." (***Participant 1)**

*"They would usually say they've played with the dolls, or they've played dress-up. When the friends visit, the whole lounge gets transformed into a fort, or they build a tent, or they play with dolls, or they make clay in the kitchen with Mommy's flour and oil (chuckles). Or they bake cookies or cupcakes and play outside." (***Participant 2)**

One of the caregivers mentioned the influence of early exposure to screens on children's preferences and interactions:

*"Unfortunately, he got a phone when he was still very young…" (***Participant 3)**

Preserving childhood innocence and promoting play is significant for holistic development, as it fosters essential social, emotional, and cognitive skills for their well-being. As noted previously, children are growing up in a digital world, and screen time affects their development positively and negatively. Goodwin, cited in Parenting SA (2023) recommends the three B's – Boundaries, Basic Needs, and Boredom- as guidelines for raising children in the digital age. She highlights the importance of mindfulness of children's basic needs when setting limitations. When children engage in screen time excessively, basic needs such as sleep, relationships, and physical movement are neglected significantly (Parenting SA, 2023). Lastly, Goodwin regards boredom as an important aspect of human development, children's physical and mental health, and productivity (Parenting SA, 2023).

4.3.4.2 Social interaction with peers

Various authors emphasise the critical role of peer interaction in the social development of children in middle childhood (Bergen and Fromberg (2015:32-34), Louw and Louw (2019:275), Singh and Verma (2021:424), and Carr (2017:86). They highlight the importance of peer groups in fulfilling the natural need for affiliation, love, affection, and social support essential for relationship management. Social interaction with peers enables children to practice social skills, understand social cues, and explore communication in a context different from adult (or family) interactions (Louw & Louw, 2019:274; Singh & Verma, 2021:424). Participants highlighted the active engagement of children in social interactions at school. They participated in various activities, fostering friendships and a sense of belonging within the school community.

*"She's very interactive at school with her friends." (***Participant 1)**

*"...they arrange sleepovers, and they arrange to get together, and they see each other during break times." (***Participant 2)**

*"She has about 4 or 5 friends. She doesn't have a big crowd. She stays in a small group." (***Participant 4)**

*" He [has] that one friend that is a little bit older than him, by two years. But they play chess together." (***Participant 6)**

However, participant 3 revealed the influence of screen time on her child's social interactions with the evolving nature of digital media. While online communication offers convenience and connectivity, it also raises questions about the impact on traditional face-to-face interactions and communication styles among children.

*"He can communicate much better on the phone… I think, because online has taken over, he tends to prefer to communicate in that way." (***Participant 3)**

Overall, these perceptions emphasise the importance of peer relationships and the versatile nature of social interaction among children in the intermediate phase in developing social skills and establishing a sense of belonging within the child's systems.

4.4 CONCLUSION

These findings highlight the complex dynamics surrounding screen time usage among children in the intermediate phase, as perceived by caregivers in South Africa. It is evident that integrating screen time into daily routines significantly influences families' time management and interactions with one another. The findings reveal screen time's positive and negative effects on children's social development. The study also emphasises the important role of parents and caregivers in raising awareness and implementing strategies to manage the effects of screen time. Ultimately, understanding children's experiences and development reveals the complex relationship between screen time and social interactions. This highlights the need for a balanced approach that encourages healthy use of technology while nurturing meaningful family connections.

CHAPTER 5: KEY FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

5.1 INTRODUCTION

This chapter is a final discussion of the conclusions and recommendations derived from the study's findings on the views of caregivers on screen time's effects on children's social interactions in the intermediate phase. The chapter begins by revisiting the research goal, objectives, and research question to ensure alignment between the study's purpose and outcomes. It then presents conclusions from the research methodology, literature review and theoretical frameworks, and the biographical information. It further summarises the key findings, conclusions, and recommendations related to each theme. Then proposes recommendations for practice, policy, and future research. The chapter concludes by offering final remarks on the study.

5.2 GOAL, OBJECTIVES, AND RESEARCH QUESTION

This section provides an overview of the study's goal, objectives, and guiding research question. It reflects how the objectives were pursued throughout the research process. By revisiting these elements, it offers clarity on the study's overall direction and sets the stage for the key findings, conclusions, and recommendations presented in the following sections.

5.2.1 Research Goal

The goal of the study was to explore and describe caregivers' views regarding the impact of screen time on children's social interactions during the intermediate phase, living in Knysna, South Africa. This goal was achieved through the formulation of clear research objectives, the use of a qualitative research methodology, the application of established theoretical frameworks - namely Bronfenbrenner's ecological systems theory and Vygotsky's social interaction theory - a comprehensive review of relevant literature, and engagement in an empirical study involving in-depth interviews with caregivers.

5.2.2 Objectives of the study

The goal was achieved through the following objectives:

5.2.2.1 Objective 1: To explore and describe the positive and negative experiences of caregivers of screen time usage by their children in the intermediate phase

This objective was met through a combination of literature review and empirical data presented in Chapter 4, specifically sections 4.3.2.2, 4.3.2.3, and 4.3.2.6. The literature showed that screen time can support cognitive development, skill enhancement, and educational engagement when used constructively (Louw & Louw, 2019; Neophyto et al., 2021). However, it also outlined risks such as impaired memory, emotional dysregulation, and reduced physical activity due to excessive use (Domingues-Montanari, 2017; Lissak, 2018).

Findings from the semi-structured interviews reflected a nuanced understanding of screen time. Participants identified clear educational advantages, such as helping children with research, school tasks, and problem-solving. These views aligned with Vygotsky's concept of mediated learning, where digital tools can serve as extensions of guided instruction. At the same time, caregivers expressed concerns about excessive screen time negatively affecting family relationships - particularly conflicts among siblings, reduced communication, and behavioural changes.

When viewed through Bronfenbrenner's ecological lens, these experiences reflect interactions within the microsystem (home and family), and the way digital habits influence and are shaped by other systems (e.g., school, peer groups). The caregivers' perspectives, influenced by their backgrounds and family dynamics, enriched the study's understanding of both the risks and opportunities that screen time presents in middle childhood.

5.2.2.2 Objective 2: To explore and describe how screen time has affected children's social interactions in the intermediate phase

This objective was met through a combination of literature insights and empirical findings detailed in Chapter 4, particularly section 4.3.2.5. The literature emphasises that social interaction in middle childhood is foundational for building relationships and developing communication, empathy, and cooperation skills (Louw & Louw, 2019). While digital devices can support cognitive and social development, several studies caution that excessive passive screen time can lead to attention issues, emotional dysregulation, and reduced face-to-face interaction, all of which hinder healthy social functioning.

Caregivers in this study echoed these concerns. Some participants noted that screen time, especially when unsupervised, restricted opportunities for meaningful interpersonal interaction and increased behavioural challenges. Others acknowledged its benefits, especially during

the COVID-19 pandemic, as a means for children to maintain peer and teacher connections through platforms like WhatsApp. This reflects a tension between screen time as both a social tool and a potential barrier to social development.

Using Bronfenbrenner's ecological theory, these findings illustrate the complex interplay between children's immediate relationships (microsystem) and broader social influences (mesosystem and exosystem). Vygotsky's theory further supports the notion that social learning is mediated not just by people, but by tools, including digital ones. Therefore, the nature and context of screen time critically shape its impact on children's social interactions. The research thus confirms that the objective was thoroughly addressed.

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

This objective was addressed through the literature and empirical findings, specifically Chapter 4, sections 4.3.3 and 4.3.4. The literature review highlights the importance of parental involvement in managing screen time and promoting balanced social interaction. Guidelines from the American Academy of Pediatrics (AAP, 2016) and authors such as Ceder (2020) and Neophytou et al. (2021) stress that excessive screen use - defined as more than two to three hours daily - is linked to developmental delays and diminished family cohesion. In contrast, engaged parenting, boundary-setting, and thoughtful content selection support healthier outcomes.

Participants in the study confirmed this. They reported implementing structured routines, screen time limits, parental control applications, and joint family activities to encourage meaningful interaction. These strategies align with the developmental need in middle childhood for co-regulation, where caregivers guide behaviour while fostering autonomy (Arnett & Maynard, 2017). This balance is also reflected in Vygotsky's Zone of Proximal Development, which highlights the importance of adult guidance in helping children internalise responsible habits, including digital behaviours.

Caregivers recognised both the benefits and risks of screen time, promoting open dialogue, modelling appropriate use, and encouraging offline engagement. Despite the availability of digital media, participants noted that children still actively sought peer play and imaginative outdoor activities, critical for socio-emotional growth. Kristy Goodwin's "3 B's" approach

(Boundaries, Basic Needs, and Boredom) was echoed in some strategies, showing that boredom can be a springboard for creativity and real-world interaction (Parenting SA, 2023).

The value of peer interaction during middle childhood, as emphasised by Louw and Louw (2019), Carr (2017), and Singh and Verma (2021), was clearly supported by participants' efforts to maintain social engagement. Overall, the study demonstrated that caregivers play a proactive role in managing screen time and promoting healthy social development, thereby fulfilling this objective.

5.2.3 Research Question

The research question that guided this study was:
"How do South African caregivers, living in Knysna, view the effects of screen time on children's social interactions in the intermediate phase"

This question was explored through qualitative empirical research involving semi-structured, face-to-face interviews with six caregivers who met the inclusion criteria. Participants were recruited through purposive sampling, and interviews were conducted in a confidential setting to allow for open, in-depth discussions. The data collected were analysed using thematic analysis, which generated four overarching themes and 15 sub-themes, as presented in Chapter 4, section 4.3.

The generated themes captured both the positive and negative experiences of caregivers regarding screen time and its impact on their children's social interactions. Caregivers described how screen time could support connection and learning, but also highlighted concerns about social withdrawal, behavioural changes, and reduced face-to-face engagement. These insights directly addressed the research question by revealing how caregivers perceive and respond to the influence of digital media on their children's social development.

The theoretical framework further deepened the understanding of these findings. Bronfenbrenner's ecological systems theory contextualised caregivers' perspectives within broader systemic influences - including family, school, community, and digital culture. Vygotsky's social interaction theory emphasised the role of guided, meaningful interaction in the development of social skills. Together, these theories supported a holistic interpretation of caregivers' views and demonstrated that the effects of screen time are shaped by both individual and contextual factors.

5.3 KEY FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

This section presents conclusions from research methodology, literature, and theoretical frameworks, and biographical information of participants. It also summarises key findings, conclusions, and recommendations based on each theme.

5.3.1 Conclusions from research methodology

The research methodology adopted in this study was well aligned with the study's aim: to explore South African caregivers' views on the influence of screen time on their intermediate phase children's social interactions. Grounded in the interpretivist paradigm, the qualitative approach and instrumental case study design offered the researcher the flexibility and depth required to engage meaningfully with participants and explore the subjective meanings they attach to their experiences. The use of purposive sampling, semi-structured interviews, and thematic data analysis allowed the researcher to collect rich, contextually grounded data and generate nuanced insights that would not have been possible through a more rigid or quantitative approach.

The interpretivist paradigm, which guided the study, emphasises the importance of understanding human experiences from the participant's perspective. In line with this, the qualitative approach facilitated the collection of descriptive data rooted in real-world experiences and enabled the researcher to explore the complexity of caregiver-child dynamics in relation to screen time. This choice was particularly appropriate given that screen time is a socially embedded and context-dependent phenomenon that affects families differently depending on a range of factors, including household routines, parental awareness, and socio-economic conditions. By prioritising subjective meaning-making, the methodology enabled a rich portrayal of caregiver narratives that would have been lost in a purely objective or numerical framework.

The use of an instrumental case study design proved to be a strength of the study, as it enabled an in-depth examination of a bounded system - caregivers in a specific South African community - while seeking to illuminate a broader issue. The case study allowed for thick description, incorporating both context and meaning, and was instrumental in uncovering the ways in which screen time shapes or interferes with children's social development from the perspective of those most intimately involved in their care. Importantly, the instrumental design served as a vehicle for exploring the phenomenon of screen time rather than merely documenting a single, unique case.

The sampling method, purposive sampling, further supported the study's interpretive aims. Participants were carefully selected based on predetermined inclusion criteria to ensure that they were well-positioned to offer relevant and meaningful insights. This included caring for children aged nine to twelve, residing with the child, being over the age of majority, and having the ability to communicate in English. Access was granted through a local welfare organisation, the Knysna Initiative for Learning and Teaching (KILT), which also served as the physical site for data collection. While the sample size was relatively small (six participants), this is consistent with qualitative research, where the emphasis lies not in quantity, but in depth of understanding. Data saturation was reached when no new themes emerged, further validating the adequacy of the sample.

Semi-structured interviews were employed as the primary data collection tool. These allowed participants to express their views freely while enabling the researcher to probe for clarification or elaboration as needed. Conducted in a private setting within KILT's facilities, the interviews created a safe space for open dialogue. The interactive nature of the interviews was instrumental in fostering trust and eliciting rich, detailed responses. One of the methodological challenges, however, was the time-intensive nature of qualitative interviewing and transcription. Despite this, the researcher found that the flexibility and responsiveness of the semi-structured format provided a valuable depth of insight that justified the effort involved.

In terms of data analysis, the researcher utilised thematic analysis to identify and interpret patterns across the dataset. Thematic analysis is a widely used method in qualitative research and is particularly suitable for exploratory studies. Moreover, the researcher adhered to accepted criteria for trustworthiness in qualitative research—credibility, transferability, dependability, and confirmability. For example, credibility was strengthened by prolonged engagement during interviews and detailed transcription, while transferability was supported through rich descriptions of participants and context. The use of a pilot study further enhanced dependability by helping refine the interview schedule prior to full implementation.

Nevertheless, the methodology was not without limitations. The findings cannot be generalised to the broader population, given the non-probability sampling method and small sample size. Additionally, the case study design, while rich in context, inherently limits the scope of applicability to other settings. Another challenge was the potential for researcher bias, especially in interpreting emotionally charged narratives. However, reflexive practices and attention to confirmability helped mitigate this risk. The researcher remained cognisant of their assumptions and strived to present the data authentically.

In conclusion, the chosen methodological approach effectively supported the research aims and was well suited to the exploratory nature of the study. The interpretivist paradigm, qualitative design, and case study methodology allowed for deep engagement with caregiver perspectives on screen time, producing findings that are both contextually meaningful and theoretically insightful. Despite limitations in generalisability, the study provides a valuable foundation for future research and practical intervention. It also demonstrates the merit of qualitative inquiry in capturing the complex, lived realities behind contemporary social issues such as screen use among children.

5.3.2 Conclusions from the literature review and theoretical framework

The literature reviewed for this study offered critical insights into the intersection of screen time, social interaction, and child development in the South African context. It provided the conceptual and theoretical grounding necessary to explore how screen-based behaviours may influence interpersonal development during the intermediate phase (middle childhood). This foundation was further reinforced by the integration of Bronfenbrenner's ecological systems theory and Vygotsky's social interaction theory, both of which offered nuanced lenses through which to interpret children's interactions with digital media and their broader social environments.

The review of literature on middle childhood underscored this developmental period as one of increased autonomy, social learning, and peer orientation. According to Louw and Louw (2019), middle childhood is characterised by a growing need for belonging, competence, and reciprocal relationships, particularly in school and peer-group contexts. These developments occur in tandem with shifts in cognitive and emotional regulation, which are influenced by environmental stimuli. The literature emphasised that social competence at this stage is not only linked to personal growth but also later academic success and emotional well-being (Arnett & Maynard, 2017).

In the section on social interaction, both developmental and relational aspects were explored. The reviewed literature consistently highlighted the role of interpersonal relationships in shaping behavioural norms and emotional maturity during middle childhood. Interactions with parents, siblings, teachers, and peers serve as critical vehicles for social learning and identity formation (Henderson & Thompson, 2016). These interactions also form the basis for developing empathy, perspective-taking, and problem-solving abilities - competencies that are often affected by prolonged and unstructured screen time.

A central focus of the review was the growing prevalence and implications of screen time. The literature indicated that digital media use among children is on the rise globally, with particular concern about its potential to displace face-to-face interactions. Dunckley (2015) and others argue that excessive screen exposure may lead to delayed social skills, reduced empathy, and impaired emotional regulation. While some researchers acknowledge the educational and connective potential of certain digital tools, the consensus remains that unmoderated screen time can negatively affect children's ability to engage meaningfully with others. This is especially true when digital engagement becomes passive, isolating, or replaces developmentally critical play and interaction.

Importantly, the literature also drew attention to the South African context, where socio-economic, cultural, and educational disparities complicate how screen time is experienced and managed. In low-income households, for instance, digital devices may serve both as entertainment and unsupervised caretakers due to parental work obligations. The unequal access to quality education, combined with limited awareness of the developmental risks of screen overuse, poses a unique set of challenges for caregivers in this setting. Cultural values further shape screen time practices, with differing expectations regarding child autonomy, obedience, and the use of technology in the home. These contextual realities reinforced the need for a locally grounded exploration of caregiver perceptions, precisely what this study sought to achieve.

The theoretical framework played a pivotal role in interpreting these themes. Bronfenbrenner's ecological systems theory provided a holistic model for examining how children's social development is influenced by multiple interconnected systems - from immediate family and school environments (microsystem) to broader societal, technological, and policy-related factors (macrosystem and chronosystem). This study affirmed that screen time does not occur in isolation; its effects on social interaction are shaped by the context in which it is embedded. For example, caregiver involvement, access to educational content, and community norms regarding screen use all play a role in determining whether screen time facilitates or hinders social growth.

Rather than focusing exclusively on one level of Bronfenbrenner's model, this study adopted a multilevel approach. Screen time was shown to influence not only the child-caregiver dynamic but also peer relationships, school engagement, and even broader patterns of cultural expectation. This dynamic interplay validates the ecological view that development is shaped by reciprocal interactions within and between systems over time.

Vygotsky's social interaction theory further deepened this perspective by highlighting the role of mediated learning in social and cognitive development. The theory posits that learning occurs first on a social level before becoming internalised, with language and interaction serving as key mediating tools. In the digital age, screen time introduces new tools into this equation, but their value depends on how they are used. As the literature suggested and the study findings supported, passive or solitary screen use may limit opportunities for the kind of socially embedded learning Vygotsky emphasised. Conversely, when screen time involves collaborative games, caregiver-child interaction, or guided exploration, it can support development within the child's zone of proximal development.

The integration of Vygotsky's and Bronfenbrenner's theories provided a robust conceptual lens through which to interpret caregivers' concerns about reduced face-to-face interaction, emotional disconnect, and behavioural changes. The literature encouraged a shift from viewing screen time purely in quantitative terms (e.g., number of hours) to considering qualitative dimensions such as content, context, and co-engagement. This theoretical perspective supports the idea that screen time is not inherently negative, but that its developmental impact hinges on how it intersects with children's social environments and relationships.

In summary, the literature review and theoretical framework offered a comprehensive foundation for understanding the effects of screen time on children's social interactions. The reviewed literature illuminated the complexities of childhood development, the rise of digital engagement, and the socio-cultural nuances of the South African context. Theoretical grounding in Bronfenbrenner and Vygotsky enabled the researcher to interpret findings in a way that accounted for both individual agency and contextual influence. Together, these elements underscore the need for informed, context-sensitive strategies to support caregivers in managing children's screen use in ways that promote healthy social development.

5.3.3 Conclusions on the biographical details

The biographical details of the six participating caregivers provided important context for understanding their perspectives on screen time and its influence on their children's social interactions. All participants cared for children aged 11 or 12, aligning with the intermediate phase of development where peer relationships, communication, and identity formation become increasingly important.

Five participants were mothers, and one was a father, with most families structured as nuclear households. One caregiver came from an extended family setting. The majority of participants identified as White, with one identifying as Aboriginal. While the ethnic profile was not representative of the broader South African population, the variation in family size, gender of participants, and household roles offered meaningful insight into the dynamics of screen time management across diverse home environments.

Notably, families with more children, such as Participants 1 and 6 (with four and seven children, respectively), reported more difficulty monitoring and regulating screen time. In these homes, screens were often used to keep children occupied or reduce conflict among siblings, rather than as tools for enrichment or education. These caregivers also expressed concern about unequal access to personal devices, with their intermediate phase children not owning phones, unlike the others in the sample, highlighting financial or practical limitations that shaped the child's digital experience.

A clear pattern emerged regarding caregiver education and screen time management. Participants with higher educational backgrounds displayed a deeper understanding of screen time's developmental implications and were more proactive in setting boundaries, monitoring content, and promoting interactive, guided use. These caregivers described screen time not merely in terms of duration, but also in terms of quality, purpose, and context - echoing literature that emphasises digital literacy as a critical factor in supporting children's healthy development.

Although the sample size was small, these biographical details helped illuminate the ways in which caregiver background, household structure, and access to resources influenced attitudes and practices surrounding screen time. The findings suggest that interventions aimed at supporting caregivers, such as workshops or community-based programmes, should consider the diverse socio-economic and educational contexts in which families operate. Tailoring support to these realities is essential for ensuring that strategies to manage screen time are both practical and sustainable.

5.3.4 Key Findings, Conclusions, and Recommendations on the Thematic Analysis

This section presents an integrated analysis of the key themes that emerged from the empirical data, aligning the participants' responses with the overarching theoretical framework. Each theme is discussed through a threefold lens: key findings derived from participant interviews, conclusions drawn in relation to the literature and theory, and

recommendations for practice and policy. The aim is to provide a coherent combination that not only highlights the lived experiences of caregivers navigating children's screen time but also evaluates how these dynamics intersect with developmental principles and socio-ecological influences. By interpreting the findings through Bronfenbrenner's ecological systems theory and Vygotsky's social interaction theory, the section contextualises screen time practices within the broader developmental ecosystem of intermediate phase children.

5.3.4.1 Theme 1: Family Dynamics and Time Management

- **Key Findings**

The findings indicated that family routines, caregiver responsibilities, and the presence or absence of structured schedules significantly influenced children's screen time use. In households where routines were well-established and consistently upheld, children had more limited and purposeful access to screen time. These families emphasised structure, time management, and balanced activities, which included screen time alongside homework, play, and family interaction. Conversely, in households where routines were disrupted - often due to demanding work schedules, single parenthood, or multiple caregiving responsibilities - children were more likely to engage in prolonged or unsupervised screen time.

Caregivers acknowledged that screen time often served as a convenient tool to manage their own time, reduce parenting pressure, or provide children with independent activity while they completed chores or worked. Participants described screen time as both a helper and a hindrance - useful for giving caregivers a break, but also a source of concern when it replaced other important developmental experiences such as play or socialisation. The COVID-19 pandemic further intensified these dynamics, as work-from-home arrangements and school closures disrupted previously established routines.

- **Conclusions**

The interplay between family structure, time constraints, and household routines has a direct influence on how screen time is integrated into children's daily lives. From Bronfenbrenner's ecological systems theory perspective, the microsystem - including parent-child relationships, daily interactions, and home routines - plays a pivotal role in shaping digital engagement. When caregivers are unable to regulate children's time due to external pressures from the exosystem (such as job demands or lack of community support), screen time often becomes a default activity. The findings highlight the importance of the mesosystem - the link between family and school structures - in providing a framework that supports balanced screen time usage.

Vygotsky's theory of social interaction underscores the importance of guided participation in children's learning and development. When caregivers are unavailable or disengaged due to time constraints, opportunities for meaningful interaction and scaffolding diminish. As a result, children are left to navigate screen-based environments with limited guidance, which can hinder the development of critical thinking, problem-solving, and self-regulation skills that emerge through social interaction.

- **Recommendations**

It is recommended that caregivers establish consistent daily routines that include dedicated time for screen use, physical activity, homework, and unstructured play. Practical strategies such as visual schedules, time blocks, or family agreements around screen time can help manage children's expectations and promote self-regulation.

Employers and policy-makers should consider flexible work arrangements and support structures for families, especially single-parent or extended-family households, to reduce the caregiving burden that contributes to unregulated screen use. Community-based parenting programmes could offer practical tools for managing time and setting digital boundaries in resource-constrained settings.

Educators can support families by reinforcing routine-setting at school and collaborating with parents to maintain consistency between home and school expectations. Further research could explore the impact of post-pandemic family dynamics on children's digital habits, particularly in low-income South African communities where time constraints and resource limitations are significant.

5.3.4.2 Theme 2: Screen Time Use and Effects

- **Key Findings**

Caregivers demonstrated a broad and informed understanding of what constitutes screen time, recognising it as encompassing a range of digital activities including watching TV, using smartphones, gaming, video calling, and internet browsing. Participants consistently acknowledged both positive and negative dimensions of screen time in their children's lives. On the positive side, caregivers identified educational value, cognitive development, improved language skills, and social connectivity as key advantages. Platforms such as YouTube and Google were praised for enabling children to research topics, acquire new skills, and explore

interests independently. Some participants noted improvements in their children's English proficiency and emphasised the importance of adapting to a digitally evolving world.

At the same time, participants expressed concern about excessive screen time, citing its impact on family dynamics, interpersonal communication, and emotional regulation. Reports of addiction-like behaviours, withdrawal symptoms, and increased sibling conflict were common. Children were said to isolate themselves with devices, sometimes preferring digital interactions over family communication. In several households, screen time became a source of tension, especially when shared devices led to arguments or when children resisted limits on their usage.

Entertainment was identified as the primary function of screen time, with children often engaged in platforms like YouTube, TikTok, Roblox, and Netflix. While some screen time was monitored, caregivers reported that entertainment content frequently dominated over educational use. Furthermore, screen-based interaction played a significant role in maintaining social bonds, particularly during the COVID-19 pandemic. Children used apps like WhatsApp to stay in touch with peers and family, and to receive instructions from teachers. However, participants also recognised the risk of digital interactions replacing face-to-face engagements, potentially weakening children's real-world social skills.

The COVID-19 pandemic amplified screen time dependency. With in-person schooling suspended and children confined to their homes, screen time became essential for education, entertainment, and social contact. Participants reflected on the dual role screen time played: while it supported continued learning and emotional connection, it also functioned as a "babysitter" when caregivers had competing responsibilities, highlighting the lack of alternatives in constrained circumstances.

- **Conclusions**

Screen time in intermediate phase children's lives serves multiple purposes - educational, recreational, and social - yet its effects are shaped by how it is used and monitored. Drawing from Bronfenbrenner's ecological systems theory, the role of screen time is embedded in the microsystem (home, family interaction) and mediated by the exosystem (e.g., school closures, caregiver work demands) during events like the COVID-19 pandemic. Caregiver attitudes and household practices directly influence whether screen time supports or hinders children's development.

From Vygotsky's social interaction theory perspective, screen time becomes problematic when it replaces guided learning and co-constructed knowledge. While educational screen time can support independent exploration, unsupervised or passive use may limit children's opportunity for meaningful cognitive scaffolding and real-time interaction. The findings suggest that the quality and context of screen engagement - whether it encourages interaction, creativity, or communication - are more important than screen time duration alone.

Furthermore, the balance between screen-based and real-world socialisation is increasingly fragile. While digital tools facilitated peer interaction during the pandemic, some caregivers observed a preference among children for digital over interpersonal contact. This shift may have long-term implications for emotional intelligence and interpersonal skills, especially if not balanced with offline relationships and activities.

- **Recommendations**

Caregivers should be encouraged to take an active role in shaping screen time usage by distinguishing between passive and active screen engagement. They can support children by co-viewing educational content, discussing online experiences, and setting firm but reasonable boundaries on entertainment-based screen use. Digital literacy programmes could empower parents to understand the platforms children use and to identify signs of overuse or digital dependency.

Schools should continue to leverage educational technologies introduced during the pandemic, but should also partner with families to ensure screen use is purposeful and age-appropriate. Teachers can guide parents on how to blend online and offline learning, reinforcing that screen time should complement, not replace, structured teaching and social engagement.

Policymakers and NGOs should develop community-based workshops and campaigns that promote balanced screen time, especially in under-resourced areas. These programmes can address practical constraints, such as a lack of childcare or shared digital devices, and offer alternatives to digital babysitting through structured after-school activities, mentorship programmes, or supervised playgroups.

Finally, future research should explore long-term trends in post-pandemic digital habits, especially among South African children from diverse socioeconomic backgrounds. Investigating the intersection of screen time, social skills development, and caregiver

involvement can offer deeper insight into how to best support healthy digital engagement in middle childhood.

5.3.4.3 Theme 3: Parental Role and Awareness

- **Key Findings**

The findings revealed that caregivers implemented a range of strategies to manage their children's screen time. These included setting time limits, establishing household routines, using parental control applications such as Family Link, and even physically removing devices to restrict access. These efforts illustrate a shift from parental control to co-regulation, where caregivers provide guidance while encouraging children to make responsible choices independently. Participants reported that this collaborative approach allowed children to gradually develop autonomy within clearly defined boundaries.

Moreover, parents demonstrated varying levels of awareness regarding screen time risks and benefits. Some engaged their children in age-appropriate conversations about digital dangers and online behaviour, thereby actively promoting digital literacy. This was complemented by efforts to model respectful screen use, such as putting away their own devices during conversations. While some caregivers perceived screen time as a convenient means to keep children occupied, others recognised its potential to hinder development when overused.

The COVID-19 pandemic further highlighted disparities in caregivers' capacities to support educational screen use. Participants with a background in education, such as Participant 2, reported feeling confident in creating structured home learning environments and using screen time constructively. In contrast, others experienced difficulty understanding the school content or balancing work responsibilities, resulting in reduced parental involvement in academic screen use and increased reliance on digital devices as unsupervised learning tools.

- **Conclusions**

From the findings, it is evident that the effectiveness of screen time management during the intermediate phase is closely linked to caregivers' ability to balance structure with collaboration. This dynamic aligns with Vygotsky's social interaction theory, specifically the Zone of Proximal Development, which emphasises the importance of adult guidance in helping children master tasks beyond their independent capabilities. Through co-regulation, caregivers scaffold their children's developing autonomy while still maintaining oversight, thereby fostering responsible digital habits.

Bronfenbrenner's ecological systems theory further contextualises these findings. The family environment (microsystem), particularly caregivers' educational background and parenting style, emerged as a strong determinant of screen time outcomes. In the exosystem, parental work responsibilities influenced the degree of involvement in managing screen time, while the chronosystem - specifically the COVID-19 pandemic - exacerbated existing inequalities in access to educational support. These layered systems interacted to either enable or limit caregivers' ability to use screen time as a constructive developmental tool. Overall, the findings illustrate that parental engagement, knowledge, and available time all significantly shape children's screen time experiences and developmental outcomes.

- **Recommendations**

It is recommended that caregivers adopt a balanced and proactive approach to screen time management. This includes establishing consistent rules and routines, modelling responsible digital behaviour, and engaging children in open discussions about screen content and safety. Co-viewing content, setting shared expectations, and encouraging children to reflect on their digital experiences can foster critical thinking and digital literacy, especially when grounded in respectful adult-child interaction.

Schools should consider offering workshops or resource packs focused on digital parenting, equipping caregivers with practical strategies to manage screen use effectively at home. These interventions should take into account varying levels of parental education and digital fluency, ensuring accessibility for all communities.

Policy-makers are encouraged to invest in public awareness campaigns and provide easily understandable resources - both digital and print-based - that guide parents in navigating screen time. Special attention should be given to supporting working parents who face time constraints in supervising and educating their children online.

Further research should explore the intersection of parental education, socio-economic status, and digital fluency in shaping screen time practices, particularly in diverse South African contexts. This could help inform targeted interventions that reduce disparities and promote equitable digital development for all children.

5.3.4.4 Theme 4: Childhood Experience and Developmental Level

- **Key Findings**

Caregivers consistently emphasised the importance of imaginative play, outdoor activities, and peer interaction in the lives of intermediate phase children. Despite the presence of digital devices, many children still gravitated towards creative and unstructured play. Activities such as riding bikes, building forts, playing with dolls, and baking were frequently mentioned, suggesting that screen time had not yet fully displaced traditional play. However, one caregiver highlighted that early exposure to screens reduced her child's interest in such activities, suggesting that the timing and extent of exposure may influence developmental preferences. Participants also confirmed that children actively participated in social engagements with peers, both during school hours and through arranged activities such as sleepovers. These peer interactions were described as essential to their children's sense of belonging. Nonetheless, a minority of participants noted a shift towards digital communication, where children were more comfortable interacting via phones than in person.

- **Conclusions**

The findings confirm that play remains a central aspect of development during the intermediate phase, supporting the development of cognitive, emotional, and social competencies. This is aligned with Vygotsky's social interaction theory, which emphasises the importance of social engagement in the development of higher-order thinking. Similarly, Bronfenbrenner's ecological systems theory highlights the microsystem, including peers and play environments, as key to child development. While digital media has become an integral part of children's environments, it has not entirely replaced traditional play and in-person peer interactions. However, early and unsupervised screen exposure may negatively impact the natural progression of childhood experiences and developmental outcomes, particularly social-emotional learning. Caregivers' reflections reveal both resilience and vulnerability in how children negotiate digital engagement within their broader developmental context.

- **Recommendations**

Caregivers and educators should prioritise unstructured play and peer interaction opportunities, especially in early and middle childhood, to support well-rounded development. Developmentally appropriate screen time guidelines should be promoted, ensuring that digital engagement does not displace critical developmental experiences. Public health and education stakeholders should offer guidance on creating balanced routines that support both technological literacy and childhood wellbeing. Interventions should also help caregivers recognise signs of early overdependence on screens and provide strategies to reinforce

boundaries around screen use, in line with frameworks such as the "Three B's"—Boundaries, Basic Needs, and Boredom. Ultimately, reinforcing the importance of play and real-world social interaction can help protect childhood innocence while supporting developmental goals in the digital age.

5.4 RECOMMENDATIONS FOR PRACTICE AND POLICY

This section presents the recommendations to inform social work services and policy supporting children in middle childhood within a digital context.

5.4.1 Recommendations for social work services aimed at supporting children in middle childhood within a digital context

To enhance social work services for children in middle childhood within a digital context, it is recommended that practitioners focus on developing comprehensive digital literacy programmes. These programmes should educate children and caregivers about safe and responsible screen time practices, addressing online privacy, cyberbullying, and balancing digital and offline activities. Social workers should collaborate with schools and community-based organisations to create structured support systems integrating digital safety with academic and social development. Regular workshops and counselling sessions could be beneficial in helping families navigate the complexities of digital media and maintain healthy screen time habits. Additionally, social work services should advocate for policies that promote equitable access to digital resources while addressing the potential risks of digital dependency, promoting an environment where children can thrive online and offline.

5.4.2 Recommendations for social policies related to the care of children in a digital environment

To effectively address the needs of children in middle childhood within a digital environment, social policies should focus on establishing robust guidelines for digital safety and education. Policies should mandate the inclusion of digital literacy in school curricula, emphasising responsible online behaviour, privacy protection, and cyberbullying prevention. Additionally, policies should advocate for equitable access to digital resources, ensuring that children benefit from educational and recreational technologies regardless of socioeconomic status. Governments should also support research on the impacts of screen time on child development and adjust regulations based on emerging evidence. Furthermore, policies should encourage collaboration between schools, parents, and technology companies to

facilitate a cohesive approach to screen time management and digital interactions. This could help create environments where children can navigate the digital world safely and effectively.

5.5 RECOMMENDATIONS FOR FUTURE RESEARCH

Future research should explore the long-term effects of screen time on the social interactions and emotional development of children in the intermediate phase. Studies should focus on longitudinal analyses to track how different types and amounts of screen time influence interpersonal skills, family dynamics, and peer relationships over time. Additionally, research should investigate the impact of specific digital activities, such as social media use, online gaming, and educational applications, on social behaviour and cognitive development. Understanding how these interactions vary across different age groups and cultural contexts can provide deeper insights into effective strategies for screen time management. Moreover, future studies should examine the influence of parental involvement and digital literacy education in mitigating the negative effects of screen time. Future research should also consider the effects of emerging technologies and digital platforms to ensure that recommendations and interventions remain relevant and effective.

5.6 FINAL CONCLUDING REMARKS

This study explored the multifaceted impact of screen time on intermediate phase children in South Africa, with specific attention to how caregivers navigate, regulate, and interpret digital engagement. The findings affirm that screen time is not inherently detrimental but becomes consequential depending on the context, content, and level of adult involvement. Children's developmental trajectories remain rooted in the interplay between structured routines, parental guidance, social interaction, and opportunities for play - factors all situated within the layered systems described by Bronfenbrenner. Simultaneously, Vygotsky's emphasis on co-construction of knowledge and guided learning reinforces the importance of adult mediation in digital spaces. While digital media has become an embedded feature of children's environments, it has not fully replaced traditional developmental activities, nor should it be allowed to. Ultimately, safeguarding childhood in the digital age requires intentional, informed, and collaborative efforts among caregivers, educators, and policymakers to ensure that digital experiences enrich rather than replace the foundational elements of middle childhood development.

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APPENDIX A: PERMISSION LETTER FROM NGO

KILT

11 May 2023

To: Ms. Miona de Klerk

RE: Permission to Conduct Research

This letter hereby confirms that the Knysna Initiative for Learning and Teaching (KILT) will allow you, Ms. Miona de Klerk (school counsellor), to access potential participants for your Masters in Social Work research project via our organisation.

As indicated in your letter of request to us, we understand that the research topic is: *Caregivers experiences on the effects of screen-time on social interactions of South African children in the intermediate phase.* The overall research goal is:
To explore and describe the experiences of caregivers on how screen-time effects the social interaction of their intermediate phase children.

As we understand, we will assist by handing out Participant Information Leaflets/Sheets to prospective participants, who will then contact you directly if interested in participating in your research project.

Kind Regards,


(signature)

KNYSNA INITIATIVE FOR LEARNING AND TEACHING
MELROSE HOUSE, 34 QUEEN STREET, KNYSNA • PO BOX 1177, KNYSNA, 6571
Board: G. Marcus (Chairperson), N. Ford-Hoon, Dr M. Friedman, K. Gaind, B. F. Mohale, T. Mpshe, T. Murray, J. Nel, S. Ueckermann (Managing Director)
NPC No: 2021/89333/08 • PBO No: 930074215
kilt.org.za • info@kilt.org.za • 27 (0)44 382 7508

APPENDIX B: POSTER

RESEARCH PARTICIPANTS NEEDED

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Ms. Miona de Klerk
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:
Miona de Klerk
mionadeklerk@gmail.com
0798855103

APPENDIX C: 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)[1]	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?

[1] 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 D: ETHICAL CLEARANCE LETTER

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Faculty of Humanities
Fakulteit Geesteswetenskappe
Lefapha la Bomotho

Humanities 100. Since 1919

11 August 2023

Dear Miss M de Klerk

Project Title:	Caregivers experiences on the effects of screen-time on social interactions of South African children in the intermediate phase
Researcher:	Miss M de Klerk
Supervisor(s):	Ms J Chiba
Department:	Social Work and Criminology
Reference number:	18004670 (HUM050/0523)
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

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 E: LETTER OF AGREEMENT TO COUNSELLING

24 Queen Street
Knysna
6571
1 May 2023

Ms. Nandi Calitz
072 064 8919
nandicalitz@gmail.com

To: Ms. Miona de Klerk

Letter of agreement to debriefing/ counselling of research participants

This letter serves to inform you and the institution, University of Pretoria, that your request for debriefing/ counselling sessions with research participants has been approved.

These debriefing/ counselling sessions will be made available to your research participants as the need arise during the data collection phase of this study. This service will be free of charge.

I am a practicing counsellor registered with the HPCSA, registration number: PRC 0040029
Do not hesitate to contact me should you have any enquiries.

Kind Regards,
Nandi Calitz

_____

Nandi Calitz
HPCSA Registered Counsellor,
Mental Skills Trainer
PRC 0040029

APPENDIX F: INFORMED CONSENT FORM

2023/05/10

Principal investigator
Our Ref: Miona de Klerk
Tel: 079 885 5103
E-mail: Mionadeklerk@gmail.com

LETTER OF INFORMED CONSENT

TITLE OF THE STUDY
Caregivers experiences on the effects of screen-time 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 affects 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 Knysna Initiative for Learning and Teaching offices, Melrose House, 34 Queen St, Knysna.

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 Nandi Calitz (counsellor).

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. Knysna Initiative for Learning and Teaching 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 Bomotho

Department of Social Work & Criminology

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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**

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