Young adults' reflections on their experiences of social media use during adolescence

by

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ABSTRACT

YOUNG ADULTS' REFLECTIONS ON THEIR EXPERIENCES OF SOCIAL MEDIA USE DURING ADOLESCENCE

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Approximately forty percent of the world population currently has access to the internet, with growing popularity among adolescents who can access social media and the internet at any time and place. Social media use can be advantageous in terms of social support and learning opportunities, but a growing body of research indicates links to poor mental health among young individuals (Kelly, Zilananwala, Booker & Sacker, 2018:59). This study explored young adults' reflections on their experiences of social media use during adolescence with the goal of better understanding the effects of social media use on a sample of South African adolescents. The study formed part of a group research project in which several researchers conducted individual studies countrywide on the topic.

The goal of the study was to explore and describe young adults' reflections on their experiences of social media use during adolescence, and the research question for the study was: *What are young adults' reflections on their experiences of social media use during adolescence?* In order to accomplish the research goal and to answer the research question, the following research methodology was employed: A qualitative research approach; an interpretivist paradigm; the research was regarded as applied research and was guided by an instrumental case study design. The sample was selected by means of snowball and purposive sampling; data was collected by means of a semi-structured interview, with the use of an interview schedule; and thematic analysis was utilised to analyse the data that was obtained. The theoretical framework for this study was Bronfenbrenner's ecological systems theory.

The researcher interviewed 10 participants who fit the specific criteria for inclusion; the sample consisted of young adults living in South Africa, within the geographical area of the City of Tshwane. These young adults had experience of using a range of social media during their adolescent years. Participants were between the ages of 19 and 25 and gave an account of their reflections on their social media use between the ages of 11 and 18.

The findings of the study indicated that adolescent social media use affected growth and development within all the ecological systems of the participants. Participants were also affected in terms of their biological development (i.e., physical, cognitive, emotional, social, moral as well as their identity development). Numerous safety concerns and risks that exist for young individuals who are growing up in an era where social media and ICTs cannot be avoided was evident, leading to the recommendations that were made for professionals that work with the development and treatment of this vulnerable population group. The recommendations that were suggested for professionals, relevant organisations, families and communities to adopt and follow can make a difference to safeguard children and adolescents from the harmful effects that social media use can hold for all consumers and assist them to reap the benefits that such platforms can provide.

KEY CONCEPTS

Social media

Internet

Social network sites

Adolescent

Young adult

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CHAPTER 1
GENERAL INTRODUCTION AND ORIENTATION TO THE STUDY

1.1 INTRODUCTION

The use of smartphones, tablets, and other information and communication technologies (ICT) has changed individual behaviour and daily routines and has become a significant aspect of modern life (Oberst, Wegmann, Stodt, Brand & Chamarro, 2017:51). Technology advancements have made wireless and internet communication widely available and well-liked, especially among adolescents and young children who are using a variety of devices to access the internet (Badri, Alnuaimi, Al Rashedi, Yang & Temsah, 2017:2656; Moawad & Ebrahem, 2016:174; Višnjić, Veličković, Stojanović, Milošević, Rangelov, Bulatović, Stanković & Miljković, 2015:64).

A statistical report by Galal (2022a) revealed that there were roughly 30 million individuals using social media in South Africa during 2019, and it is anticipated that this number will rise to 40.77 million by the year 2026. The use of smartphones, personal computers and tablets have therefore become an integral part of modern society and daily life, playing a significant role in the formation of the behaviour and habits of individuals pertaining to their personal, professional, and social lives (Oberst et al., 2017:51; Zafar, 2016:46).

According to Zafar (2016:46) approximately forty percent of the world population has access to the internet, with growing popularity among adolescents who can access social media and the internet at any time and place (Cookingham & Ryan, 2015:2). Furthermore, between 2014 and 2021, the South African youth population increased steadily from 20,2 million to 20,6 million, representing approximately 34.3 percent of the total population (Statistics South Africa, 2022). Depending on their year of birth, the present youth population is referred to as millennials, Generation Y, or even Generation Z (Dimock, 2019). Between the ages of eighteen and the early thirties, 2.5 billion people, or nearly one-third of the world's population, are known as millennials; with new interactive ICT presenting millennials with a variety of channels for connecting, communicating, and socialising (Duffett & Wakeham, 2016:22).

The internet therefore laid the groundwork for the next historical turning point, namely the rise of social media. In addition, Web 2.0 provided consumers with access to audio-visual material on mobile devices. This created a new relationship between consumers and brands, as media consumption was no longer a one-way dialogue but rather one in which individuals could join the discourse and shape communication (Mosenene, 2022:2).

Social media use can be advantageous in terms of social support and learning opportunities, but a growing body of research indicates links to poor mental health among young individuals

(Kelly, Zilananwala, Booker & Sacker, 2018:59). Adolescents in a Pew Research Center poll expressed varying views on the perceived influence of social media use on their daily lives (Anderson & Jiang, 2018:5). This study explored young adults' reflections on their experiences of social media use during adolescence with the goal of better understanding the effects of social media use on a sample of South African adolescents. The study formed part of a group research project in which a number of researchers conducted individual studies countrywide on the topic. The following key concepts apply to this study:

- **Social media**

According to Carr and Hayes (2015:46), social media comprises of internet-based channels that enable individuals to selectively self-present and communicate online with both large and niche audiences who value user-generated content and the appearance of interpersonal interaction. Social media can thus largely be defined as a type of ICT that includes any form of technological programme or application that involves the use of a smartphone, tablet, personal computer, or any device that can connect to the internet (Oberst et al., 2017:51).

- **Internet**

According to Dennis (2022) the internet is a vast network that links computers worldwide. Through the internet, individuals can share information and communicate from any internet-connected location. The internet is not only a network of computers, but it has also evolved into a network of devices of all shapes and sizes, including vehicles, smart phones, home appliances, toys, cameras, medical instruments, industrial systems, animals, people, and buildings, all communicating and sharing information based on predetermined protocols (Patel, Patel & Scholar, 2016:6122).

- **Social networking sites**

A social network is defined as an internet-based site that connects individuals that share personal and professional interests on virtual communities; that permit an individual to create a personal profile, join groups, and interact with other individuals on the platform that they use to share photographs and video, links that connect to other sites and news, and also updates in text (Oberst et al., 2017:1; Quesenberry, 2019:113).

- **Adolescence**

Adolescence is defined by Louw and Louw (2014:303) as the time between childhood and maturity. This life stage can be viewed as a developmental link between being a child and becoming an adult. Ages 11 to 18 make up the adolescent life stage (Berk, 2013:6). In this study, the participants were thus asked to reflect on their experiences of social media use when they were adolescents between 11 and 18 years of age.

- **Young adult**

Young adulthood, which is typically described as being between the ages of 18 and 35, is a unique life stage since it is the point at which the majority of individuals move from a dependent life as adolescents, living with family and attending school, to being independent and self-sufficient (Klassen, Douglass, Brennan, Truby & Lim, 2018:2). According to Arnett (2016:27), the distinction between life phases after childhood is not usually related to age, although young adulthood implies the increasing acquisition of adult duties. In this study, participants were young adults between the ages of 19 and 25 years.

1.2 THEORETICAL FRAMEWORK

The theoretical framework for this study is Bronfenbrenner's ecological systems theory. Both aspects of biological development and aspects of psychological, social, and emotional development are included under the ecological systems theory of child development (Rathus, 2017:22). Biology's field of ecology examines the interactions between living organisms and their surroundings. In essence, the theory considers the developing child as being embedded in a series of complex and interactive systems, consisting of the microsystem, mesosystem, exosystem, macrosystem and the chronosystem (Louw, Louw & Kail, 2014:29; Rathus, 2017:22); with each of these layers in the child's environment significantly influencing the child's development (Berk, 2013:26).

The **microsystem** is the closest layer to the child, containing structures with which the child has the most direct contact. The terminology that was used to create the name of the microsystem was taken from the Greek word "mikros," which refers to something small (Rathus, 2017:23). The microsystem comprises of the child's immediate surroundings, which include the child's immediate family, the school or child-care centre, their immediate neighbourhood, and their peers (Berk, 2013:27; Louw et al., 2014:29; Rathus, 2017:23). The bi-directional orientation of the relationships in this system was emphasised by Bronfenbrenner when explaining the ecological systems theory. The child's innate physical qualities, personality, and abilities influence the behaviour of parents and other adults, and in the same way, adults' behaviour influences a child's behaviour (Berk, 2013:27; Louw et al., 2014:29).

The **mesosystem** is the link between the structures in the child's microsystem, such as interactions between the child's school, home, and neighbourhood (Berk, 2013:27, 28). The term mesosystem is derived from the Greek word "mesos," which refers to the middle (Rathus, 2017:23). According to the ecological systems theory, what happens in one microsystem will most likely affect the other microsystems (Louw et al., 2014:29). As a result, the strength of a child's connection with the school will influence academic success. The researcher is of the

view that the interaction between microsystems defines the mesosystem. Social media use thus has the potential to foster relationships because the direct and active participation on social media leads to two or more social settings on the internet becoming intertwined (Fulantelli & Taibi, 2021:151).

The **exosystem** refers to the larger social environment with which the child has no direct interaction, but which influences the child (Fulantelli & Taibi, 2021:151; Louw et al., 2014:29). The system comprises both formal and informal contexts, such as the parents' workplace, health and welfare agencies, churches, as well as the parents' social networks, which include their extended family and friendship groups (Berk, 2013:28; Fulantelli & Taibi, 2021:151). As a result, through the use of digital technology, social media use can support and facilitate connections (Fulantelli & Taibi, 2021:151).

According to Rathus (2017:24), the school board of the school which a child attends also forms part of the exosystem, as the decisions made by the board affect the education of the child. A similar example of the effects that the exosystem may have on a child include the employment and financial circumstances of parents and caregivers, which may impact their availability to the child, and their disposition when they are with the child. For instance, poverty and unemployment induce parental stress, which negatively affects parenting and consequently, children may behave poorly at home and in school (Rathus, 2017:24). The exosystem can thus provide support to parents in raising their children. However, adverse circumstances such as poverty can lead to negative consequences for the child and family (Louw et al., 2014:29).

The **macrosystem** is the outermost layer in the child's environment and comprises of the interaction between values, expectations, cultures, customs, and laws; with each macrosystem having its own distinctive lifestyle, value system and expectations regarding the development of a child (Rathus, 2017:24). In this way, the ideas and behaviours that make up the macrosystem are passed down from one generation to the next through information distribution, usability, and socialisation processes enabled by the vast internet environment (Fulantelli & Taibi, 2021:151). The micro-, meso- and exosystem are thus embedded in the macrosystem. Although the influence of the macrosystem is indirect, it has an important influence on a child's life and development (Berk, 2013:28; Louw et al., 2014:29).

The **chronosystem** relates to the changes and life events that occur over time. External life circumstances or the child's own disposition can cause transformations (Berk, 2013:29). As children age, they determine a greater proportion of their own experiences and environments, based on factors such as their own characteristics and the opportunities presented by their surroundings (Fulantelli & Taibi, 2021:151). In the context of the present study, one of the

developments that reflects the chronosystem is the advent of ICT, with cell phones, computers, and tablets playing an increasingly important role in contemporary life (Oberst et al., 2017:51). Additionally, it is important to build the required skills for children to be able to interact in the online environment and grow inside the ecological system theory's school microsystem, since typical learning experiences are insufficient to foster the development of certain competencies; specific learning activities must be proposed to achieve this goal (Fulantelli & Taibi, 2021:151).

From the above it is evident that Bronfenbrenner's ecological systems theory has firmly established itself. O'Neill (2015:35) asserts that taking an ecological approach to the study of children's experiences online assists to frame the media environment as a complex interplay between technology and society, in which modes of communication and mediated interaction fundamentally shape human behaviour and social life. This notion has been supported by a number of studies (O'Neill, 2015:35).

According to Jordan (2004, in O'Neill, 2015:39), the ecological systems theory is significant because it simultaneously focuses on the features of the individual child, the crucial family environment, and the pervasive cultural milieu. Jordan (2004, in O'Neill, 2015:39) advocates for the expansion of the notion of the home as a multimedia environment by asserting that media has become an integral part of home-based relationships.

Older studies regarding the above focussed on the impact of cable television on the various ecological systems as posited by Atkin, Greenberg and Baldwin (1991, in O'Neill, 2015:39). Although cable television is seemingly out-dated compared to the technological advancements that have been made in the last 30 years, the researcher is of the opinion that the theoretical hypotheses made by Atkin et al. (1991, in O'Neill, 2015:39) regarding the effect of cable television on the various ecological systems, assist in broadening the understanding of the ecological systems theory and consequently the understanding of the data that was collected in this study. The researcher thus found the hypotheses to be relevant to modern technological development.

Therefore, the researcher is of the view that the three levels of the typology that were described by Atkin et al. (1991) as pertinent to the mediation of cable television in the home can still be used as a guide for the current study. In the first level, it is suggested that parent-child interaction has a direct influence on television use within the microsystem of the home. The macrosystem also specifies delivery methods, the television's capabilities, and regulatory limitations. In terms of the exosystem, television has a dynamic influence, a second-order effect that transcends ecological bounds through its effect on parents and their interactions with children. According to macrolevel determinants of occupation, income, education, and

ethnicity; as well as within the microsystem in terms of age, number, and ages of children in single parent versus two parent homes, it is contended that differentiation in parental mediation might be explored at each level (Atkin et al., 1991 in O'Neill, 2015:39).

This disputed media context, when combined with the range of social phenomena that Bronfenbrenner described as "growing chaos" in the lives of children, such as childhood obesity, dysmorphic body perception, anti-social behaviour patterns, and attention deficit disorder, creates an urgent demand for researchers to investigate the environmental influences on the child's developmental outcomes pertaining to technology use (O'Neill, 2015:40). Therefore, the concept of an **ecological techno-subsystem** is pertinent; and adds another dimension to the individual microsystems, by adding an additional zone of interaction with both living and non-living components of communication, information, and recreation technologies in the immediate or indirect ecological environments of children (Johnson & Puplampu, 2008 in O'Neill, 2015:40).

Johnson and Puplampu (2008, in O'Neill, 2015:41) highlight the significance of technology use in the growth and development of children by concentrating on the ecological techno-subsystem. They also encourage a comprehensive investigation of the developmental effects of internet use during childhood, based on the mutual accommodation that takes place between a developing individual and the immediate environment; thus, motivating for the techno-subsystem to be added to the microsystem of Bronfenbrenner's ecological systems theory.

In addition, this theory broadens the scope of potential intervention options for a variety of problems, including the prevention of teenage pregnancy, child maltreatment, and juvenile delinquency, which includes substance misuse (Rathus, 2017:24). The researcher is of the view that since the microsystem of a child's immediate environment is perceived to have the greatest influence on a child's growth and functioning, it is crucial for professionals to become aware of the influence that social media use may have as a component of the microsystem of each modern child. The rationale and problem statement of the current study is presented in the following section.

1.3 RATIONALE AND PROBLEM STATEMENT

The researcher found that most research studies on social media use has been carried out in affluent countries, most notably in Europe and the United States of America (United States). As an example, the researcher would like to note some of the statistics on adolescent social media use from Europe and the United States, which found American adolescents to have a 76% social media use penetration (Uhls, Ellison & Subrahmanyam, 2017:S68), and European adolescents to have a 82% social media use penetration (Tsitsika, Tzavela, Janikian,

Ólafsson, Iordache, Schoenmakers, Tzavara & Richardson, 2014:142). In contrast, the researcher found that relatively little research has been carried out in emerging economies and countries, particularly in Africa. Therefore, more social media use research needs to be completed in different countries (Wang et al., 2012 in Duffett & Wakeham, 2016:22), as consumer perceptions might vary greatly, depending on the consumer's cultural background (Duffett & Wakeham, 2016:22).

Adolescents' use of social media has become a routine aspect of their lives and is frequently recognised as the most common everyday activity that they engage in (Coyne, Padilla-Walker, Holmgren & Stockdale, 2019:9). According to Barth (2015:201), many young individuals cannot imagine a future without social media, with the use of social media by adolescents being associated with both benefits and drawbacks in several areas of life and development. Adolescents might, for example utilise social media to obtain knowledge and receive social support from their peers; however, numerous studies suggest that an association between the use of social media and the mental health of adolescents is prominent (Kelly et al., 2018:59).

According to Hawk, Van den Eijnden, Van Lissa and Ter Bogt (2019:66), adolescents who are constantly connected to the internet may become stressed and dependent on it, leading to anxiety when they are unable to access social media. Additionally, overusing the internet can make individuals feel lonelier and more anxious in social situations and worsen whatever social isolation that may already exist (Glover & Fitch, 2018:174).

It is clear from the context of this study that children and adolescents engage with others through the internet in three separate contexts, namely home, school, and the community. This clarifies the use of Bronfenbrenner's ecological systems theory as a theoretical framework. This theoretical paradigm, however, indicates that these systems are tightly interrelated, meaning that using the internet in one environment affects the use of the internet in other systems. It is thus important to conduct more research since using the internet and social media, especially among adolescents, involves concerns that go beyond the possibility of disturbing family dynamics (Fulantelli & Taibi, 2021:148).

Even though numerous professionals who work with adolescents were not exposed to social media use during their adolescence, Barth (2015:201) suggests that young individuals cannot imagine a life without it. Therefore, it may be difficult for professionals to comprehend how social media use effects the adolescents with whom they work professionally. The research available on adolescent social media use amongst South African adolescents is limited. The researcher believes that professionals working with adolescents thus need to obtain relevant information pertaining to the effect that social media use has on their functioning and

development within a South African ecological systems context. The researcher is of the view that this might provide professionals with the ability to understand South African adolescents' perspectives, assist with mental health concerns that might relate to social media use, and add to possible prevention and treatment modalities for professionals such as social workers, counsellors, psychologists, and psychiatrists.

The **research question** for the study was: *What are young adults' reflections on their experiences of social media use during adolescence?*

1.4 RESEARCH GOAL AND OBJECTIVES

The goal of the study was to explore and describe young adults' reflections on their experiences of social media use during adolescence.

The objectives of the study were as follows:

- To theoretically conceptualise social media and to contextualise it within a South African context.
- To explore and describe participants' use of social media during their adolescent years.
- To explore and describe the participants' perceptions of positive and negative influences of social media use on them during adolescence.
- To obtain suggestions from the participants on promoting optimal use of social media by adolescents.
- To obtain the participants' suggestions for curbing harmful effects of social media on adolescents.

1.5 OVERVIEW OF THE RESEARCH METHODOLOGY

The researcher employed a **qualitative research approach** to acquire detailed information from participants on their perceptions of the use of social media during their adolescent years. An **interpretivist paradigm** informed the research as the focus was on the participants' social constructions of social media use, rather than the objective interpretation thereof by the researcher (Nieuwenhuis, 2016a:60). An interpretivist paradigm supported the goal of the study as this viewpoint recognises various truths that are the outcomes of human subjectivities rather than a single all-encompassing truth (Harrison, 2014:229).

The researcher is of the view that the study's findings could increase understanding of adolescent social media use, which could assist social workers and other professionals with the planning of prevention and early intervention services to address the adverse influences of social media use on adolescents. The research can therefore be regarded as **applied research**, which refers to research intended for inducing change and solving social problems (Jansen, 2016:9). The study furthermore had an exploratory and descriptive purpose.

Exploratory research is appropriate because it seeks to gain understanding of the phenomenon being studied, whereas descriptive research is appropriate as the researcher will present a picture of the specific details of a situation by accurately describing the data (Fouché & De Vos, 2011:95, 96).

The research was guided by a **case study design**. Case studies are frequently used to reflect the typical characteristics of a larger class of events, and they are also frequently used to identify the effects of a phenomenon (Prior, 2014:370). A case study is an in-depth exploration of the complexity and one-of-a-kind nature of a specific initiative, policy, institution, or system within a "real-life" setting. This exploration is conducted from different angles. It is founded on research, takes a variety of methodologies into account, and is evidence-driven (Simons, 2014:457). An **instrumental case study design** was relevant to the current study. The study aimed to explore the meaning that participants gave to their experiences of social media use during adolescence, thus intending to gain knowledge and insight into a specific social issue (Nieuwenhuis, 2016b:82).

The **sample** for this study was selected by means of **snowball and purposive sampling** as the population size and members were unknown (Strydom & Delport, 2011a:392, 393). The researcher interviewed 10 participants who fit the specific criteria for inclusion. The sample consisted of young adults living in South Africa, within the geographical area of the City of Tshwane in the neighbourhoods of Wonderboom South, Rietfontein, Villieria, Queenswood, Kilner Park, East Lynne, Meyerspark and Eersterust. These young adults had experience of using a range of social media, particularly social networking sites, during their adolescent years. Participants were between the ages of 19 and 25 and gave an account of their reflections on their social media use between the ages of 11 and 18.

To obtain in-depth data from the participants' perspectives, **semi-structured interviews** were undertaken. This allowed the researcher to freely investigate pertinent problems that emerged from the interviews (Greeff, 2011:351, 352). An **interview schedule** consisting of open-ended questions that were developed, guided the interviews. This schedule was tested during a pilot interview prior to the data collection phase. The interviews were audio recorded, with the permission of participants, and were then transcribed (Strydom & Delport, 2011b:409). These transcriptions were subjected and analysed by means of **thematic analysis**.

Several **ethical considerations** were considered throughout the research process (Strydom, 2011a:115-126). Throughout the research process, the researcher attempted to collect credible data. Consequently, numerous techniques to ensure **data quality** were implemented. In chapter 3, the researcher will provide additional information on the research methodology

that was utilised throughout the completion of the study.

1.6 LIMITATIONS OF THE STUDY

The following could be regarded as limitations of the study:

- The sample of the study was restricted to young adults who reside within the geographical area of the City of Tshwane in South Africa, as indicated under 'sample' above. The researcher is of the view that this thus makes the findings of the present study context-specific and not necessarily transferable.
- The study included ten participants; five males and five females, suggesting that the research findings cannot be generalised to the larger population. Data collected regarding young adults' reflections of their social media use during adolescence can therefore not be generalised to the entire adolescent population of South Africa. Generalisation was however not the purpose of this study; the emphasis was on understanding individual and subjective accounts of the effects that social media use had on participants when they were still adolescents.
- The decision to recruit young adults as participants instead of adolescents was based on their capacity to be more objective and provide a more insightful description of adolescent experiences. The fact that they were required to recall their adolescent experiences may have been difficult for some, despite the fact that they did not suggest this to be the case. Even though the questions in the interview schedule were focused on the adolescent life stage and the researcher oriented the discussion towards this life stage, the passage of time may have led to inaccurate memory of their perceptions.
- The passing of time that has occurred since the participants were adolescents were also found to be a limitation, as ICTs and social media have continued to develop rapidly and the experiences of the participants when they were adolescents are not necessarily the same experiences that children who are currently still in adolescence, are experiencing.

1.7 CONTENTS OF THE RESEARCH REPORT

The research report on young adults' reflections of their social media use during adolescence is divided into four chapters. The outline of the chapters are as follows:

Chapter 1: General introduction and orientation to the study

Chapter 1 presents a general introduction to the research study. The concepts relevant to the study are introduced and defined, as well as the theoretical framework of the study. The rationale and problem statement, and the goal and objectives of the study are discussed. The chapter includes a summary of the research methodology.

Chapter 2: Social media use during adolescence

In chapter 2 an in-depth literature review is presented, focussing on the conceptualisation of social media use and an overview of the various social networking sites. The prevalence of social media use amongst individuals, adolescent social media use, and the role of parents in adolescent social media use are also discussed. Moreover, an overview of adolescent development, focussing on physical, emotional, social, and cognitive development, as well as identity formation, and the development of a moral value system are provided. Focus is additionally placed on the effects that social media use might have on the emotional, social, cognitive, and physical spheres of adolescent life and development. Problematic internet use is discussed, along with the prevention and treatment thereof.

Chapter 3: Research methodology and empirical findings

Chapter 3 includes a description of the research methodology used and the rationale for employing particular research methods. The empirical findings of the study are explored and supported by participant accounts in their entirety. In addition, a literature review is integrated into the presentation to demonstrate how the findings align with existing literature and prior studies on the phenomena. The study's theoretical framework, the ecological systems theory, is also employed to gain a better understanding of participants' perceptions of their social media use during adolescence.

Chapter 4: Conclusions and recommendations

In the concluding chapter, an overview of the study, focusing on the achievement of the research goals and objectives, and a summary of the key findings are presented. In addition, the researcher derives inductive conclusions from the findings regarding young adults' reflections on their social media use throughout adolescence. The implications of the findings for social workers and other professionals are analysed and provides recommendations to aid professionals in preventing the negative effects of social media use on children and adolescents. This is accomplished through recommendations for practise and for future research.

CHAPTER 2
SOCIAL MEDIA USE DURING ADOLESCENCE

2.1 INTRODUCTION

The use of social media is a significant interactive tool for adolescents and young adults. Unlike more traditional forms of media, users actively participate in the process of producing and influencing the experience they have on social media (Berryman, Ferguson & Negy, 2018:307). Deeper considerations of the 'virtualisation' of relationships and their expanding significance in daily life have been made possible by the rise of social media. According to Scheinbaum (2017, in Hendricks & Kanjiri, 2021:1) social media has the capacity to transform and consistently reinforce life experiences in both positive and negative ways. This is very significant given that the amount of time that adolescents spend online has dramatically increased in recent years, especially as a result of the virtual and social connections that have been made possible through social media (Fulantelli & Taibi, 2021:148).

Given the variety of forms that social media can take, there is no single, all-encompassing definition that can be applied to it. According to Safko and Brake (2009, in Dzomonda, Fatoki, Oni & Bosch, 2017:60), the term 'social media' refers to the actions, practices, and behaviours that take place within communities of individuals who come together online to share information, expertise, and ideas through the use of conversational and visual media. Despite the fact that there are variations in how social media is defined, these definitions all share three characteristics, and those characteristics are people, platforms, and content (Dzomonda et al., 2017:60).

The development of solutions created around internet-based technology, such as the World Wide Web, platforms for remote work, open resource repositories, and online learning options, has significantly altered the way individuals live. Numerous academics have examined how the internet affects daily life, and many studies consider it to be one of the greatest inventions of the 20th century (Fulantelli & Taibi, 2021:147). In terms of the educational effects of internet-based technology, researchers Greenfield and Yan (2006) as cited in Fulantelli and Taibi (2021:147), found that adolescents who use the internet gain both socially and cognitively. Additionally, the internet has caused a paradigm shift in society as well as in the scientific community.

Moreover, adolescents and young adults' use of social media is an integral part of their growth as they communicate with others and exhibit their evolving identities online (Berryman et al., 2018:307). The literature review is set out to illustrate the prevalence and purpose of social media and adolescent social media use. Focus will also be placed on the positive attributes

and risk factors that social media use holds for adolescents, and in turn for their development. The role of parents in adolescent social media use, as well as problematic internet use, and the prevention and treatment thereof will also be discussed.

2.2 SOCIAL MEDIA USE

The emergence of social media has not only changed and added to how individuals communicate with each other, but has also fostered connection, online collaboration, and has vastly strengthened interpersonal relationships (Hughes, 2018:20), as characteristics of community, participation, connectedness, and conversation are consequently included in the functioning of social media platforms (Veil, Buehner & Palenchar, 2011 in Huges, 2018:20). To assist the researcher with the collection and analysis of data for this study, the concept and functioning of social media use will be discussed below. In this section focus will be placed on the conceptualisation of social media and the prevalence of social media use.

2.2.1 Conceptualising social media

As stated previously, in our constantly developing and technological age the concept of social media is difficult to define (Carr & Hayes, 2015:47). Social media is largely defined as a type of ICT that includes any form of technological programme or application that involves the use of a smartphone, tablet, personal computer, or any device that can connect to the internet (Oberst et al., 2017:51). It enables individuals who have internet access to connect, collaborate, freely express themselves and interact socially with individuals and groups on a virtual platform (Hughes, 2018:18).

Social media has been observed to assist in satisfying the primary human need for social integration and interaction (Maree, 2017:964). Social media furthermore provide individuals with the choice and opportunity to share their thoughts, feelings, perceptions, interests and activities with likeminded individuals that might be familiar or unfamiliar to them (Carr & Hayes, 2015:50). Individuals are thus provided with the opportunity to share and consume knowledge, relevant information and ideas that interest them (Berezan et al., 2018 in Hendricks & Kanjiri, 2021:11).

The researcher found that the use of social media has to an extent simplified social interaction, as it encourages and strengthens interpersonal connection, establishes opportunities for collaboration, and creates a platform where debates and important discussions can occur amongst individuals (Howell, 2012 in Hughes, 2018:20; Duffett & Wakeham, 2016:22). Social networking platforms operate primarily as social connection tools; consumers are thought to join social networking platforms based on a need for integration and social contact (Berryman et al., 2018:307; Maree, 2017:7).

As stated, access to the internet and consequently the utilisation of social media is believed to have enveloped a fundamental portion of society's social routine (Maree, 2017:968). Although thought to have been created to foster social integration and interaction, the use of social media can have both a positive and a negative effect on the functioning and development of an individual. An example of the above pertains to the majority of social media platforms requiring the creation of a personal or professional profile which can be selectively or non-selectively shared (Spies Shapiro & Margolin, 2014:1). The sharing of personal information online thus indicates a conscious decision by an individual to risk personal privacy (Watson & Hill, 2015:298), as social media profiles might not exhibit the real identity of the individual who created it (Cookingham & Ryan, 2015:2).

Berryman (2014:2) asserts that social media can lead to competitiveness and jealousy amongst individuals, which may influence the nature of what an individual chooses to portray online and whether it is a true or skewed representation of the self. In accordance with the above, the use of social media, in instances where individuals were found to exhibit competitiveness and high acceptance seeking behaviour, was indicative of symptoms of clinical depression being exhibited when spending an excessive amount of time on social media (O'Keeffe & Clarke-Pearson, 2011 in Berryman, 2014:2). An individual's experience of social media is thus individualised and depends on the input that an individual places on social media and the outcomes that the input yields.

It is believed that most individuals like to share and read because they enjoy doing so, as seventy percent of internet users that took part in a study indicated that they have shared some type of content on social media within that last month (Quesenberry, 2019:144). When focussing on the type of content that is generally shared on social media, visual media was most popular, with the opinions of others, status updates, links to articles and recommendations following the trend of sharing for enjoyment (Quesenberry, 2019:144). In line with the above, Hendricks and Kanjiri (2021:9) are of the view that due to the lack of suitable recreational infrastructure in South African and young individuals demanding to occupy and control their space, social media has become an immediate and accessible form of recreation for youth of all ages.

Several social media platforms have been designed for social interaction and connection, including categories such as social networking (Facebook), blogs (WordPress), microblogs (Twitter), rich site summary (RSS) feeds, bookmarking sites (Pinterest), audio podcasting (Audacity), video podcasting (YouTube), instant messaging (WhatsApp), widgets and applications, linking, posting, and reviews (Duffett & Wakeham, 2016:22; Hendricks & Kanjiri, 2021:2; Sajithra & Patil, 2013:73, 74). The researcher has found social media to be diverse

and that it tends to have various purposes and focusses. The most prominent categories of social media that were relevant to the study, are highlighted below:

2.2.1.1 Social networking sites

When the term **social media** is mentioned, individuals firstly tend to think of social networking sites such as Facebook or LinkedIn (Quesenberry, 2019:113). As briefly indicated earlier, a social network is defined as an internet-based site that connects individuals that share personal or professional interests; and that permits individuals to create a personal profile, join groups, and interact with other individuals on the platform that they use to share photographs, videos, links, news, reviews, and updates in text (Quesenberry, 2019:113). In addition, it is important to note that social networking sites have become more prominent and accessible due to their mobile and "on-the-go" access (Quesenberry, 2019:113).

Facebook is the most widely used social networking site, already surpassing one billion users globally in 2012 (Arnett, 2016:453); approximately 87 percent of South African social media users have a Facebook profile (Galal, 2022b). In a South African study completed by Hendricks and Kanjiri (2021:10) all of the participants that took part in the study indicated that Facebook had assisted them with connecting with other individuals in rural South Africa.

The researcher found the creation of a personal profile and an individualised feed that permits news updates from 'friends' to be two of the defining characteristics of Facebook at the time of its launch in 2004. The creation of an online profile allows an individual to display information regarding day-to-day activities, interests, personal information and events, photographs, videos, and friendship or interest groups. Individuals are able to interact with one another through the use of a chat feature (also known as instant messaging), wall posts, and status updates (Duffett & Wakeham, 2016:23; Quesenberry, 2019:113). Facebook has recently also started to include access to games and a marketplace where goods can be sold. Anderson et al. (2014) as cited in Hendricks and Kanjiri (2021:11) proved the efficacy of the above, as their study found Facebook to be beneficial for young individuals to look for employment opportunities, advertise employment opportunities and to promote their own local businesses. Likewise, the youth in South Africa's most remote areas have been found to utilise Facebook to become social activists, working for social justice and equity by sharing their stories of injustice in response to the country's plethora of social problems (Hendricks & Kanjiri, 2021:11).

Although Facebook and LinkedIn are based on the same principles, **LinkedIn** is a social-networking site that has a business focus, as consumers' profiles are centred around sharing their work experience and connecting with other likeminded professionals. It is no wonder that

this social networking site that was launched in 2003 promotes itself as the globe's largest professional network, with over 500 million users worldwide (Quesenberry, 2019:113).

Google+ is another social networking site that was established in 2011 as a social addition to other Google applications, with the purpose of allowing its consumers to link information on the internet directly with the individual who created it; this site has grown to 540 million active consumers (Quesenberry, 2019:121).

2.2.1.2 Blogs

A blog, or weblog as it is formally known, can be defined as an internet-based site that has a journal-type format that allows for stories to be told and for consumers to make comments on blog posts. As with any journal, the content of blogs varies greatly and can include news, personal experiences, work and politics, to mention a few. The entries on a blog are usually in chronological order, with the newest entries showing at the top of the page and can also include all the different types of multimedia and can have embedded links (Quesenberry, 2019:121, 122).

As with a real-life journal, all internet consumers can write about and share what inspires or interest them on a blog platform of their choice. Thus, internet consumers do not have to move through the loops of professional media publishing and receive the opportunity to directly interact with likeminded or non-likeminded individuals that react to and comment on their blog post (Quesenberry, 2019:122). Examples of popular Blogs are WordPress, Blogger and Tumblr.

Established in 1999, **Blogger** was the first of its kind in introducing consumers to internet-based blog-publishing services, free of charge. It was bought out by Google in 2003 when it was still the largest weblogging platform, but was surpassed by WordPress (Quesenberry, 2019:124).

WordPress was launched in 2003 and grew to an average of 750 million monthly users by 2019. It is a weblogging site that is free to use, with topics that range from anything relating to news, media, arts, and entertainment. WordPress is however mostly used as a platform for consumers to host their blogs on, due to its multifaceted functionalities and free access (Quesenberry, 2019:122, 123).

Tumblr can be considered as the youngest sibling of weblogs, as it is both a blogging platform and a social-networking platform. Tumblr is different from WordPress and Blogger in the sense that it was designed for the posting of short blogs containing multi-media content with the purpose of attracting followers, making it the weblogging platform on which consumers spend

the most time (Quesenberry, 2019:125).

2.2.1.3 Microblogs

Although similar in name to weblogs or rather blogs, microblogs draw core aspects from blogs when it comes to the type of content; the content is however shorter, and the multi-media is smaller. Microblogs thus restrict a consumer in terms of placing a character limit on post descriptions, only allowing small images and short video links, and with the core purpose of sharing immediate experiences and interests without expending too much time on it (Quesenberry, 2019:138). The immediate, almost real-time effect, and the short spurts therefrom that are generated by microblogs allow consumers to experience feelings of excitement, energy, and ingenuity (Quesenberry, 2019:138).

As with Tumblr, that has aspects of a weblog and of a social networking site, some social networking sites like Facebook, and LinkedIn include aspects of microblogging by allowing consumers to post 'status updates' and publish images and video content to their heart's content. True microblogging platforms nonetheless include Twitter, Pinterest, and Vine, amongst others (Quesenberry, 2019:138). For the purpose of this study, Twitter and Pinterest is briefly discussed below.

Twitter is a microblog that was launched in 2006. It is briefly described as a platform that allows users to know "what's happening in the world and what individuals are talking about right now." This refers to any current event in both the private and public domains of an individual's life and anything that happens anywhere in the world. Consumers of this platform can thus impact their communities and the world and can action mass media reporting by posting information and multi-media about events that are occurring in real-time, thus playing the role of a journalist (Quesenberry, 2019:138).

The 280-character (words, numbers and/or other symbols) limit to each post or rather 'tweet' that a user publishes, is what makes Twitter a microblog. This character limit was increased in 2017 and is thought to have allowed consumers to publish tweets faster, as they need to do less editing to fit all the information into the previous 140-character limit. Twitter additionally allows consumers to link other twitter users to the content that they publish by using the symbol '@' followed by the Twitter username that is used by the party that is being included in the tweet. This function automatically notifies the 'tagged' party and allows for the information and multi-media from the tweet to be seen by all the consumers that follow the tagged party; causing conversations to start in the comments, and if the content is of such a nature, for it to spread or go 'viral' (Quesenberry, 2019:139).

Only launched in 2010, **Pinterest** is another popular microblog that mainly focusses on multi-media (image and short video's) sharing, searching, and saving or 'pinning' what interests the consumer on an online pin board. The pins that are shared and stored are linked to a consumer's profile, allowing the consumer to see similar pins from others also using the microblog. All pins are linked back to the websites where products and services that relate to a pin can be purchased, resulting in a high percentage of business accounts being created on Pinterest (Quesenberry, 2019:141).

Just like Twitter, Pinterest consumers are enabled to follow others in their entirety or only boards that interest them. Consumers can at any time save content from other boards on a board of their own. The original consumer that shared the multi-media content is recognised and the original website where the content originated from will remain part of the pin and accessible to other consumers. There is a constant stream of new posts, in social networking terms a 'feed', that updates as consumers and topics that are followed by a Pinterest consumer is updated and more information is shared (Quesenberry, 2019:143). Consumers additionally have the ability to choose whether the pin boards that they create should be kept private, or if they want to make the content of their pin boards public for others to see and share.

Pinterest can be described as a proverbial 'rabbit-hole' where a consumer searches for one topic and is exposed to an innumerable number of possibilities. With each pin that is opened, a whole list of networks is opened, revealing other pins that relate to the initial search query, thus going further down the 'rabbit-hole' with each new pin that is opened (Quesenberry, 2019:143).

The researcher is of the opinion that Instagram and Snapchat can also be included under the category of Microblogs, as both platforms allow for image and video content to be shared, only the structure of the social media platform differs. **Instagram** is described by Quesenberry (2019:147) as a social networking site that enables a consumer to take or upload multimedia content whilst using the application and adding digital "filters" or editing the content. Instagram consumers mostly upload high quality photographs or real-time short video content, which can also be shared to other social networking platforms, such as Facebook under the consumer's profile on that site.

Instagram was launched in 2010 and grew to 800 million users that are active on the platform monthly, and an astonishing 500 million users that are active on the platform daily. Recent penetration rates in South Africa indicate that 73 percent of social media consumers are active on Instagram (Galal, 2022b). The platform especially attracts adolescents and young adults,

as fifty percent of the active users in the United States were found to be between the ages of eighteen and twenty-nine (Quesenberry, 2019:147).

As with Instagram, **Snapchat** allows for the sharing and editing of image and video content, but with a difference. Snapchat acts as a messaging service where messages only stay visible for ten seconds when it is sent to another. The application also creates a collection of vertical images or ten second videos from a consumer's profile and that of their friends that also use the site. The video turns into a story that disappears after twenty-four hours (Quesenberry, 2019:150).

2.2.1.4 Forums

A **forum** can be defined as an internet-based discussion platform where subjects are posted and discussed, with the messages being more in-depth, at times detailed, constant and archived, unlike chat rooms. Forums are also known as message or bulletin boards, discussion boards or groups, and threaded discussions. These imply that new threads, or rather sub-conversations, are started underneath a post on a forum as individuals comment and reply to comments on forum discussions (Quesenberry, 2019:125).

2.2.1.5 Video podcasting

Video podcasting is important to include under the umbrella of social networking and sharing platforms. An estimation given by Cisco indicated that by 2021, 82 percent of internet traffic globally will take place online in the form of a video. This would mean an 18 percent increase since 2014. Additionally, adolescents have been found to spend 34 percent of their video screen-time on YouTube, whilst only spending 27 percent on watching movies and series on Netflix or 14 percent on traditional broadcasted television (Cisco, 2017 in Quesenberry, 2019:144).

YouTube was launched in 2005 and is currently the most used video-sharing platform, as an estimated third of internet consumers worldwide frequent the platform. The platform allows consumers to upload and view videos, and to share and save all the video content available on the platform. As with other social networking sites, YouTube allows a consumer to create a profile. Like Pinterest, YouTube also groups content together when a search is initiated by an individual and creates a feed or in YouTube jargon, a channel of similar content that might interest a consumer. Consumers can also choose which content should be made public and they can subscribe to channels of other individuals and will be notified if new content is available on that channel (Quesenberry, 2019:145).

In addition, YouTube is utilised by consumers and channel subscribers for the creation of video blogs that are in short referred to as a vlog. A **vlog** is characterised by a video that contains images, text, and in most cases spoken word by the 'vlogger' that creates the content. As with all content found on social media, the content of vlogs varies in topic and interest and includes product or service reviews, and the sharing of personal life experiences. Consumers can furthermore earn money from gaining channel subscribers and achieving content views (Quesenberry, 2019:146).

There have been several developments in video podcasting, one of which being the growing popularity of short-form video and recommendation systems (targeted content) across several platforms (Mosenene, 2022:3). **TikTok** is an example of a video-based social media network that has experienced remarkable expansion because of the utilisation of targeted short-form video content. TikTok provides its consumers with a one-of-a-kind experience that differentiates itself from other popular social media networks, by placing more of an emphasis on the consumer's frequent interaction with the targeted content that is made available on the platform (Mosenene, 2022:3). TikTok is one of the most downloaded mobile applications worldwide, and it has set a record for being the most downloaded mobile application worldwide within a quarter. This spike in popularity occurred during the COVID-19 pandemic in 2020 (Chapple, 2020 in Mosenene, 2022:2, 3). As a result, TikTok is currently the second most downloaded mobile application in South Africa (Kemp, 2021 in Mosenene, 2022:3).

2.2.1.6 Messaging platforms

A cross-platform messaging application called **WhatsApp messenger** enables consumers to communicate with one another without having to pay for short message services (SMS). The application works with Windows, BlackBerry, iPhone, Android, Nokia, and other smart phones (Montag, Błaszkiewicz, Sariyska, Lachmann, Andone, Trendafilov, Eibes & Markowetz, 2015:2). One-on-one messaging, group chats, push alerts, and the sending and receiving of both audio and video files are among the capabilities of WhatsApp messenger (Shambare, 2014:544). According to estimates, WhatsApp messenger had 500 million consumers as of April 2014, and consumers worldwide are estimated to have sent and received more than 64 billion messages on a daily basis (Trenholm, 2014 in Shambare, 2014:544). A statistical report from Galal (2022a) indicated that in South Africa, WhatsApp messenger is the most widely used social media platform. The messaging application was utilised by 95 percent of the nation's internet consumers as of the third quarter of 2021 (Galal, 2022a).

The researcher is of the view that the smartphone has entered into the mainstream culture as a result of WhatsApp messenger. As previously noted, the smartphone has completely changed how individuals live everywhere, including in developing nations. Even though many

social media applications have been released in South Africa, very few of them have gained the same level of popularity as WhatsApp messenger (Shambare, 2014:544). This notion was already posited by Van Rijswijck (2013, in Hendricks & Kanjiri, 2021:4) who stated that in South Africa, social media use has surpassed the urban-rural barrier and has become mainstream. Furthermore, according to UNICEF (2012, in Hendricks & Kanjiri, 2021:4), the growth of social media use is largely attributable to South Africa's leadership in social networking and microblogging in Africa.

Since the launch of WhatsApp messenger, it has become clear that fewer individuals are using traditional instant messaging applications such as SMS and **BlackBerry Messenger (BBM)** (Shambare, 2014:547). Particularly when it comes to SMS services, WhatsApp messenger has two definite advantages. The service is free, and users have limitless access to send unlimited-sized instant messages (Montag et al., 2015:2). Despite offering equal features to BBM, WhatsApp still seems to be substantially more beneficial to consumers (Shambare, 2014:547). Contrary to WhatsApp messenger, Blackberry subscribers must pay a monthly subscription of R59 to access BBM services (Shambare, 2014:547).

Mxit is a prominent South African instant messaging application that primarily provides consumers with a private instant messaging service at a fraction of the cost of an SMS. This primarily mobile ICT channel has also established public chat rooms that allow users to connect and interact with other anonymous individuals online, as well as providing businesses with real-time direct marketing messaging (Kahn, 2013 in Duffett & Wakeham, 2016:23). At its height in 2010, Mxit transmitted 250 million messages each day and claimed to have 50 million users in 120 countries, primarily in Africa with 17 million users in South Africa (Duffett & Wakeham, 2016:23). Nonetheless, Mxit remains one of the most popular social networking sites in South Africa, with 4.9 million active users. The numbers have primarily decreased as a result of WhatsApp messenger and the rise of smartphone usage (Thomas, 2015 in Duffett & Wakeham, 2016:23). This mobile ICT channel also provides a number of free community assistance mechanisms in the form of education, health care, and agriculture applications, which are utilised by numerous South African government agencies and non-profit organisations (Duffett & Wakeham, 2016:23).

Due to the evident pervasiveness of the internet and the variety of social media platforms that are available, the global prevalence of social media use will accordingly be discussed. The purpose of the following section serves to provide the reader with a more detailed account of the impact that social media use has on the functioning and development of individuals and especially adolescents.

2.2.2 Prevalence of social media

Due to the availability of the internet and technology social media is becoming increasingly more accessible on a global scale and has started to serve different purposes within society (Sajithra & Patil, 2013:69). Research indicates that social media use is highest amongst adolescents and young adults, and that it has become a significant role-player in the lives of these developmental groups (Glover & Fitch, 2018:171; Hausmann, Touloumtzis, White, Colbert & Gooding, 2017:714). Additionally, Beger and Sinha (2012:3) found that seventy-two percent of adolescents and young adults who are between the ages of fifteen and twenty-four, own or have direct access to a smartphone, and thus the internet and social media.

As with the internet, smartphone penetration and popularity has soared in the past two decades, with smartphones becoming increasingly more popular among adolescents and young adults as well (Arnett, 2016:454). For instance, in Sweden, almost ninety percent of individuals between eighteen and twenty-four have access to a smartphone (Axelsson, 2010 in Arnett, 2016:454). In the United States, ninety-three percent of individuals between eighteen and nineteen own a smartphone, which constitutes the highest rate of any age group that has been recorded (Lenhart, 2010 in Arnett, 2016:455). Ninety-two percent of American adolescents have furthermore been found to go online daily, with twenty-four percent of adolescents being online non-stop (Young & de Abreu, 2017:5). According to a statistical analysis by Galal (2022c), as of January 2021, young females between the ages of 18 and 24 made up 12.7 percent of social networking users in South Africa, the same percentage as males in the same age range. Female adolescents aged 13 to 17 constituted 5.6 percent of social networking audiences in South Africa (Galal, 2022c).

Social media has become the preferred means of communication by youth in numerous countries (Kelly et al., 2018:59). It therefore seems to be an undeniable truth that the use of smartphones, personal computers and tablets have become an integral part of modern society and daily life, playing a significant role in the formation of the behaviour and habits of individuals. Social media influences the personal, professional, and social lives of individuals (Oberst et al., 2017:51; Tran, Huong, Hinh, Nguyen, Le, Nong, Thuc, Tho, Latkin, Zhang & Ho, 2017:1; Zafar, 2016:46) and creates a context in which adolescents are constantly exposed to influences that can have an effect on their thoughts, feelings, and behaviours (Hendricks & Kanjiri, 2021:9).

A study completed in 2010 indicated that the majority of participants that utilised the internet were between the ages of five and fifteen, thus signifying that modern children were then already being shaped to become influential consumer of internet-based services from a young age (Wang, Luo, Bai, Kong, Luo, Gao & Sun, 2013:67). As evidenced above, a survey

completed in 2016 by the Pew Research Center amongst a group of adolescents reported the following percentages of social media use amongst the age group, namely: Facebook (71%); Instagram (52%); Snapchat (41%); Twitter (33%); Google (33%); Vine (24%); Tumblr (14%); and other social media platforms or applications (11%) (Reid Chassiakos, Radesky, Christakis, Moreno, Cross, Hill, Ameenuddin, Hutchinson, Levine, Boyd & Mendelson, 2016:3).

Similarly, another study revealed that ninety-four percent of adolescents that utilise social media have a Facebook account, while twenty-six percent have a Twitter account, and eleven percent an Instagram account (Rathus, 2017:525). Adolescents were additionally found to spend thirty-four percent of their video screen-time on YouTube, whilst only spending twenty-seven percent watching movies and series on Netflix and fourteen percent on traditional broadcasted television (Quesenberry, 2019:144).

It has been found that internet use amongst adolescents normally increase during the early onset of adolescence and the frequency of daily and repeated use thereof is thought to increase as adolescents move through the developmental phase (Davel, 2017:32). The use of digital multimedia however does not only commence with the onset of adolescence. Children are exposed to digital multimedia before their first birthday, fifty percent plus of children aged two to four and ninety percent of children aged five to eight years are already being exposed to interactive mobile technology. Concurrently, ninety-one percent of emerging adolescents have been found to spend no less than six hours per day utilising ITCs and being connected to the internet (Common Sense Media, 2016 in Young & de Abreu, 2017:5). With the overall prevalence of social media use constantly pointing to the adolescent use thereof, adolescent social media use will accordingly be discussed.

2.3 ADOLESCENT SOCIAL MEDIA USE

Without a consideration of the media that adolescents consume, the researcher is of the notion that no study of adolescent development is complete. According to literature almost every adolescent that is currently growing up, especially in developed countries are regularly exposed to recorded music, television, movies, magazines, electronic games, smartphones, and have access to the internet (Arnett, 2016:396).

Most adolescents who have internet access are perceived to utilise the internet for academic work and as a medium for social interaction, including the expression of individual points of view by means photography, online journaling, blogging, and artistic creation (Berryman, 2014:3). With all the above occurring on a virtual and personalised platform, there is no wonder that it has become more popular amongst the youth (Oberst et al., 2017:52).

According to literature, social media use has furthermore been reported by adolescents to be beneficial with problem-solving and connection with others, as it provides quick and easy access to an innumerable number of individuals and groups that have knowledge about a specific impasse that might be experienced (Vitak & Ellison, 2013 in Berryman, 2014:3). Social media therefore broadens the possible social interactions, influence, and exposure from the immediate environment (microsystem) of an adolescent to any individual or group globally.

Smartphones and other types of media can furthermore be regarded as central to development during adolescence (Warburton, 2012:11). The adolescent developmental stage is reliant on the establishment of a positive self-identity (Warburton, 2012:11), and access to social media can, therefore, contribute to the development thereof as experiences affect the psychosocial development of adolescents (Bosch & Mutsvairo, 2017 in Hendricks & Kanjiri, 2021:3).

The researcher is of the view that the innovative ability of technology that enables adolescents to meet their interpersonal needs in countless ways lie central to adolescent social media use, as it can assist with strengthening the self and can foster identity development during adolescence (Davel, 2017:34). In accordance, adolescents with a stronger self-identity have been found to be more connected within their peer group by means of their smartphones and other digital technology (Walsh et al., 2010 in Davel, 2017:34).

As discussed previously, becoming part of a social media platform usually includes the construction of an individual profile and offers a virtual platform for individuals on which to communicate, share their views and opinions, and experiences. Platforms such as Facebook, Twitter and Instagram appear to be the most frequented (Cookingham & Ryan, 2015:2; Oberst et al., 2017:52). These virtual platforms and individual profiles allow adolescents to create a representation of themselves or of the type of individual that they strive to be on platforms that entice them and allow them access to groups and societies that fit with the identity that they are creating (Cookingham & Ryan, 2013:2). Adolescents should be guided to find a balance between suitable sharing of information and the over-sharing thereof and should be warned against technological dependency (Hawk et al., 2019:65), as studies have found social media use to have a substantial effect on the well-being of adolescents (Cookingham & Ryan, 2015:2; Hawk et al., 2019:65). This notion is further confirmed by Shah et al. (2019, in Hendricks & Kanjiri, 2021:3) who stated that the youth population and social media have become nearly synonymous, and that the influence of social media on their lives is alarming.

Smartphones thus allow for the mobile use of applications like e-mail and social networking platforms, enabling adolescents and young adults to stay in touch nearly all day. Accordingly,

the social spheres of young individuals are no longer cleanly segregated into time spent with family and time spent with peers, or time spent at school. Therefore, modern media enables the worlds of others to be a near-constant presence in their lives. Thus far, literature has been able to ascertain that young individuals like the comfort with which new media enables them to communicate and interact, even if only from a distance. A study in Italy for example concluded that many of adolescents' happiest moments occurred while connecting with peers online or while on their smartphones (Arnett, 2016:455).

Višnjić et al. (2015:64, 65) are of the opinion that the considerable increase in the availability of smart devices and access to the internet that adolescents have are also related to parental beliefs that adolescents would benefit from technological exposure, as it is what the growing information age and education system requires. Adolescents have however started to utilise the internet for much more than education. As evidenced from the above, social media and in general, access to the internet provide adolescents with enhanced social capital, platforms for expression of the self and the formation of a personal identity, opportunities for increased self-esteem and fulfilling the developmental task of belonging. All these can be considered as positive attributes depending on the nature of exposure received (Glover & Fitch, 2018:175; Oberst et al., 2017:52). A brief look will be taken into the role of parents in adolescent social media use.

2.4 THE ROLE OF PARENTS IN ADOLESCENT SOCIAL MEDIA USE

Parents and caregivers have been found to encourage their children to become proficient with digital technology for them to flourish in schools that increasingly assign academic work online and to prepare them for the emerging digital workplace. Simultaneously, many parents are concerned that their children are more linked to their smartphones and computers than to the ‘real world’, that their academic performance and sleep suffer as a result, and that they do not play outside, practice sports, or spend time with family and friends in real life (Young & de Abreu, 2017:3).

Parents and caregivers are however also constantly connected on their own ICTs and to the internet. When parents express concern, children in most cases, disregard parental attempts to govern their digital lives as children can see themselves to be held to a higher standard. According to a recent survey, more than a third of parents admitted to arguing with their children about smartphone use; and half of adolescents and more than a quarter of their parents felt that they were addicted to their ICT devices (Common Sense Media, 2016 in Young & de Abreu, 2017:4).

Older generations have furthermore been thought not to understand the need that adolescents have to be connected to other individuals and groups on social media and the importance that

it yields in terms of the development of self-esteem and self-awareness (Davel, 2017:25; Louw & Louw, 2014:375). If the above happens to be accurate it may lead to adolescents being granted access to social media with minimal supervision and guidelines for safety, which may pose a great risk to adolescent development (Davel, 2017:31; Oberst et al., 2017:52).

Literature strongly advises that parents and caregivers should set boundaries for appropriate social media use and monitor adolescents' online activities (Badri et al., 2017:2658; Cookingham & Ryan, 2015:4). According to Kalaitzaki and Birtchnell (2014:734) the best predictors of maladaptive internet use and addiction amongst adolescents have however been related to parental attachment factors and not to an age gap that exists between generations. A generally held belief is that a child's attachment patterns remain relatively stable throughout time and that parenting styles become indicative of an adult's interpersonal interactions (Kalaitzaki & Birtchnell, 2014:734).

Parenting styles, and in particular the approach that is taken to internet use, thus have a considerable influence on the frequency of child and adolescent internet use. A higher percentage of internet usage has been discovered amongst children whose parents adopt a permissive parenting style, and at their lowest rate with parents who adopted an authoritarian parenting style towards internet use (Wang et al., 2013:62). Furthermore, parental and peer relationships are mutually beneficial to adolescents, and a healthy attachment link created by authoritative parenting may provide adolescents with the confidence, social cognitive understandings, and social skills necessary to navigate their peer environment and develop satisfying peer relationships (Berk, 2013:607).

Berk (2013:464) asserts that children and adolescents whose parents are supportive and kind, and who set fair standards for mature behaviour, have been found to feel particularly good about themselves and engage in constructive problem-solving behaviour. Warm, affirming parenting additionally teaches children and adolescents that they are capable and valuable, and clear but acceptable expectations, accompanied by explanations, assist them in making rational decisions and evaluating themselves against realistic standards (Berk, 2013:464).

Controlling parents are those that frequently assist or make choices on behalf of their child, causing them to receive a sense of inadequacy from their parents. Having parents that are always critical and disrespectful is also associated with poor self-esteem. Children raised by such parents want frequent reassurance, and many rely significantly on others to validate their self-worth, which increases their risk of adjustment disorders such as violence, antisocial conduct, crime (Donnellan et al., 2005 in Berk, 2013:464) and possibly maladaptive internet and social media use.

In comparison, excessively accepting, indulgent parenting is associated with children and adolescents having a disproportionately high sense of self-worth, which can also impair development. This might lead individuals to develop an exaggerated feeling of superiority combined with an obsessive concern about what others think of them (Thomas et al., 2010 in Berk. 2016:464). Literature has found such individuals to frequently react aggressively against peers who show disapproval and to exhibit adjustment difficulties, including cruelty and violence (Berk, 2013:464).

Thus, parenting styles have a significant effect on the development of empathy and compassion in their children. When parents are friendly, encourage emotional expressiveness, and show sensitive, sympathetic concern for their children's feelings, their children are more likely to respond favourably to others' difficulties. Apart from modelling compassion, parents may help children acquire the capacity to manage their negative emotions, which undermine empathy and sympathy (Berk, 2013:418). Additionally, sustained shyness during adolescence has been observed to increase the chance of developing severe anxiety, particularly social anxiety of being humiliated in social circumstances. To help inhibited adolescents develop good social skills, parenting must thus be individualised and temperament-based (Berk, 2013:422).

Of all the different parenting styles literature favours an authoritative parenting style and indicates that is it the most beneficial for adolescent development. Rathus (2017:524) indicates that an authoritative parenting style encompasses parents actively connecting with their child, and clearly explaining the reason behind certain limits that are set when they impose a limit. Adolescents from authoritative environments have been observed to exhibit more competent conduct than any other group of adolescents. The adolescents are more self-sufficient, do better academically, have better mental health, and have the lowest rates of psychiatric issues and misbehaviour, including substance use (Rathus, 2017:524).

Barth (2015:204) is of the opinion that adolescents become more secretive about their online and offline social lives as they gain independence from their parents and caregivers; parents are also not able to keep up with the technological trends (Glover & Fitch, 2018:176). Adolescents thus do not want their parents and caregivers to be involved or carry much knowledge about their online activities, resulting in secretive behaviour for some (Barth, 2015:204; Davel, 2017:20). Social media sites can therefore be regarded as “a forum that is often shielded from supervising adults” (Oberst et al., 2017:52).

Adolescent mood swings and parental discord are a natural part of growing up. It is believed that children must rebel against their parents and their parents' ideals to mature (Rathus, 2017:450). However, behind these discords are significant concerns such as: parental efforts

to safeguard adolescents from substance abuse, motor accidents, and early sex. It is believed that the greater the divide between parents' and adolescents' perceptions of adolescents' readiness for new responsibilities, the more quarrelsome they may become (Berk, 2013:208). Nevertheless, most conflicts are minor, and by late adolescence, only a small percentage of families continue to encounter friction. Parents and adolescents exhibit both disagreement and affection, and they frequently agree on fundamental principles such as honesty and the significance of education (Berk, 2013:208; Rathus, 2017:523).

Most conflicts between adolescents and parents that have been recorded, relate to mundane aspects of family life, such as cleaning, schoolwork, curfews, personal appearance, finances, and dating. Conflicts may emerge in these areas because adolescents assume that personal matters, such as their clothing and friend choices, that were previously under the authority of their parents should now be under their control (Rathus, 2017:523). Despite the above disagreements, parents and adolescents often have comparable values and attitudes about social, political, religious, and economic concerns (Rathus, 2017:523).

According to Rathus (2017:523) time spent with the nuclear family decreases considerably during adolescence, with a fifteen-year-old adolescent spending half the amount of physical time with their nuclear family than when they were nine years old. Accordingly, males have been found to replace most of the time spent with family with being alone, whilst females balance being alone and spending time with their friends (Rathus, 2017:523).

The decline in family time may indicate adolescents' efforts to gain independence from their parents. Distancing from parents to some extent may be beneficial for adolescents as they embark on the task of building relationships outside the home and transitioning into adulthood. However, increased independence does not imply that adolescents emotionally isolate themselves from their parents (Rathus, 2017:523). Although a definite decline in time spent with the nuclear family has been observed, well-adjusted adolescents retain a high level of affection, loyalty, and respect for their parents throughout adolescence (Rathus, 2017:523); again, stressing the importance of a positive and supportive parenting style.

Peer engagement encourages adolescents to develop their socio-cognitive intellectual and social skills. Additionally, in situations where adolescents are subjected to severe stresses, such as parental divorce, meaningful friendships with peers can partially become a substitute for a supportive parent-child connection (Berk, 2013:608). Whilst gradual parental and familial separation is adaptive, both generations benefit from strong, protective family ties throughout their lives. As the adolescent years progress, parent-adolescent interactions become less hierarchical, laying the groundwork for mutually supportive adult relationships (Berk, 2013:208).

As evidenced in this section, the parent-adolescent relationship develops across the adolescent developmental life stage and throughout childhood, with parental influence playing an important role in adolescent development and social media use. This is not only related to environmental aspects, but social and emotional aspects as well. An overview of adolescent development is thus important to be able to further understand the broad effect that social media use may have on adolescent development and functioning. The following section endeavours to provide a broad overview of adolescent development, and will explore the adolescent's physical, emotional, social, and cognitive development, as well as identity formation and the development of a moral value system.

2.5 ADOLESCENT DEVELOPMENT

The end goal of the developmental stage of adolescence is to allow an adolescent to start transitioning into young adulthood in order to assume the tasks and responsibilities of adulthood in their society (Arnett, 2016:349; Louw & Louw, 2014:303; Rathus, 2017:450). This transitional period begins at the onset of puberty, between the ages of eleven and thirteen, and continues up to the age of eighteen years (Colman, 2015:14). An early American psychologist, G. Stanley Hall (1904) originally suggested that the period of adolescence should be treated as a distinct developmental phase, as adolescents were observed to often experience confusion and stress and move between feelings of elation and sadness, egotism, and uncertainty, and wanting to be independent, but still being dependent on their parents for most of their survival and development (Rathus, 2014:450).

According to Malekoff (2014:7), the adolescent developmental phase is characterised by vulnerability and is a time in which adolescents are experiencing the sexual awakenings of puberty, facing increasing social and educational demands; and experimenting more with freedom and choice, than during any other developmental stage. Berger (2018:58) asserts that adolescents and children move through different life and cognitive phases on a daily and annual basis and that it continues from one generation to the next. Some adolescents experience effortless growth, improvement, and progress, whilst others experience radical transformation and deterioration in stability; all opposite from each other in time and direction. Some experiences offer advantages whilst others cause disadvantages to holistic development (Berger, 2018:58).

The period of so-called 'storm and stress' during adolescence has however been suggested not to be inescapable, as biological changes start to occur during adolescence which fuels certain behaviour and is influenced by individual environmental changes and societal expectations (Hollenstein & Lougheed, 2013 in Rathus, 2017:450). This transitional phase thus involves major biological changes including physical, cognitive, and socio-emotional

development that allows individuals to move towards maturity, and thus young adulthood as they gradually adapt to the changes throughout the developmental phase.

Each of the above spheres of development have however historically been discovered to pose their challenges, and are believed to occur during different stages of adolescence as described below by Persike and Seiffge-Krenke (2011, in Rathus, 2017:451):

- Early adolescence occurs from approximately eleven to fourteen years of age and is almost solely distinguished by rapid biological, especially physical changes that start to occur due to the onset of puberty. Early adolescents also tend to have low coping ability and frequently experience elevated stress levels.
- Middle adolescence occurs from approximately the age of fourteen to sixteen years of age. During this stage, most of the physical changes of puberty start to end and adolescents develop a higher tolerance to stress and have an increased coping ability.
- Late adolescence, lastly occurs from approximately the age of sixteen to nineteen years of age and is the time in which adolescents begin to develop more adult-like facial features. The pace of biological development decreases further, resulting in lower levels of stress and a high level of tolerance.

Adolescence is thus a period of rapid development, and the physical changes are more noticeable throughout puberty. However, other significant changes also occur in family relationships, peer relationships, sexuality, and media consumption. Adolescents additionally also experience changes in their thinking and communication about the world around them, making the development that takes place, vaster and more complex (Arnett, 2016:349).

In the following section, the researcher will discuss the core aspects of adolescent development, namely: the biological development of an adolescent, which includes physical, emotional, social, and cognitive development. The importance of identity formation, obtaining autonomy, the formation of a healthy sexual identity; and the development of a moral value system during adolescence will also be discussed as additional developmental tasks that need to be achieved during adolescence.

2.5.1 Physical, emotional, social and cognitive development

According to Malekoff (2014:7) the selection of a career, and preparing for future relational aspirations, including marriage and family responsibilities, form part of the developmental tasks of an adolescent, as in accordance with the psychosocial development theory of Erik Erikson. This theory focusses on the biological development that takes place during adolescence and the impact thereof.

The biological development of an adolescent can be regarded as the forerunner that allows an adolescent to have the ability to successfully prepare for the future, attain chosen life goals, and develop an individual and unique sense of self. Biological or physical development make way for the development of physical skills and coordination, as well as the ability to think conceptually, mathematically, and inquisitively (Carter, McGoldrick & Preto, 2014:35). Acquiring these skills indicate that the physical, emotional, social, and cognitive shifts that adolescents endure, are core to the accomplishment of this developmental stage (Berk, 2013:206).

2.5.1.1 Physical development

As evident from the above, adolescence is regarded as a transitional phase between childhood and adulthood that starts with the onset of puberty and is a global term that refers to the series of biological changes associated with achieving physical and sexual maturity (Arnett, 2016:349, 350). Puberty is a period of biological transformation during which the adolescent's anatomy, physiology, and physical appearance undergo substantial changes. By the time adolescents approach the end of their second decade, they appear and operate much differently than they did before puberty, and they are biologically equipped for sexual reproduction (Arnett, 2016:350).

The onset of puberty is largely unpredictable, with only estimations existing as to when it will commence, as individuals develop at their own biological pace. Most pre-adolescents are however negatively influenced by pubertal timing which can further be intensified when it is added to the stress that stems from the other spheres of development, that are also placed under stress by pubertal changes and the influence of the environment (Berk, 2013:209). The onset of puberty is largely made visible by the various physical changes that occur in both males and females (Louw & Louw, 2014:303). These physical changes occur at a rapid pace and can influence the psychological functioning of an adolescent (Louw & Louw, 2014:305, 310).

After a period of relatively constant growth throughout infancy and young childhood, children undergo a dramatic metamorphosis during puberty that includes the production of pubic and underarm hair, changes in body shape, breast development, menstruation in females, and the advent of facial hair in males (Arnett, 2016:350). Physical development during puberty is additionally earmarked by a sudden accelerated growth of children’s legs, arms, hands, and feet; later being followed by torso growth that allows for weight gain, characterised as an adolescent growth spurt (Rathus, 2017:452, 453).

The above development during puberty occurs because of rising sex hormone levels throughout puberty. Primary sex characteristics are closely tied to reproduction and related to females starting to produce ova (eggs) and males starting to produce sperm. Secondary sex characteristics refer to the additional physical changes that occur because of the increase in sex hormones during puberty, excluding those immediately connected to reproduction. (Arnett, 2016:351). Secondary sex characteristics range from pubic hair development to a lowered voice and increased production of skin oils and perspiration (Arnett, 2016:351, 352).

Gender differences in physical development are however evident. Starting between eight and ten years of age, females have been observed to gain more body fat on their arms, legs, and torso during puberty, whilst body fat in the arms and legs of males typically increase in muscle growth; with both gender's growth spurts continuing for a period of approximately two years (Berk, 2013:177; Rathus, 2017:452).

Females also typically experience their first growth spurt two years earlier than males, which approximately starts to occur from the age of ten, with both genders achieving a period of peak growth in their height two years after their initial growth spurt occurred (Hills & Byrne, 2011 in Rathus, 2017:452). Although females typically enter the phase of physical development at the onset of puberty, males catch up in time and often become heavier and taller than females. Both genders need adequate nutrition during their respective growth spurts and have been found to have an appetite that never seems to end during this time (Rathus, 2017:452).

A gradual change in body shape is another element of physical development that males and females endure during the onset of puberty and throughout adolescence. When comparing the two genders, males develop broader shoulders and females develop broader hips, which is where the increased body fat that females gain, tend to centre (Rathus, 2017:453). In addition, males characteristically also develop stronger and bigger hearts and skeletal muscles, an increased lung capacity, and more red blood cells throughout puberty. Male development during puberty is estimated to be 150 percent more than the physical development of females, allowing them to present stronger and faster than females (Berk, 2013:177).

Harter (2006, in Berk, 2013:209) asserts that body image significantly influences the self-esteem of an adolescent. Body image can be defined as the perception that individuals have regarding how attractive their personal belief of the self is, as well as the general feeling and acceptance of physical attributes (Rathus, 2017:463). During adolescence, both males and females have been observed to become aware and often anxious about their physical appearance, especially during the onset of puberty when the physical changes and self-

awareness start to occur. These views may encourage adolescents to engage in changes in eating habits, which may include fasting for 24 hours or longer, the use of diet products, purging, and the use of laxatives to achieve weight control (Arnett, 2016:358).

Fortunately, acceptance and in most cases the satisfaction of individual body image has been observed to occur by the age of eighteen (Bucchianeri et al., 2013 in Rathus, 2017:463). In addition, it is important to note that prolonged dissatisfaction of individual body image may cause a depressed affect in both genders, but typically more in females (Rathus, 2017:463).

Malekoff (2014:7) and Carter et al. (2014:35) identify the forging of a healthy sexual identity as one of the key developmental tasks during adolescence. In forming a healthy sexual identity, adolescents need to continue to cope with the rapid changes in their bodies, and the cultural ideas surrounding body image (Carter et al., 2014:35). The establishment of such an identity also requires adolescents to have an increased awareness and ability to deal with their own and others' sexuality, also learning to handle their own sexual and aggressive impulses (Carter et al., 2014:35).

2.5.1.2 Cognitive development

There are various perspectives available in literature that describe cognitive development in children. Theorists that have focussed on cognitive development across the individual life span demonstrate numerous similarities, as they are interested in the mental processes that occur when an individual experiences or does something. Cognitive theories also hypothesise and investigate the way individuals mentally perceive and represent the world. Additional aspects that are focussed on include the development of logic, thinking, and problem-solving (Rathus, 2017:18).

The cognitive development theory that was developed by Swiss biologist, Jean Piaget (1896-1980), will be applied to discuss adolescent cognitive development (Rathus, 2017:18). The cognitive development theory of Jean Piaget focusses on the development of mental representations, or rather the individual understanding of the systems that children are exposed to. These mental representations, called concepts, were hypothesised to influence how a child interacts with other concepts to bring about change in their external systems. Piaget accordingly acknowledged the work of behaviourists that hypothesised that individual thoughts cannot be measured directly. Piaget thus set out to compare the hypothesis surrounding the mental processes of children with observed behaviour throughout development (Rathus, 2017:18).

Additionally, the cognitive development theory proposed that cognitive development throughout the individual life span is reliant on brain maturation and regarded children as

physicists that keenly explore and learn about the world that they live in (Rathus, 2017:18). Piaget's theory has been labelled as a constructivist approach to cognitive development because children are seen as discovering and constructing the knowledge that they have of their world by means of their own exploration and understanding of their surroundings (Berk, 2013:226).

In accordance with the notion of constant development that occurs with exploration and knowledge acquisition and organisation, Piaget theorised that the psychological structures that develop with age allow children to make sense of their experiences in an organised manner. Piaget named this occurrence, scheme development (Berk, 2013:226; Rathus, 2017:19). The schemes that are formed across development thus form individualised mental representations that can be defined as internal representations of obtained knowledge that is controlled by the mind (Berk, 2013:227).

The second step in the cognitive development process of Piaget is called adaptation and involves the construction of new schemes by means of direct interaction with the individual environment, involving both the processes of assimilation and accommodation. Assimilation involves the utilisation of already existing schemes to make sense of an individual's external world. Accommodation comes after assimilation and involves the creation of new schemes or updating existing schemes. Accommodation occurs upon realising that the current manner of thinking (current scheme) is not adequate in capturing the core of what there is to learn from the external world, and it can thus not be assimilated into the existing scheme. Assimilation and accommodation thus complement one another and create balance, allowing for adaptation to the environment and awareness of the knowledge that the environment holds within the present moment (Berk, 2013:226; Rathus, 2017:19).

Berk (2013:227) also states that more frequent assimilation takes place in times of little individual change, allowing for a comfortable state of cognitive equilibrium, as new experiences are easily assimilated into existing schemes (Rathus, 2017:19). Unfortunately, the understanding of most things that individuals learn as they grow up change throughout time, and especially rapidly during periods of vast cognitive change like during adolescence, causing a cognitive state of disequilibrium and discomfort. The realisation that current mental schemes are 'out of date' when new knowledge is acquired allows for accommodation to take place. The process of adaptation is ongoing with a back-and-forth shift continuously occurring between assimilation and accommodation as an individual constantly continues to acquire new knowledge across their individual life span; defined by Piaget as equilibration (Berk, 2013:227; Rathus, 2017:19). In addition, equilibration was believed by Piaget to be the process of restoring cognitive balance and that it lies at the core of a child's natural curiosity

to explore the world that they exist in (Rathus, 2017:19). Piaget further posited that the innumerable number of schemes that are established over the course of an individual life span is mentally organised by rearranging and linking existing schemes together, thus broadening the knowledge of specific schemes and allowing for cognitive development to take place (Berk, 2013:227).

Advanced cognitive capacities are developed during adolescence, allowing adolescents to reason more like adults, which links with the formal operational stage in Piaget's theory of cognitive development. This allows adolescents to participate in scientific thought, abstract reasoning, deductive thought, considering various possibilities when making decisions, and testing hypotheses (Berk, 2013:253; Louw & Louw, 2014:323; Rathus, 2017:20, 490). The stage of formal operational thought begins from approximately the age of twelve and is the highest level of development in Piaget's cognitive development theory, indicating that adolescents start to reach cognitive maturity but with room for improvement (Rathus, 2017:490).

Adolescents furthermore start to develop the ability to think and reason in an abstract manner (Arnett, 2016:363). This does not only have scholastic advantages but provide endless opportunities for personal reflection. Abstract concepts might include envisaging different and idealistic personal circumstances and worldviews, as well as dreams for the future. Such notions can also cause adolescents to explore with different religions, sexualities, personal styles, and so forth to establish their identity and sense of self; which often causes conflict with parents and caregivers, but assists with moral development (Berk, 2013:256; Rathus, 2017:491). In summary, abstract thinking allows adolescents to mentally move past their immediate experience and envisage everything that could be, instead of becoming trapped in concrete thought where they were only able to think of what is (Arnett, 2016:363; Rathus, 2017:490).

Adolescents also in general tend to be unrealistic, critical, self-centred, and self-conscious (Arnett, 2016:263, 264; Berk, 2013:253, 254). Piaget was of the view that adolescents move back to egocentric thinking, as adolescents have been observed to struggle with distinguishing between their personal experiences and the perspectives of other individuals. Adolescents' tendency to, in most part only think about themselves is believed to be caused by a combination of physical, and emotional changes that occur, the development of self-consciousness, and the predisposition for self-centred behaviour during adolescence (Berk, 2013:255).

The development of adolescent egocentrism can furthermore be explained by advances in cognitive development during adolescence, which involve the development of metacognition, or the capacity to think about one's own thoughts. This development entails the capacity to consider not just one's own opinions, but also the opinions of others. Although adolescents are more proficient at metacognition than younger children, they may struggle to separate their own ideas from those of others, resulting in a unique form of adolescent egocentrism (Arnett, 2016:366).

Additionally, an even greater tendency for adolescent self-consciousness is established due to the creation of distorted thinking patterns, causing adolescents to become more aware of those around them. A common distorted thinking pattern causes adolescents to believe that everyone is always paying close attention to what they say and do, leading to the creation of a ‘personal fable’ that causes an inflated sense of self. This allegory allows adolescents to believe that they are unique and special and can result in a sense of invulnerability which can cause sensation-seeking and risk-taking behaviour. The ‘imaginary audience’ is the second distorted thinking pattern that arises due to the poor ability of adolescents to discriminate between their own thoughts and those of others. Adolescents tend to spend so much time thinking about themselves and are so conscious of how they look to others, they believe that others must also be thinking about them. Due to the exaggerated perception of others, adolescents create an image of a rousing reception for their appearance and behaviour (Arnett, 2016:366).

The two distorted patterns that were observed by Piaget differ vastly, as the personal fable can cause a sense of invulnerability, whilst the imaginary audience can cause a sense of vulnerability. Adolescents may thus envisage themselves achieving great heights and that nothing can stop them from achieving their dreams even if unrealistic, whilst not achieving what they plan on, or being faced with criticism can cause them to enter an unusual emotional low that is hard for others to comprehend (Arnett, 2016:367; Berk, 2013:255).

The so-called imaginary audience that develops can however also be interpreted in a positive manner, as independently caring for yourself, experimenting with the things you like, and being conscious of your behaviour may allow for important friendships to form that will make the journey to independence and establishing a sense of self easier (Berk, 2013:256). Both distorted patterns thus lie on a continuum that can move in a positive or negative direction, depending on the intensity thereof.

Furthermore, sensation-seeking and risk-taking behaviour can be intensified by the disinhibition effect of social media (Cookingham & Ryan, 2015:2). Poor judgement and risk-

taking can additionally be attributed to an immaturity in brain development, which is also in line with another theory of development (Rathus, 2017:464).

2.5.1.3 Emotional development

Berk (2013:401) asserts that emotions are swift judgments about a situation that holds personal importance for individuals and prepare them for action. Emotions thus, allow for the expression of individualised readiness to establish, maintain, and bring change to the internal system that is affected by the emotion (Saarni et al., 2006 in Berk 2013:401). Examples of the typical actions that have been observed during specific emotional experiences include:

- Happiness naturally leading to approach.
- Sadness typically causing an individual to passively withdraw.
- Fear in contrast, typically causing conscious withdrawal.
- Anger, when managed positively, assisting with overcoming an obstacle.

The above allows for the development of a mental level of emotional self-communication that assists with emotional reflection and understanding, and thus appropriate emotional management (Berk, 2013:412). When understood and managed in a negative manner, emotions can however cause distress in an individual. Emotions can affect memory, and high levels of anxiety have been observed to impede the processing of complex tasks, inhibiting thinking. Furthermore, prolonged anxiety causes the attention to be shifted away from everyday cognitive processing towards unrelated worrisome thoughts and threatening stimuli (Berk, 2013:402).

The development of empathy already commences during early childhood when toddlers develop self-awareness, thereafter the development of language, emotional intelligence, and the ability to understand the perspectives of others during middle childhood and adolescence allow for an increased awareness of others' feelings, which promotes selfless behaviour (Berk, 2013:444). As children develop, they acquire knowledge and understanding of a broader scope of emotions that enable them to gradually consider and assess the emotional experiences of other individuals. Although emotional understanding starts to develop from an early age, true empathic responses regarding the immediate stress and general well-being of an external individual have been observed to develop more during adolescence, as it requires an advanced form of individual perspective taking (Berk, 2013:417) and cognitive development.

During middle childhood and adolescence, children are challenged on an almost daily basis with the regulation of negative emotions. It is affected by the individual sense of self that continuously develops and the continued acquisition of new knowledge about the systems

they function in. The ability to effectively manage negative emotions is made possible by continued cognitive development that allows for the ability to plan, the development of self-consciousness, and a vast array of social experiences that expose a developing individual to effective and malleable emotional management strategies (Berk, 2013:412).

It is thus evident from Piaget's cognitive development theory that adolescents gradually develop the ability during this developmental stage to understand the perspectives of others, allowing them to regulate their emotions more effectively and exhibit empathy, emotion-centred coping, and emotional understanding (Berk, 2013:419). Adolescents are however at greater risk to experience emotional distress (Arnett, 2016:377), as they must manage and effectively balance the pressures that physical changes and puberty, the achievement of autonomy, and shifts within familial and peer relationships place on them (Berk, 2013:205, 206).

Due to the high pubertal hormone levels that adolescents experience, greater levels of moodiness and emotional instability is common during adolescence and can have a negative impact on relationships within all systems. Fortunately, the constant fluctuations in mood tend to mostly dissipate by the age of sixteen, with mood fluctuations at an older age being related to situational changes. Literature indicates that both high points and low points in mood are evident during adolescence, with adolescents experiencing more high points when spending time with peers or pursuing something that interests them. Low points mostly involve adult regulated settings such as school, employment, and church (Berk, 2013:207). Thus, during late adolescence, the negative emotional demeanour of an individual begins to decline, with emotions and the regulation thereof stabilising (Berk, 2013:207). Literature has noted that during the developmental phase of adolescence social support from especially family and peers have a significant impact on the emotional awareness and management of an adolescent, with adolescents with greater support showing emotional self-efficiency and adolescents receiving limited support exhibiting the opposite (Berk, 2013:207).

The researcher is of the opinion that well-adjusted emotional self-regulation is the end-goal of emotional development during childhood and especially adolescence, as it allows for the acquisition of emotional self-efficiency or rather a type of individualised emotional independence. If this independence is achieved an individual is aware and in control of their emotional experiences, cultivating a positive self-image and mindset that will assist with the conquering of future emotional challenges (Berk, 2013:412) and the challenges that social situations and relationships during adolescence brings.

2.5.1.4 Social development

According to Arnett (2016:355) social and individual responses to puberty are inextricably linked, as the way adolescents react to going through puberty is often dependent on how others react to them (Arnett, 2016:355). Along with the development of an emotional consciousness discussed above, adolescents accordingly tend to focus more on social qualities like being approachable, respectful, attentive, and kind. Adolescents additionally become more concerned with being viewed positively by other individuals, especially their peers; assisting with the development of a moral value system (Berk, 2013:458).

Peer pressure has been found to peak during middle adolescence after most of the physical development has taken place (Berk, 2014:527). The influence of negative peer pressure is a concern that is carried by most parents or caregivers of adolescents, as exposure to a so-called 'wrong' group of friends might influence a developing individual to participate in anti-social or destructive activities that do not fit in with the moral value system of the nuclear family. Succumbing to peer pressure during adolescence can be related to the high value that adolescents place on friendship, as peers provide socio-emotional and physical support, and adolescents start to long for independence from parents or caregivers (Rathus, 2017:527).

In most cultures it has been observed that between middle childhood and adolescence time spent with family declines, while time spent with peers grow. The emotional life of adolescents thus become more reliant on their peers, and like other developmental stages, is characterised by the formation of friendships based on shared qualities such as age, gender, ethnicity, personality, interests, and hobbies (Arnett, 2016:389; Rathus, 2017:525). While familial relationships remain significant, peers take precedence in other aspects. Adolescents have reported that they rely on peers for friendship and closeness more than they do on their parents or siblings. Peers therefore become the source of adolescents' happiest experiences, the ones with whom they feel most secure, and the individuals with whom they feel most openly confident (Arnett, 2016:390).

Relationship and connection lie core to social development during adolescence, as friendships increase three-fold compared to the other developmental stages. Adolescents have more friends than younger children, with most having one or two more favoured friends and often a plethora of good friends that they spend most of their days with, physically and electronically. If they are not together at school or during school recess, adolescents can remain in touch by means of social media (Rathus, 2017:523). Adolescents thus place a high value on the opinions of their peers and spend more time with them (Louw & Louw, 2014:367). Social media use offers wonderful opportunities for connecting with others, forming, and participating in online communities that stimulate creativity, knowledge, and civic engagement (Martin, Wang,

Petty, Wang & Wilkins, 2018:213).

The inherent comparison that takes place between peers has also been identified as crucial to adolescent development, as adolescents become more aware of their strengths and perceived failings by looking at the actions and perceptions of their peers (Davel, 2017:6; Louw & Louw, 2014:367).

Although having a large group of friends can make an outsider believe that the quality of friendship during adolescence is low, adolescents have surprisingly been found to place a high value on the quality of their friendships. As growing individuals, adolescents have been observed to emphasise the importance of acceptance, self-disclosure, and mutual understanding in their circles. Adolescents also place significance on the importance of loyalty and trustworthiness (Hall, 2011 in Rathus, 2017:523).

The researcher is of the view that the influence that individuals have on each other is often not given full merit. Adolescent friendships have been observed to share behavioural similarities in school aspirations and achievements, morals and values, sport and culture interests, clothing, music, and so forth. Most importantly, however, are the advances in the development of a positive self-concept, psycho-social adjustment, and a good self-esteem that positive and intimate friendships during adolescence allow (Rathus, 2017:525).

As is evident from the above, parents and caregivers thus become less influential during adolescence, and peers more influential (Berk, 2013:579; Crone & Konijn, 2018:1). The influence and opinions of peers are thus unconsciously deemed more important than that of parents and caregivers (Berk, 2013:577, 579). Both parental and peer support is however critical for the development of self-esteem during adolescence (Berk, 2013:461; Rathus, 2017:522). Identity development is promoted when adolescents feel valued by family and friends, as they are more likely to have good feelings about themselves than those who feel unsupported.

2.5.2 Identity formation

Literature indicates that society generally characterises and identifies adolescence as a period of active and ongoing search for identity (Carter et al., 2014:35). As noted earlier, for some adolescents this period is referred to as one of ‘storm and stress’ (Arnett, 2016:377) or of inner conflict (Rathus, 2017:13); where adolescents are trying to find a balance between caring about themselves (finding their identity) and caring for others (conforming to the norm). Constructing an identity moreover involves adolescents evaluating personal characteristics, how others see them and how they see themselves, and the accompanying questions

regarding the purpose of their existence that comes with the growing ability to reason abstractly.

The psychosocial development theory of Erik Erikson postulates that the construction of an identity is the core developmental task of adolescence and involves the crisis of identity versus role diffusion (Rathus, 2017:11). The theory places a greater emphasis on the influence of an individual's social relationships in life, as in comparison with the sexual and aggressive predispositions as theorised by Sigmund Freud in his theory of psychosexual development. This emphasis thus places the weight of the identity versus role diffusion crisis on the establishment of an individual's ego and sense of self (Rathus, 2017:12).

Adolescents' well-organised self-descriptions and the development of a differentiated sense of self thus offer the cognitive framework for establishing an identity, which was initially identified by Erik Erikson as a significant personality achievement and a necessary step toward becoming a content and productive adult (Berk, 2013:468).

During this crisis, adolescents also explore and experiment more to find their social identity (Louw & Louw, 2014:342). This search for identity can be best explained and fulfilled by the inherent need that adolescents have to voice their own opinions and feelings within the context of their caregivers, peers, and society that is pressuring them to conform to specific age, gender, racial, cultural, religious, ideological and political stereotypes and expectations (Carter et al., 2014:35; Rathus, 2017:516). The period of identity formation can thus be earmarked as a time of exploration, an inquisition into existing values and beliefs, and the experimentation with different social roles (Louw & Louw, 2014:342), to build a coherent sense of self/ego identity (Rathus, 2017:516). Developing an identity thus entails establishing who you are, what your values are, and the life path you want to follow (Berk, 2013:469).

According to Chambers (2013:96), peer relationships have been considered as a central part of identity formation during adolescence. It is essential for adolescents to test and experiment in relationships with peers and authority figures that will in turn lead to them achieving emotional independence from their parents and other adults; increasing autonomous functioning and developing independent relationships (Louw & Louw, 2014:342; Malekoff, 2014:7; Yonker, Zan, Scirica, Jethwani & Kinane, 2015:2).

In the opinion of the researcher, self-esteem is an important aspect of identity development as it encompasses a large part of the individual sense of self, involving the feelings that individuals have about their holistic self-representation. Self-disclosure is also important for identity development as it relates to an individual's representation of thoughts, feelings, and behaviour (Glover & Fitch, 2018:172), which the researcher found to be important for the

development of social roles. Autonomy can be achieved during adolescence by the development of an independent and separate sense of self (Berk, 2013:577), which as seen from above is inextricably linked to the development of a coherent identity. The achievement of a sense of self and inherently the establishment of an identity needs to occur in relation to peers, family, and the broader community. Adolescents thus need to increase their self-management and develop the ability to handle social relationships, which necessitates the acceptance of, and adjustment to certain groups (Carter et al., 2014:35).

It is believed that adolescents that successfully resolve this identity crises can comfortably start to transition into young adulthood, as the development of a coherent sense of self provides them with an impression of the role in society that they want to fulfil (Louw & Louw, 2014:22; Martorell, Papalia & Feldman, 2014:472). In essence, identity refers to the process that takes place largely during adolescence where individuals decide who they are and what they believe in by evaluating individual skill and social roles that have been developed and socialised to form career/life goals (Rathus, 2017:11), which Erik Erikson referred to as the process of moratorium (Rathus, 2017:516). Access to social media, if constructive, can support the development of a positive self-identity (Warburton, 2012:11).

Once established, identity is continually improved throughout life as individuals assess their previous commitments and decisions (Berk, 2013:469). During the period of identity formation adolescents experiment with alternative values and aspirations before settling on values and goals for the future. They engage in an inner soul-searching process, sorting through childhood features and blending them with growing traits, capacities, and commitments. Identity only then starts to shape into a strong inner core that offers a feeling of continuity when an adolescent transitions through each day (Berk, 2013:469).

2.5.3 Developing a moral value system

Malekoff (2014:7) and Carter et al. (2014:7) describe the task of developing a moral value system as the development of moral frameworks, values and an ethical system that serve as guidelines for socially responsible behaviour. Kohlberg's theory of moral development indicates that adolescents are more inclined to adapt to the social norms and values of their family, peer, and societal systems (Louw & Louw, 2014:379, 381). Kohlberg believed that moral growth is contingent upon cognitive development and that moral reasoning evolves inevitably as cognitive capacities develop, regardless of culture (Arnett, 2016:382).

The moral development theory held that what mattered most in determining an individual's moral growth was not whether the individual decided that the behaviours of other individuals were right or wrong, but how they justified their findings. The focus of the theory centred

specifically around the moral thinking of adolescents and not moral judgments of right and wrong or the moral conduct of others (Arnett, 2016:382).

Kohlberg (1976, in Arnett, 2016:382) proposed the following approach for categorising moral thinking into three levels of moral development that cognitive development allows adolescents to progress through, namely: Preconventional reasoning, conventional reasoning and postconventional reasoning.

- Moral reasoning at preconventional level was hypothesised to be mainly dependent on the interpretation of external rewards and punishments. What is correct is that which avoids punishment or yields benefits.
- As cognitive development takes place adolescents move more towards conventional reasoning that is less egocentric. During this stage adolescents tend to conform to established standards of tradition and authority.
- Postconventional reasoning occurs alongside with identity development and involves autonomous decisions rather than relying on what others consider to be wrong or right. What is right is determined by the individual's understanding of objective, universal principles, rather than by the individual's wants or the group's standards (Arnett, 2016:382).

The key premise of the cognitive development perspective is thus that moral comprehension should influence moral motivation. As adolescents develop an understanding of the moral reasoning underlying human behaviour, they tend to become annoyed when this logic is not understood by others, because they understand how critical it is to act in accordance with one's beliefs in order to create and sustain a just social reality (Gibbs, 2010 in Rathus, 2017:504). Older adolescents that have reached a higher level of moral reasoning are thus more likely to engage in prosocial behaviour through assisting, sharing, and protecting victims of injustice, as well as volunteering in their communities (Rathus, 2017:504). They have also been found to commit fewer acts of dishonesty, aggressiveness, and other negative or delinquent behaviours (Berk, 2013:506).

According to Berk (2013:485) morality is supported in all societies by an overarching social organisation that establishes guidelines for acceptable behaviour and that is simultaneously, morally ingrained in every fundamental part of our psychological makeup. Individuals feel powerful emotions when they empathise with the distress of another individual or when they are the source of that distress. Cognitive development during the lifespan also allows for the development of social awareness, enabling individuals to make increasingly sophisticated judgements about what they think to be proper or improper. Experiencing morally significant

ideas and feelings improves the possibility of individuals acting in accordance with these ideas and feelings, but does not ensure it (Berk, 2013:485). Morality is thus emotional in nature, involves a significant cognitive component, and is inextricably linked to conduct.

As with the developmental tasks of adolescence, the emotional, social, cognitive, and physical effects of social media are discussed in the following section.

2.6 THE EFFECTS OF SOCIAL MEDIA USE ON ADOLESCENTS

It is important for professionals to be aware of the possible effects and risks involved in the use of all digital technology, due to its easy accessibility (Glover & Fitch, 2018:172). Davel (2017:32) is of the opinion that the positive benefits and educational development opportunities that the internet and access to digital multimedia technology yield for adolescents are hard to overlook, however not all adolescent social media use yield positive outcomes. O'Keeffe and Clarke-Pearson (2011, in Davel, 2017:34) identified communication and socialisation as a positive attribute of social media use, as it provides improved opportunities for learning. Access to information is also a perceived benefit that can be attributed to adolescent social media use, whilst some of the perceived risks are exposure to cyberbullying, harassment, sexual exploitation, and depression (Davel, 2017:34). The possible effects, negative or positive that social media use can have, is thus determined by the type and quality of information that consumers come across (Hausmann et al., 2017:715).

Whilst assertions regarding the adverse impacts of social media and technology on the development and functioning of adolescents are frequently made, their social media usage is more complicated than simple action and reaction incidences. Jane Brown (2006) and her colleagues established a useful model of the roles that all forms of media play in adolescents' lives (Brown, 2006 in Arnett, 2016:396). The model suggests that adolescents' media consumption is active in a variety of ways and that adolescents do not all consume media in the same manner. It was rather found that each adolescent's identity influences the media goods they consume. Thus, paying attention to certain media goods results in contact with them, which means that those goods are assimilated and understood (Arnett, 2016:396). The evolving adolescent identity then influences new media choices, and so on. The proposed model therefore demonstrates that adolescents actively choose the media they consume, and they respond to media information in a variety of ways, based on their interpretation and relevance to them individually (Arnett, 2016:397).

Social media usage therefore influences adolescent development (Crone & Konijn, 2018:1; Louw & Louw, 2014:374), and the use thereof on mobile technological devices and online video games has become areas of concern when studying the potential damaging effects that

social media use has on adolescents (Oberst et al., 2017:51). The emotional, social, intellectual, and physical effects of adolescent social media use will be discussed in more detail below.

2.6.1 Emotional effects

A consistent finding on the effect that all ICTs have on individuals is that it intensifies emotions in adolescents and adults (Barth, 2015:201). The term 'emotional contagion' has been coined by Kramer et al. (2014, in Hausman et al., 2017:717) and refers to all possible emotional states that can be conveyed through social media use. Talking and texting on online platforms allow for emotionally significant ways in which adolescents can share their views in another way than face-to-face interactions (Barth, 2015:203, 204). A valuable example of the above applies to adolescents that form part of marginalised groups such as the LGBTQIA+ community, that can find solace and belonging in social media use (Glover & Fitch, 2018:176). If solace can however not be found personally or online the development of low self-esteem can be considered a risk factor that is caused by negative influences of social media use (Kelly et al., 2018:60).

Problematic social media use can be considered as a risk factor for the development of psychological problems in adolescents. According to Woods and Scott (2016:45), the emotional investment that is placed in social media, and the overall use thereof have been associated with anxiety, depression, low self-esteem, and sleep deprivation; as evidenced by a Scottish study that was completed with 467 adolescents. Other risk factors that have been identified from the prolonged use of social media are cyberbullying, sexting, online harassment, and increased social aggression, amongst other factors already mentioned (Cookingham & Ryan, 2015:3; Coyne et al., 2018:897; Kelly et al., 2018:66).

Due to the widespread and uncontrollable nature of posts and messages on social media, online activities such as the above can lead to embarrassment and negatively influence adolescent relationships and reputations, which in turn may have a negative influence on their mental health (Kelly et al., 2018:59; O'Keeffe & Clarke-Pearson, 2011:801). Sherman, Payton, Hernandez, Greenfield and Dapretto (2016:1031) found peer influence and pressure on social media to be prosocial or alternatively, to cause unsafe behaviour. Social media use can place adolescents at risk and negatively affect their socio-emotional well-being, as it has been found that adolescents are attracted to the concept of self-expression and that it often results in competitive behaviour for attention, which can in turn lead to bolder social and even sexualised behaviour online (Cookingham & Ryan, 2015:2, 3). The above is particularly dangerous, as adolescents have limited skills and knowledge of judgement and self-regulation (Cookingham & Ryan, 2015:2).

2.6.2 Social effects

Gaining independence from parents and caregivers is a key developmental task of adolescence and forms part of identity development as it involves obtaining support from peers who are going through similar experiences (Dolev-Cohen & Barak, 2013:58, 59). Concurrently, adolescents who have been found to struggle with obtaining direct social support from individuals and systems close to them often use social media as a means of obtaining support (Barth, 2015:206; Glover & Fitch, 2018:175; Weinstein & Davis, 2015:932).

Social media can be considered as safe spaces to explore with identity formation, as it does not bear the consequences of situations that occur in real-life (Cookingham & Ryan, 2015:2). Adolescents can for instance experiment with their identity by creating representations online of the type of individual that they strive to be. The function of many social media platforms that allow participants to share their likes and dislikes publicly provides opportunities for self-disclosure and identity formation (Spies Shapiro & Margolin, 2014:4).

Social media does not succumb to geographical boundaries and allow adolescents to communicate and socialise with family members and friends instantly across the world, assisting with the enhancement of social relationships (Charoensukmongkol, 2018:75; Glover & Fitch, 2018:175; Reid Chassiakos et al., 2016:6). Social media has additionally become a preferred means of communication for many adolescents as it allows for easier and convenient communication, sharing, teamwork, and the exchange of user-generated content (Badri et al., 2017:2657; Barth, 2015:203; Yonker et al., 2015:2).

Access to the internet and the opportunities for virtual communication that accompany it may allow for the establishment of addictive and obsessive behaviour patterns, which can negatively influence adolescent social and school performance (Salmela-Aro, Upadyaya, Hakkarainen, Lonka & Alho, 2017:343). Negative patterns of social media use can also exacerbate psychosocial problems in adolescents, as youth tend to favour online communication and interaction and to shy away from face-to-face interaction.

Social media further allows consumers to have large quantities of ‘friends’ and ‘followers’. The quality of relationships formed on social media have however been found to be superficial and does not always lead to the feeling of connection and social support that adolescents strive to achieve (Hawk et al., 2019:71; Kross et al., 2013 in Barth, 2015:203).

Weinstein and Davis (2015:940) found interpersonal communication on social media to be substantially more revealing with regards to intimate sharing than it would be if contact took place face-to-face, which may result in developmentally beneficial intimacy not taking place (Handschuh, La Cross & Smaldone, 2019:88). Sexually explicit messages and images that

are shared on online platforms are a cause of concern for professionals and caregivers, as adolescents are mostly uninformed that such information leaves a digital footprint and that it can easily appear somewhere else on the internet or lead to exploitation and other negative consequences (Cookingham & Ryan, 2015:3, 4; Handschuh et al., 2019:88).

The limitlessness of information on social media also presents the risk of an individual being misinformed or receiving harmful advice (Barth, 2015:204). According to Weinstein and Davis (2015:937) research has concluded that the effects of rejection on social media are like that of face-to-face rejection and bullying. It has also been found that social media use can create disturbances in family life and parent-adolescent relationships, leading to conflict. According to Spies Shapiro & Margolin (2014:2) family life and relationships are becoming separated and revolve around social media. This phenomenon is ironic, as social media provides communication opportunities whilst at the same time diminishing contact with those closest and most available to you.

2.6.3 Cognitive effects

Social media use can be utilised by adolescents to increase their learning opportunities, as it enables users to gain access to almost any information beyond the classroom and social life and allows for the sharing of information on homework, assignments, and projects. Social media use further enhances creativity and offers opportunities for reading by providing users with access to inspiration for new ideas and projects, as well as daily access to news on current events. Social media platforms are thus used positively in educational backgrounds and classroom settings around the world and provides individuals with the opportunity to communicate with each other and share course material online (Westerman, Daniel & Bowman, 2016:56), much like what was seen in 2020 due to COVID-19.

Additional learning opportunities are also available by means of applications that can be downloaded and accessed and are developed by experts to provide age-appropriate educational guidance and information (Reid Chassiakos et al., 2016:5). In line with the cognitive development theory, Davel (2017:32) found that early exposure to ICTs allows for the development of mental skills; and found that the vast possibilities social media platforms provide, develop adolescents' ability to perform quick mental switching and scanning. The amount of time that children and adolescents are exposed to digital technologies can therefore also impact their brain development, especially since the use of ICTs all involve attention, evaluation of rewards, and impulse control (Davel, 2017:23).

2.6.4 Physical effects

Access to social media is advantageous for adolescents as they are able to obtain information on a variety of health and wellness subjects from their smart devices (O'Keeffe & Clarke-Pearson, 2011:801). It has been found that adolescents also tend to be more comfortable to find information regarding sexual health on online platforms, as this topic is not often talked about freely (Guilamo-Ramos, Lee, Kantor, Levine, Baun & Johnsen, 2015:59).

Some social media platforms promote interventions relating to health and behaviour change and are thus available to adolescents who do not have access to generic health intervention programmes that involve payment for services (Ramo, Meacham, Kaur, Corpuz, Prochaska & Satre, 2019:12). An example of the above pertains to some social media sites providing advice and providing access to services that can promote adolescent mental health. Such platforms can provide advice and support instead of conventional treatment that not everyone can afford, also saving time and financial resources (Cookingham & Ryan, 2015:4; Glover & Fitch, 2018:175, 177).

Social media use can cause disturbances in sleeping patterns. According to Kelly et al. (2018:59, 60) online harassment can cause stress and anxiety which may lead to an inability to sleep. Sleep disturbances and long periods of social media use may also lead to obesity among adolescents (Barth, 2015:206; Spies Shapiro & Margolin, 2014:3). Furthermore, sleep disturbances due to social media use have been found to cause depression, anxiety and low self-esteem (Woods & Scott, 2016:43).

Social media sites often convey what beauty, and the ideal body type should look like, as well as trends for fashion, fitness, gender roles and sexuality, therefore creating idealised standards. These standards cause comparisons between the self and what is considered as perfect, which may have an influence on the adolescent's self-concept. The above is supported by research that has concluded social media to have an influence on how individuals view their body image and that discontent with the self often occurs due to standards created online (Burnette, Kwitowski & Mazzeo, 2017:114, 115).

As previously stated, profiles on social media and other online platforms are often carefully constructed to create an idealised self-image, allowing for unrealistic comparisons with the media image and the real self to occur; consequentially resulting in a distorted view of how their peers look and what they are actually doing (Glover & Fitch, 2018:174). Comparisons like the above can lead to the development of anxiety, low self-esteem, and self-consciousness (Glover & Fitch, 2018:174; Kelly et al., 2018:60).

Adolescent social media use can thus have positive and negative outcomes. In concurrence, a 2018 survey completed in the United States with adolescents aged between thirteen and seventeen years revealed that consensus could not be found amongst adolescents regarding the perceived influence of social media use on their daily lives. The study discovered forty-five percent of adolescents to remain neutral, whilst thirty-one percent indicated that they have experienced a positive impact and twenty-four percent indicated a negative impact of social media use (Anderson & Jiang, 2018:2, 5). It is however clear that the use of, and exposure to social media influence adolescent development (Louw & Louw, 2014:374). The extent to which it has an effect is, however, unclear as adolescence is a transitional period of development where children develop into adults and need to achieve certain developmental tasks (Louw & Louw, 2014:303).

The researcher has found literature sources to have conflicting views on the effects that internet use has on individuals. Numerous sources focus on the positive effects that the internet and social media have on individuals, whilst others place more focus on the excessive and problematic use thereof. Problematic internet use will be discussed in the following section as to complete a holistic picture of how social media and digital multimedia technology may influence the development and overall functioning of adolescents.

2.7 PROBLEMATIC INTERNET USE

With the fast spread of ICT devices, the digital revolution has altered not only how individuals communicate, educate, and entertain themselves, but also how individuals act individually and as a community, with no demographic being more impacted than children and adolescents (Young & de Abreu, 2017:3). It has become common for toddlers to be given electronic devices to keep them calm, and for school-aged children to have smartphones to communicate with their parents and to text one another. During middle childhood, children become masters at online video games, competing with and against gamers from around the world. High schoolers complete their homework on computers with numerous windows open, while messaging their peers, following, and generating drama on social media, gaming and flaming, flirting, and taunting one another (Young & de Abreu, 2017:3).

According to Zafar (2016:46) the forerunners of internet technology viewed online social contact, entertainment, and conversation favourably, believing that virtual communities provide emotional support as well as a place for discussion and information sharing to occur with relative ease and less constraint. Society has embraced these technologies at such a quick pace, transforming routines and habits in dramatic ways, that research has yet to establish what constitutes healthy use and what constitutes problematic use. Every new technology, from the printing press to television, has been accompanied by a fear, often

bordering on panic that the technology would be abused or overused, irreparably altering individuals and society (Young & de Abreu, 2017:5). With the proliferation of internet-based platforms enabling access to all forms of media, undesirable behaviours are thus no longer confined to a particular device, domain, or application (Young & de Abreu, 2017:8).

There is no doubt that access to the internet enhances contemporary life, but its prevalence has resulted in many individuals becoming excessively dependent on it (Tang, Yu, Du, Ma, Zhang & Wang, 2014:744). Internet Addiction (IA) is increasing among adolescents and has grown into a global epidemic (Tran et al., 2017:2). Kalaitzaki and Birtchnell (2014:733) in concurrence indicate that IA is a rapidly growing phenomenon amongst the youth. Adolescents and young adults are believed to be more vulnerable to the development of an IA, as the accessibility and affordability of internet access and ICTs, even in developing countries continue to grow rapidly (Kalaitzaki & Birtchnell, 2014:733; Tran et al., 2017:1). Furthermore, children and adolescents are particularly more vulnerable to problematic uses of digital multimedia, both because they are early and enthusiastic adopters of technology that they understand better than supervising adults and because they have not yet developed executive brain functions such as impulse control, self-regulation, and future thinking (Young & de Abreu, 2017:4).

Although official diagnostic criteria are not yet available for an internet addiction (IA), it can broadly be described as an inability to exert control over internet usage, which can inhibit daily functioning (Kalaitzaki & Birtchnell, 2014:733; Wang et al., 2013:62), thus problematic internet use occurs. In addition, terminology including compulsive internet use, pathological internet use, and problematic internet use, among others, are widely used interchangeably with Internet Addiction (American Psychiatric Association, 2010 in Tang et al., 2014:744; Young & de Abreu, 2017:6; Lindenberg, Kindt & Szász-Janocha, 2020:3).

Impaired functioning caused by problematic internet use can include behaviour such as irritability and moodiness when using the internet and when being deprived of it, thus theoretically placing it under the category of a behavioural addiction (Wang et al., 2013:62; Tang et al., 2014:744; Lindenberg et al., 2020:3). Additionally, behaviour indicative of problematic use has been identified by Young and de Abreu (2017:9) as obsessive use, and negative reactions to being separated from digital multimedia usage, impairing an individual's physical, mental, cognitive, and/or social functioning (Young & de Abreu, 2017:9).

Although some academics have labelled the physical and psychological consequences of excessive gambling, sex, and internet usage as addiction, the word ‘addiction’ is not widely embraced by the medical profession when pertaining to problematic internet use (Young & de

Abreu, 2017:7). Nevertheless, individuals who struggle with problematic internet use sometimes also exhibit cravings, snowballing tolerance, an inability to abstain, and diminished awareness of use-related problems. Unfortunately, these behaviours lack the consistent, reproducible physiological changes in heart and respiratory rates, blood pressure, and galvanic skin responses associated with addictive use and withdrawal from narcotics, alcohol, and tobacco (Young & de Abreu, 2017:7). Due to the lack of biological indicators, many addiction medicine professionals prefer to refer to the perceived symptoms of problematic internet use as impulse control disorders. Although the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5; APA, 2013a in Young & de Abreu, 2017:7) supports the establishment of a category for behavioural addictions (Young & de Abreu, 2017:7) only one iteration has been accepted into the medical diagnostic vocabulary, with that being Internet Gaming Disorder (Young & de Abreu, 2017:6).

The researcher found the prevalence rates of problematic internet use to vary significantly as it has been suggested to range from 0.7 percent in adults in the United States (Aboujaoude, Koran, Gamel, Large & Serpe, 2006 in Lindenberg et al., 2020:17) to 26.7 percent of adolescents in China (Shek & Yu, 2012 in Lindenberg et al., 2020:17). A meta-analysis of the prevalence of problematic internet use in thirty-one countries comprising of 89,281 individuals estimated a global prevalence of six percent, with the greatest rates occurring in the Middle East and the lowest in Northern and Western Europe (Lindenberg et al., 2020:17). A further estimated prevalence of problematic internet use ranges from 0.8 percent in Italy to 8.8 percent, and as high as 14 percent in China. It is evident that the range of these prevalence estimates reflects both substantial variances in clinical definitions and diagnostic criteria of pathology, and culturally acceptable behaviours. It is important to note that the lowest prevalence estimates, however, still indicate hundreds of millions of people whose physical health, social-emotional functioning, and productivity may be affected due to their interaction with digital multimedia (Young & de Abreu, 2017:6).

Contextual and environmental variables additionally need to be considered when examining problematic internet use. Individuals are born into a family with different characteristics (e.g., small versus big, affluent versus poor), a nation with a distinct culture (e.g., individualistic versus collectivistic), and a society with distinct social and communal standards (Lindenberg et al., 2020:21). According to research, these environmental variables may potentially play a role in the development of problematic internet use. As mentioned previously, investigations from various nations and academic researchers have indicated varied prevalence rates of problematic internet use. Additional information that has been identified includes a negative correlation between the prevalence of problematic internet use and quality of life. Prevalence

rates were found to be greater in places with lower levels of life satisfaction and poorer environmental circumstances (e.g., higher amount of air pollution, lower income) (Lindenberg et al., 2020:21).

Due to the immediacy and inescapability that childhood and the associated development that occurs hold, familial elements have a critical influence on individual psychological development. Numerous familial variables have been associated with problematic internet use, such as a dysfunctional home environment being associated with the development of an internet gaming addiction (Lindenberg et al., 2020:22). Poor social skills have also been identified as a risk factor for the development of problematic internet use and can thus correlate with peer related difficulties that some adolescents experience during this time, leading to diminished social integration (Chen, Chen & Gau, 2015 in Lindenberg et al., 2020:22), thus affecting identity development.

In order to identify and care for children and adolescents at risk of internet addiction and problematic internet use, it is critical to define the problem precisely enough to distinguish pathology from normal developmental variants. This is a task made more difficult by the rapid and enthusiastic adoption of these technologies for communication, education, and entertainment in schools, workplaces, and homes. According to literature, none of the proposed terminology adequately describes the nature of problematic digital multimedia usage in the growing child and adolescent. As is the case with most behavioural issues, the sooner dysregulated digital multimedia usage can be identified and treated, the easier it is to resolve. However, because it is not yet recognised as a health condition, parents, educators, and other individuals who engage with children and adolescents often do not bring it to the attention of clinicians until it has developed significantly enough to cause severe dysfunction or disability and is thus much harder to prevent and treat (Young & de Abreu, 2017:6). Consequently, determining when an adolescent's digital multimedia use is harmful becomes more complicated and crucial during a period of impulsivity, experimentation, and sensation seeking (Young & de Abreu, 2017:7).

Problematic internet use can moreover result in negative socio-emotional consequences, such as decreased academic performance, anxiety, feelings of loneliness, depression, bipolar disorder, increased sexual drive, relationship problems, decreased impulse control, substance addiction (Tang et al., 2014:744; Wang et al., 2013:64; Zafar, 2016:46), increased conflict with and isolation from friends, and familial conflicts (Young & de Abreu, 2017:10). In addition, internet gaming, downloading of content, social networking, and online shopping, when used excessively can all become manifestations of problematic internet use (Tran et al., 2017:1).

From a social perspective, adolescents that are identified as problematic internet users are believed to regard online conversations as safer and more comfortable, especially those who also experience loneliness. Individuals with IA require more cognitive effort while making decisions; as a result, individuals may seek advice from online peers when selecting activities or visiting destinations (Tran et al., 2017:7). Adolescents with IA have been found to have a deficiency of social support and isolation. Additionally, IA may impair social abilities and interpersonal connections. As a result, it is crucial to investigate the relationship between online interpersonal effects and IA, as young individuals with IA are usually shy and are socially awkward. The negative consequences of IA-related social skill deficits are unknown, as there has been no study on the connection between IA and online interpersonal effects thus far (Tran et al., 2017:2).

Poor interpersonal interactions have furthermore been proven to cause adolescents to engage in more problematic internet use (Kalaitzaki & Birtchnell, 2014:733). The social skill model of problematic internet use suggests that a preference for online social engagement over conventional face-to-face interaction is a result of an individual's self-perception of social inadequacy (Berk; 2013:257). Additionally, varied abilities such as social competencies and adaptive mood management appear to be critical. Individuals that exhibit symptoms of problematic internet use often exhibit impaired social competencies, greater levels of emotional distress, and more disordered emotion regulation (Lindenberg et al., 2020:20).

Inadequate social competencies and poor self-esteem have consequently been identified as risk factors for the development of problematic internet use; with loneliness appearing to have a bi-directional effect, serving as both a cause and an effect of problematic internet use (Lindenberg et al., 2020:21). The prevalence of low self-esteem easily becomes a predictor of problematic internet use, as it is conceptually and empirically associated with perceived rejection, abandonment, or indifference by important individuals (Wang et al., 2013:67). In accordance with the bi-directional effect of self-esteem on the development of problematic internet use, the use of social media has also been found to boost the adolescent’s sense of self (Berryman, 2014:1). Problematic internet use thus occurs when a variety of symptoms and predispositions are present.

According to Berk (2013:257) adolescents are considerably more prone than adults to prioritise short-term goals over long-term goals. This indicates that adolescents, in comparison to adults, are more driven by the prospect of instant gratification. This means that adolescents are more eager to take risks and are less likely to prevent potential injury (Cauffman et al., 2010 in Berk, 2013:257). Because taking risks without suffering injury might increase adolescents' perception of invulnerability, they require supervision and protection from high-

risk situations until their decision-making abilities improve (Berk, 2013:257).

Millennials are thus more prone to the development of problematic internet use due to their lack of self-control (Wang et al., 2013:63), which can be described as the capacity to resist an inclination, drive, or temptation to execute an activity (Berk, 2013:257). Fortunately, over time, adolescents learn from their accomplishments and failings, obtain knowledge about decision-making variables from others, and reflect on their decision-making processes (Berk, 2013:257).

Additional explanations for the increased risk of developing problematic internet use during adolescence include adolescent detachment from parents and, consequently, a decrease in parental control and supervision, as well as a natural decrease in craving symptoms and an increase in internal control strategies with increasing age (Lindenberg et al., 2020:19). Zafar (2016:46) identified the prevalence of psychological qualities such as impulsivity, neuroticism, and loneliness as risk factors for the development of problematic internet use, and co-morbid symptoms including, depression, obsessive compulsive disorder, somatisation, panic disorder (Lindenberg et al., 2020:19), excessive worry, general psychopathology, and anxiety disorders (i.e., cyberchondria and social anxiety) (Young & de Abreu, 2017:9). Additionally, increased levels of externalising behaviour and disorders have been reported, including aggression, hostility, conduct disorders, substance and alcohol abuse, and hyperactivity or inattention (Lindenberg et al., 2020:20).

Attention deficit hyperactivity disorder (ADHD) is frequently noted as a co-morbid diagnosis that is found along with problematic internet use (Tran et al., 2017:2; Young & de Abreu, 2017:9,10). Reduced impulsive control and heightened sensation seeking in ADHD may operate as mediators in the relationship between ADHD and internet use disorders (Lindenberg et al., 2020:12). In addition, individuals with internet use disorders display increased self-harming and suicidal behaviour, decreased life satisfaction, and increased levels of stress (Lindenberg et al., 2020:20).

The researcher found a point of contention to be whether the internet can be addictive in and of itself, or whether addictive or pathological use is associated with specific internet applications, such as social media, online games, online shopping, or online pornography (Lindenberg et al., 2020:3). When comorbidity is considered, it is critical to ascertain if problematic internet use is the core issue or only a ‘side effect’ of another mental illness (Lindenberg et al., 2020:12).

Apart from social and psychological difficulties, problematic internet use can result in physical symptoms such as back pain and tension. If it is not identified quickly, it can thus have a

negative effect on adolescents' physical and emotional health (Tran et al., 2017:2). A discussion regarding the prevention and treatment of problematic internet use follows as a means for the reader to understand how IA and other problematic effects of internet use can affect adolescent development and functioning.

2.8 PREVENTION AND TREATMENT OF PROBLEMATIC INTERNET USE

Literature clearly emphasises the need for the development of effective prevention and treatment strategies for problematic internet use, with data indicating that the youth population is a great concern (Lindenberg et al., 2020:17). Unfortunately, the absence of clinical consensus about the description and diagnostic criteria of problematic internet use causes a dilemma for practitioners who need to treat an increasing number of young individuals who exhibit problematic digital multimedia usage patterns. These individuals are therefore 'invisible' to the health care system without an acknowledged diagnosis, and medical insurance does not cover therapy. If families are unable to pay for care, they will avoid treatment. Those who can afford to pay for care out of pocket are exposed to a cottage economy of addiction therapy that offers hope in times of need but provides minimal evidence of improved results (Young & de Abreu, 2017:7).

Since health care systems do not recognise or charge for this 'illness,' the hypothesis stands that there is minimal motivation to engage in research, clinical infrastructure, or clinician training to recognise and respond to the evident need (Young & de Abreu, 2017:7). Fortunately, some researchers have invested in the development of prevention and treatment strategies for problematic internet use.

2.8.1 Prevention of problematic internet use

Literature indicates that the early identification of the cause of problematic internet use, as well as early intervention brings about far more success than attempting to change an established habit in a child or adolescent who has already suffered physical, psychological, or developmental harm (Young & de Abreu, 2017:8). Prevention or early intervention can therefore be effective in diminishing the chance of symptom onset and ultimately improving prognosis, which is critical, as individuals that present with problematic internet use have been found to exhibit low compliance and treatment motivation (Lindenberg et al., 2020:38).

When investigating the prevention of a public health concern the researcher believes it vital to ascertain what is already being done and is available on a policy level. As discussed earlier, the internet and ICT use of young individuals is dependent on individual, contextual and societal factors, as well as individual development and temperament. A standardised, research-based policy or guideline document is therefore lacking to educate young individuals,

their parents, and educators on how to manage their internet and ICT use in a balanced manner. This allows for focus to be placed on the most suitable age for when internet and ICT use can become unsupervised, possibly diminishing the risk of developing problematic internet use patterns (Wang et al., 2013:67).

When focussing on prevention strategies that have been implemented as a means of preventing problematic internet use, the researcher found that the majority of programmes utilised cognitive behavioral techniques, such as psychoeducation (e.g., information about the characteristics of hazardous use and possible consequences), cognitive restructuring, and skills training (problem-solving abilities, emotion regulation abilities, and social competences) (Lindenberg et al., 2020:38).

The soundest evidence foundation for prevention strategies can be found in school-based prevention strategies (Lindenberg et al., 2020:38). This was confirmed by a recent review of literature on preventive strategies for problematic internet use in schools, based on twenty individual studies from Germany, the Netherlands, Italy, Australia, Korea, Hong Kong, Turkey, and the United States (Throuvala et al., 2019 in Lindenberg et al., 2020:38). However, school-based prevention strategies are widely applied and critical for the prevention of problematic internet use for a variety of reasons, namely: the provision of low-barrier access to health services without requiring additional effort on the side of learners; prevention in a school setting enables a broad spectrum of potentially susceptible individuals to have early access to health care (Lindenberg et al., 2020:38).

School-based prevention strategies furthermore act as a proxy for selecting target groups for intervention activities, with individuals with a higher risk being likely to gain the most from prevention. It additionally enables risk variables to be modified within the context of intervention strategies, such as strengthening emotion management skills or lowering social anxiety (Lindenberg et al., 2020:18). Apart from the above, school-based prevention strategies directly target the age group that has been identified as most susceptible to the development of problematic internet use (Lindenberg et al., 2020:39).

In addition, prevention strategies should be focussed somewhat more on adolescents that experience frequent mood fluctuations, as they have been found to use the internet and ICTs as a coping mechanism for their emotional state, increasing the risk for problematic internet use. Not only should the internet and ICT usage of adolescents who suffer from depression be monitored, but prevention and early intervention strategies should include raising their self-esteem and elevating their moods (Wang et al., 2013:68).

Finally, when considering prevention strategies for problematic internet use, Zafar (2016:47) believes that the involvement of additional systems within the adolescent's life, such as working on parent-child relationships, will significantly diminish the prevalence of problematic internet use. Although not accepted as a medical or mental health concern, some suggestions have been made by professionals for the treatment of problematic internet use.

2.8.2 Treatment of problematic internet use

Whilst prevention strategies focus on preventing the onset of problematic internet use, treatment strategies focus on individuals that already exhibit difficulty and problematic use. In terms of intervention strategies, most of the published research uses cognitive behavioral or similar treatment techniques, with only a handful examining other modalities such as medication or electro-acupuncture. Despite methodological limitations, research suggests that intervention strategies based on cognitive behavioral approaches appear to be the most successful in treating problematic internet use (Lindenberg et al., 2020:40). Furthermore, numerous diagnostic tests have been created to evaluate illnesses associated with problematic internet use, with most measures demonstrating acceptable reliability and concept validity, and several lacking external and clinical validity. Additionally, most instruments have been found to lack a norm sample, which precludes their use in a clinical setting (Lindenberg et al., 2020:10).

Effective treatment planning for problematic internet use requires a thorough, accurate assessment of a client's needs. Due to the breadth of underlying complications that manifest as problematic internet use, a multidisciplinary treatment team is frequently required to develop and implement an individualised treatment plan that is determined based on current evidence but is also flexible enough to adjust as the patient and family respond to the treatment. A treatment team may comprise of personnel from primary medical care, psychiatry, psychology, clinical social work, educational settings, and case management, depending on the specific presentation of a given case, with frequent collaboration and regular communication amongst them (Young & de Abreu, 2017:16).

According to Lindenberg et al. (2020:10) a comprehensive diagnostic approach requires the involvement of at least one psychometric questionnaire and, where required, a structured clinical interview. Caution should additionally be exercised when studying the amount of time spent on the internet and ICTs, since many afflicted individuals tend to immerse themselves and lose track of time, thus resulting in longitudinal observation and self-reporting (Lindenberg et al., 2020:10; Young & de Abreu, 2017:12). Gaming and internet diaries, or applications that measure how much time is spent online, or on a particular application, can therefore assist in achieving a more accurate evaluation. Additionally, differential diagnosis is critical since

problematic internet use is frequently co-morbid with other mental illnesses or neurological predispositions (Lindenberg et al., 2020:10).

For a suitable differential diagnosis to occur it is suggested that a practitioner commence an assessment by inquiring about physical health changes related with problematic internet use rather than cross-examining the client about 'poor conduct.' First inquiring about areas of discomfort with which the practitioner might assist, builds therapeutic rapport, as opposed to the adversarial, punitive relationship anticipated by the client. Subsequently determining if a client has a medical condition, such as asthma, that predisposes an inactive, indoor lifestyle can aid in clarifying the causes of problematic internet use and possible barriers to recovery (Young & de Abreu, 2017:13).

Determining physical and physiological consequences ranging from back pain to obesity can also help clarify the duration and intensity of problematic internet use, as well as the amount of suffering tolerated by the client to sustain the problematic use (Young & de Abreu, 2017:13). In addition, self-care, productivity, and relationships are three fundamental aspects of functioning that need to be examined, as inadequate functioning within these domains may act as a risk factor for the development of problematic internet use (Kamal & Mosallem, 2013 in Young & de Abreu, 2017:14). Therefore, personal cleanliness, diet, physical activity, and sleep should all be assessed. It is suggested that inquiry is made relating to difficulty falling asleep, remaining asleep, and waking up early in the morning, as well as excessive daytime drowsiness or difficulty waking up in the morning. Insights into more subtle signs of sleep deprivation include lower attention, impaired memory, and irritability (Young & de Abreu, 2017:14). If sleep disturbances are identified, a professional can ascertain whether the client is attempting to remain awake to text, game, or interact online. Anxiety has been found to motivate fear of missing out (FOMO) or a protective, hypervigilant scanning of social media for negative or dangerous signals (Young & de Abreu, 2017:14).

A professional is additionally advised to enquire about a client's school experience, both academically and socially. It is suggested that attention be paid to conduct in class and homework routines, as well as evaluating the connections with peers and educators. If a connection is found with a trusted adult at school, it is advised that the professional requests to facilitate a discussion with the ally of the client to develop a holistic understanding of the client's functioning within the school environment (Young & de Abreu, 2017:14).

Research has shown that a negative association between problematic internet use and social involvement exists (Lacovelli & Valenti, 2009 in Wang et al., 2013:62). Adolescents who live more balanced lives in terms of exposure to extra-curricular activities and other interests are

more likely to be able to find their own balance pertaining to internet and ICT usage. A study that was completed in China confirms the above, as it found that physical exercise shifted the attention of adolescents away from digital multimedia usage (Hua, 2006 in Wang et al., 2013:62); also providing balance, exercise facilitates a release for emotions in a positive manner, opportunities to experience mastery, and face to face contact with other individuals.

Individuals that develop problematic internet use have been found to have an increased risk of substance use, which can exacerbate both medical and mental comorbidity (Ko, Yen, Yen, Chen & Chen, 2012 in Young & de Abreu, 2017:15). Determining the client's age at first and most recent use of substances, the frequency of use, the usual amount consumed, and the length of time spent in secondary abstinence is thus a necessary discussion point. Additionally, obtaining syndrome-specific or general psychiatric rating scales, such as the Patient Health Questionnaire, as well as collateral supports, will aid a professional in the detection and identification of the severity of associated psychiatric illnesses (Young & de Abreu, 2017:15).

It is suggested that throughout the clinical interview a professional should take note of the client's and caregiver's degree of participation and cooperation, as well as their eye contact, speech patterns, and psychomotor activity, integrating affective observations with the client's own report of emotional disposition. The client's thinking process and content should also be evaluated, noting any recurring concerns, intrusive ideas, delusions, odd perceptions, or thoughts of self-harm or harming others. Furthermore, the client's cognitive functioning, awareness of the current situation, and ability to make sound judgments should be determined. Frequently, a comprehensive assessment of a client's health and development of a diagnosis will necessitate numerous visits, due to the breadth of clinical data that needs to be obtained and the necessity of establishing a trusting relationship (Young & de Abreu, 2017:15).

The final evaluation by a professional may comprise one or more mental and medical diagnoses. Thereafter the clinical team may then develop a personalised treatment plan based on the holistic information that was found during the clinical assessment, which is guided by and contributes to the growing library of evidence-based treatment for problematic internet use (Young & de Abreu, 2017:16). After the completion of the above, education is the first step toward effective treatment of problematic internet use and digital multimedia. A crucial step at the start of treatment is to explain and discuss the clinical evaluation and treatment plan with clients and their families in an open and honest manner so that they and the treatment team may establish a common road map to recovery (Young & de Abreu, 2017:17).

During the above educational session, a professional should assemble aspects of the evaluation with specific components of the treatment plan, conveying hope and encouragement, so that the client and family proceed with a sense of understanding and engagement in the suggested course of action. Additionally, it is important to recognise and verbalise how difficult it will be to implement the treatment plan's modifications, while empathising with the client and avoiding any sense of guilt or punishment (Young & de Abreu, 2017:17).

It is important to note that problematic internet use can be treated only when a client is willing to commit to treatment. During the treatment process resistance may be encountered as the client and the family commit to difficult treatment responsibilities. Literature asserts that resistance is necessary and vital to recovery, and that it should be anticipated and acknowledged freely. It is vital for a professional to maintain a pleasant, compassionate, and workmanlike demeanour when reassuring a client of the importance of following through on the treatment plan. If necessary, a stumbling block experienced during treatment can be placed on hold indeterminately, as the professional, client, and family's alignment takes precedence. However, as progress is made and the therapeutic relationship strengthens, components of the plan that have been placed on hold can be reviewed and addressed. During treatment it is vital to consult with the client and the family on a regular basis to ensure that the clinical formulation and planned therapy are still understood, and where necessary, provide clarification and additional education (Young & de Abreu, 2017:17).

Self-monitoring can furthermore assist with treatment, as it may assist a client to develop awareness. Awareness can be obtained by means of self-monitoring through consistently documenting circumstances, events, thoughts, and feelings surrounding problematic internet use. This is perceived to allow a client to obtain awareness and insight into their problematic behaviour and assists with the data collection process of the treatment plan by identifying the strengths and weaknesses of the treatment that takes place (Young & de Abreu, 2017:18).

A professional can assist a client with the above by assisting the client with the compilation of appropriate and inappropriate online activities, as well as suggestions for minimising or eliminating inappropriate online activities and overuse. In altering problematic behaviour, especially that of problematic internet use, is it important that a client be assisted to replace the time spent on social media and ICTs with offline interests and possibilities of social interaction without the presence of technology. Furthermore, a professional can conduct thought experiments with the client in treatment to uncover skewed ideas that contribute to the persistence of the problem and can assist the client in implementing deliberate mental and behavioural activities that examine emotional and behavioural disease processes that result

in problematic internet use (Young & de Abreu, 2017:18).

Family treatment and education is advised to occur concurrently with individual therapy for problematic internet use. A professional should thus adopt a holistic approach by identifying and addressing influencing contextual variables such as problematic internet use by parents or other family members, a permissive or authoritarian perspective on media usage in the home, or prior unresolved familial conflicts (Cheung, Yue & Wong, 2015 in Young & de Abreu, 2017:19). Family therapy offers a supportive environment in which parents and family members can be informed about problematic internet use; the needs, beliefs, and stresses that contribute to its development in the client; the treatment procedures used with the client; and the need of enhanced family communication. Family members can be enlisted and supported as treatment extenders and instructed to assist the client in mastering and applying skills acquired during treatment. Finally, it is important for a professional to acknowledge and respond to the influence of problematic internet use on the family system as a whole; comprehending how it impacts siblings, parents, and interpersonal communication. Treatment of problematic internet use should be envisioned as a shared experience that promotes family unity and healing (Young & de Abreu, 2017:19).

Alongside treatment some psychopharmacology medicines have been found to complement the treatment of problematic internet use, especially when treating the co-morbid diagnoses. However, no specific prescription regimes have been approved for the sole treatment of problematic internet use, due to the lack of a unified psychiatric diagnosis (Young & de Abreu, 2017:19). Examples of psychopharmacology medicine that is prescribed include stimulants (ADHD), selective serotonin reuptake inhibitors (SSRI's), dopamine reuptake inhibitors (anxiety, depression, alcohol and substance usage), and benzodiazepines (anxiety). Furthermore, escitalopram, bupropion, and methylphenidate have been shown to ameliorate behaviours linked with problematic internet use (Kuss & Lopez- Fernandez, 2016 in Young & de Abreu, 2017:19). However, as is the case with numerous mental health disorders, including those most frequent among clients that exhibit problematic internet use, treatment with medication only is not supported by collected data (Young & de Abreu, 2017:19). Psychopharmacology and therapy thus complement each other in treating problematic internet use.

Apart from therapy, wilderness therapy has also been trialled in the treatment of problematic internet use. Wilderness therapy entails a client facing concerns with a skilled practitioner in a remote, natural setting devoid of connection. Nature is relaxing and grounding, but sometimes unforgiving. In an unconnected setting, clients will not be able to react to external cues such as pings and pokes, forcing the client to act, by for example starting a fire, establishing a

campground, and developing self-reliance. The purpose of wilderness therapy can assist clients to find and recreate their identities, develop, and maintain face-to-face contact and connection with others, and uncover talents and interests that transcend the online world's superficiality. Numerous individuals have been found to experience a sense of rebirth after completing wilderness treatment. However, the realities of re-entering an internet and ICT rich environment can cause reversion to traditional compensating problematic behaviours without continuous assistance from experienced and skilled professionals and educators (Young & de Abreu, 2017:20).

Due to the fast growth of the brain during the earliest years of life, development that is extremely sensitive and receptive to the challenges offered by life experiences, the effects and results of utilising digital multimedia during formative years remain unknown. As is the case with many other environmental and educational stimuli, the observation of both beneficial and negative impacts of interactive media on the growing brain may be found. The creation of clinical practice guidelines that guide the safe and responsible use of ICT devices, identify emergent physical, mental, and social health concerns associated with technology usage. It is thus needed to treat problematic use promptly and effectively (Young & de Abreu, 2017:5).

2.9 SUMMARY

In this chapter the prevalence and extent of social media use worldwide, adolescent social media use, the effects that have been observed on adolescents, parental involvement in adolescent social media use, the effect that adolescent development has on social media use, problematic internet use, and the prevention and treatment thereof have been discussed and analysed.

In the following chapter, a discussion of the research methodology and specific research methods that were pertinent to the study, as well as the ethical considerations that lie at the heart of the study are discussed. Thereafter, a discussion of the empirical findings that were obtained from the study are presented.

CHAPTER 3
RESEARCH METHODOLOGY AND EMPIRICAL FINDINGS

3.1 INTRODUCTION

The objective of this chapter is to provide an overview of the research methodology and to examine the numerous aspects studied and implemented in this qualitative study. A comprehensive overview of the processes utilised to collect and interpret data in order to answer the research question, will be provided. The empirical findings of the study will then be presented, including an interpretation thereof.

The research question that this study aimed to answer was: *What are young adults' reflections on their experiences of social media use during adolescence?* Therefore, the goal of the study was to explore and describe young adults' reflections on their experiences of social media use during adolescence, within a South African context.

In this chapter, the focus will be on exploring the following research objectives:

- To explore and describe participants' use of social media during their adolescent years.
- To explore and describe the participants' perceptions of positive and negative influences of social media use on them during adolescence.
- To obtain suggestions from the participants on promoting optimal use of social media by adolescents.
- To obtain the participants' suggestions for curbing harmful effects of social media on adolescents.

The researcher will outline the research methodology used in this study in the first section of this chapter.

3.2 RESEARCH METHODOLOGY

A description of the research approach, the type of research, the research design, and the research methods that were employed are included in this section's discussion of the research methodology. Following that, a review of the various ethical issues that were applied over the course of the research will be presented.

3.2.1 Research approach

An interpretivist paradigm informed the study, as the focus was on the participants' social constructions of social media use, rather than the objective interpretation thereof by the researcher (Nieuwenhuis, 2016a:60). An interpretivist paradigm also supported the objective of the study, as this paradigm recognises several truths that are the result of human

subjectivities as opposed to a single all-encompassing "truth" as it allows for the constructed nature of all social reality (Harrison, 2014:229). Consequently, cultural and contextual nuances are crucial for comprehension; inductive reasoning is the favoured method of making sense of complex social realities. Therefore, the experience-formed reality of individuals becomes interpretable. The interpretivist paradigm furthermore considers human behaviour as fundamentally meaningful, processual, temporal, and historically incomplete (Harrison, 2014:229).

In order to acquire in-depth information from the participants regarding their perceptions of the use of social media during adolescence, a qualitative research approach was adopted. This was motivated by the goal of the study, which was aimed at understanding a social situation and the individuals within it, by attempting to find the answers to numerous questions (Nieuwenhuis, 2016a:53). Therefore, broad general questions are used in qualitative research with the aim of understanding participants' experiences within a particular social phenomenon (Ivankova, Creswell & Plano Clark, 2016:309). This enabled the researcher to obtain a comprehensive account of the investigated topic in the participants' own words (Fouché & Delport, 2011:66). This assisted the researcher in finding the social significance that the participants gave to the use of social media throughout their adolescent years, which is regarded as the primary objective of qualitative research (Nieuwenhuis, 2016a:53).

3.2.2 Type of research

The type of research utilised in this study was applied research, which is research aimed at bringing about change and resolving societal issues (Jansen, 2016:9). In instances of natural experimentation, applied research is conducted, and the researcher's involvement in the action allows for the evaluation of the accuracy and validity of the evidence collection and the analysis thereof (Erikson, 2018:106). The findings of the research may lead to an improved understanding of adolescent social media use, which in turn may empower social workers and other professionals to create preventative and early intervention services for addressing the negative effects of adolescent social media use.

The two research purposes were exploratory and descriptive in nature. A descriptive study was appropriate as the researcher gave "a picture of the specific details of a situation" by accurately describing the data in the research report, whereas an exploratory study was appropriate as the research goal was to gain insight and understanding of the phenomenon that was being studied (Fouché & De Vos, 2011:95; Nieuwenhuis, 2016a:54). In this study, the researcher was focussed on the perceptions of young adults' social media use during adolescence, and concurrently the effects that it had on their well-being and development.

3.2.3 Research design

The research was guided by a case study design. Case studies are frequently used to reflect the typical characteristics of a larger class of events, and they are also frequently used to identify the effects of a phenomenon (Prior, 2014:370). A case study is an in-depth examination of the complexity and one-of-a-kind nature of a specific initiative, policy, institution, or system within a 'real-life' setting. This examination is conducted from different angles. It is founded on research, considers a variety of methodologies, and is evidence-driven (Simons, 2014:457).

The study sought to explore the meaning that participants assigned to their experiences of using social media during adolescence, hence the researcher determined that the use of an instrumental case study approach was appropriate for the current study. Therefore, the goal of the research was to learn more about and gain understanding of a particular social issue (Nieuwenhuis, 2016b:82). As boundaries are established in case study designs, it is crucial to emphasise that only the empirical data that was deemed useful and that contributed to the goal of the study was used (Henning, Van Rensburg & Smit, 2013:41).

3.2.4 Research methods

In this section, the researcher will describe the study population, which consisted of young adults between the ages of 19 and 25, as well as the sampling techniques employed in the study. Following that, the data collection method, data analysis, data quality, and the pilot study will be discussed.

3.2.4.1 Study population and sampling

The study population was young adults who experienced the use of a variety of social media during their adolescent years in South Africa. Young adults were chosen as the population as they were thought to be able to provide a more objective and insightful account of the perceptions they held during adolescence regarding the use of social media. The target population was young adults between the ages of 19 and 25 years who experienced the use of social media as an adolescent. The reflections of the participants were relevant to the goal of the study (Bless, Higson-Smith & Sithole, 2013:164).

Based on the referrals during snowball sampling, one of the sampling techniques, the study sample was recruited within the geographical area of the City of Tshwane in the neighbourhoods of Wonderboom South, Rietfontein, Villieria, Queenswood, Kilner Park, East Lynne, Meyerspark and Eersterust. The study sample was therefore manageable and accessible.

A combination of purposive and snowball sampling was utilised during the study. With the use of purposive sampling (Maree & Pietersen, 2016:198), participants who complied with the following sampling criteria, were recruited for inclusion in the research:

- Participants had to be male or female, between the ages of 19 and 25 years.
- Participants should have used social media during adolescence, between the ages of 11 and 18.
- Participants had to be able to converse in English or Afrikaans.
- Participants were not selected from the researcher's personal social network or caseload as a social worker.

The researcher, however, had no way of knowing which individuals used social media during adolescence; thus, snowball sampling as a non-probability sampling method was also employed (Strydom & Delport, 2011a:393). The researcher furthermore did not have knowledge of the sampling frame, making snowball sampling relevant for accessing potential participants (Maree & Pietersen, 2016:198; Strydom & Delport, 2011a:393).

The researcher began the recruiting process by identifying an individual who matched the aforementioned criteria, and then utilised snowball sampling to recruit the subsequent participants. Therefore, the researcher approached a potential participant, who was situated in a social environment to which the researcher had access. This individual then referred the researcher to another potential participant who complied with the sampling criteria. This process was repeated until the appropriate number of participants were included in the study (Maree & Pietersen, 2016:198; Strydom & Delport, 2011a:393). Maree and Pietersen (2016:197) note that this type of sampling should be employed when investigating a phenomenon among an interrelated group of individuals. This method is also employed when the sample size is small and participant access is restricted (Strydom & Delport, 2011a:393), as was the case in the current study.

The disadvantage of this sampling technique is that it relies on the referrals of initially selected participants, who may all belong to the same social network, which may have led to the collection of biased information (Kumar, 2011:208). The researcher attempted to mitigate this disadvantage by restricting the number of recommendations received from each participant, thereby allowing access to a larger number of participants from various social networks. Participants were furthermore not selected from the researcher's work environment or social work caseload. The envisaged sample size (Clarke, Braun & Hayfield, 2015:229) for the study was ten participants and was also the final sample size, as data saturation was reached after interviewing the ten participants that were selected for the study. In the context of qualitative

data collection, data saturation occurs when a researcher stops collecting data because new material no longer produces original insights or reveals novel traits (Cresswell & Cresswell, 2018:335), which the researcher found to be evident after conducting ten interviews during the data collection process.

3.2.4.2 Data collection

Interviews were chosen as the method of data collection. During interviews, it is essential to acquire in-depth and specific information (Greeff, 2011:351, 352; Strydom & Delport, 2011a:391). This allowed the researcher to gather as much information as possible in an effort to comprehend the reflections of young adults' social media use during adolescence.

Semi-structured one-to-one interviews were specifically employed during the data collection process. The researcher furthermore found that the correct research interview protocol included a number of essential components and ensured that the protocol was followed throughout the data collection process. These consisted of the basic interview material, an introduction, interview-specific questions with probes, and closing instructions (Creswell, 2018:266), thus leading to the utilisation of semi-structured interviews with the accompaniment of an interview schedule (See interview schedule attached as Appendix A). Greeff (2011:348) justifies the use of semi-structured interviews by stating that this form of interview is organised around specific areas of interest but allows for flexibility to obtain greater detail. Due to the flexibility provided by interviews, the researcher was able to collect sufficient data. According to Greeff (2011:351), this type of interview allows the researcher to comprehend the beliefs and perspectives of the participants regarding a particular topic. In contrast to focus groups, the researcher was able to devote undivided attention to one participant at a time, making rapport-building easier (Curtis & Curtis, 2011:32). Nieuwenhuis (2016b:93) notes that the researcher can ask the participant pre-set open-ended questions, followed by additional probing and clarification. These open-ended questions were created to provide structure while allowing for the necessary flexibility to acquire more in-depth information.

The researcher furthermore ensured that the possible disadvantages of using semi-structured interviews were kept in mind during the data collection process. The flexibility of semi-structured interviews may, for example, have resulted in the interview being side-tracked by trivial information that was not related to the topic under investigation due to the lack of a firm structure (Nieuwenhuis, 2016b:93), and participants steering off track as they believe other information to be relevant to the question that was posed to them (Curtis & Curtis, 2011:33). Throughout the data collection process, the researcher therefore guided the interview to focus on the topic of the posed question and that of the present study.

The use of an interview schedule was thus implored by the researcher to direct the interview and engage participants (Greeff, 2011:352). The interview schedule conformed to Greeff's (2011:352) recommendations, since the questions were arranged in the most logical order and the most sensitive issues were saved until the end of the interview. Therefore, participants felt more at ease when discussing delicate themes. As a result, the researcher was unrestricted by closed-ended questions, allowing participants to freely share their experiences. In addition to keeping the researcher and participants focused on the questions that needed to be answered, the interview schedule allowed the researcher to probe regarding additional information that came to the foreground (Curtis & Curtis, 2011:32). Each interview that was conducted throughout the data collection process lasted for approximately one hour and was performed without difficulty. The researcher is of the view that the length of the interviews allowed for the gathering of extensive reflections and opinions from participants regarding their adolescent social media use (Cresswell, 2013:190).

All interviews were audio-recorded. Before beginning the digital recording, the researcher obtained consent from the participants in order to transcribe the interview at a later date (Nieuwenhuis, 2016b:94; Creswell, 2018:266).

3.2.4.3 Data analysis

According to Saldaña (2014:604), the unique data collected by a researcher utilising a study's chosen research design must be analysed with a distinct analytic signature. It is also believed to be a process of learning by doing, and researchers are asked to accept this and allow themselves to be open to discovery and insight when analysing the data set strategically for patterns, categories, themes, concepts, assumptions, and possibly new theories. Thematic analysis was regarded as an appropriate data analysis method for the study, as an interpretivist research paradigm was chosen and a qualitative research approach was adopted (Clarke et al., 2015:223, 224). Thematic analysis was furthermore appropriate as it focused on eliciting meaningful and symbolic content from the collected data (Nieuwenhuis, 2016b:109).

According to Nguyen, Fernandez, Karsenti and Charlin (2014:1179, 1180), thematic analysis demonstrates that the nature of reflection is primarily that of a thinking process and is essentially a distinct and distinctive style of thinking based on the scientific method chosen for a study. The researcher furthermore found thematic analysis to be flexible, appropriate to the data collected during the interviews, allowing for the analysis of data through theme development and coding, and promoted the reliability of the research (Clarke et al., 2015:225, 228). The process of data analysis employed by the researcher involved the following phases:

- **Phase 1: Familiarisation**

During the first phase, the researcher familiarised herself with the contents of the collected data by transcribing the digital audio recordings of the semi-structured interviews. Subsequently, the researcher read and re-read the full data set with a questioning and inquisitive mindset to uncover emergent key concepts and ideas as well as potential underlying meanings in the collected data (Clarke et al., 2015:231-233; Creswell, 2018:268; Schurink, Fouché & De Vos, 2011:409).

- **Phase 2: Coding**

The process of coding the data involved separating the collected data into meaningful pieces and marking the units with descriptive words that were relevant and meaningful for answering the research question (Clarke et al., 2015:234, Nieuwenhuis, 2016b:116; Schurink et al., 2011:410). The researcher utilised the goal and objectives set out for the study as a guideline, and utilised key words to group the data of the various interviews together. This process was done by reading through each transcript, and analysing each line for descriptive content that matched the research goal and objectives.

The aforementioned process, also known as open coding, enabled the researcher to easily retrieve meaningful pieces of information from the interview transcripts, focussing on similarities between the responses of participants, as well as opposing views (Clarke et al., 2015:235; Nieuwenhuis, 2016b:116). The initial coding was intended to reduce the data into manageable pieces of information, creating the themes and sub-themes that will be presented, with the labels and codes being changed, as necessary throughout the process, to accommodate all of the collected data (Schurink et al., 2011:410). In addition, the researcher utilised various colours and abbreviations to highlight the most important categories and topics (Schurink et al., 2011:410). This procedure was continued until all pertinent information was recorded and stored in separate Microsoft Word documents.

- **Phase 3: Searching for themes**

After the coding process, the researcher finalised the themes and sub-themes by clustering the various codes that were similar together in a meaningful manner (Clarke et al., 2015:236). This process involved the evaluation of the data in terms of its usefulness and relevance to answering the research question (Schurink et al., 2011:415). A thematic map was compiled to visually illustrate the themes and sub-themes, which assisted the researcher to determine the relationships between the codes and possible themes in a clear and coherent manner (Clarke et al., 2015:238). Furthermore, the researcher developed pertinent and descriptive theme names for each category and sub-category to descriptively report on young adults' reflections of their social media use during adolescence (Clarke et al., 2015:238; Nieuwenhuis,

2016b:120).

- **Phase 4: Reviewing themes**

In phase four, the researcher evaluated the themes and sub-themes by critically assessing and challenging their relevance to the research question and their accuracy in expressing the participants' reflections on their use of social media during adolescence (Clarke et al., 2015:238; Schurink et al., 2011:415). The researcher consequently took a step back to establish connections between various data categories and interpreted the information (Schurink et al., 2011:416). This procedure involved analysing each theme separately as well as the data set as a whole. Thus, the researcher was able to review the data, eliminate extraneous themes, and make any necessary modifications to guarantee that the selected data matched the goal of the study (Clarke et al., 2015:238).

- **Phase 5: Defining and naming themes**

During this phase, a description of each theme was provided, and the themes were arranged in a specific manner in order to construct an interconnected flow of information. Thus, theme descriptions capturing the essence of the theme provided an analytic narrative and a sort of road map to aid with the comprehension of the data (Clarke et al., 2015:240). In addition to defining, finalising, and interpreting the core components of the themes, the researcher also provided a description of the extent to which it had an influence on participants during adolescence (Clarke et al., 2015:240; Schurink et al., 2011:416). In addition to providing interpretive comments and a detailed analytical narrative for each theme by utilising verbatim quotes, the researcher ensured that conceptual clarity of the information contained within each theme existed (Clarke et al., 2015:240). This was accomplished with the integration and comparison of information from relevant, existing literature (Schurink et al., 2011:417).

- **Phase 6: Writing-up**

During this final stage, the researcher made conclusions from the collected data by relating it to the literature in chapter two and the theoretical framework in order to gain new insights from the data collected during the research process (Nieuwenhuis, 2016b:123). During this step, the logical organisation of the collected and categorised data was initiated. In addition, the data was correlated with current literature to determine how the data collected related to the field's present knowledge and how it helped to build the present knowledge database that exists on the research topic (Nieuwenhuis, 2016b:120). In addition, where possible, the researcher substantiated verbatim quotes from participants with results found in relevant studies (Clarke et al., 2015:241). This not only aided in gaining a better understanding of the data, but it also added depth to the current study and indirectly to viewpoints from existing

literature, thereby enhancing, and challenging it (Nieuwenhuis, 2016b:121). In this step, the researcher furthermore drew analytic conclusions across the various themes in an effort to answer the research question (Clark et al., 2015:230). This was done by means of presenting the verbatim extracts from the research interviews, forming the basis for the conclusions that were reached in answering the research question (Clarke et al., 2015:230, 241).

3.2.4.4 Data quality

The researcher found that when the reader is informed of the research methods that were utilised throughout the completion of a research study, the trustworthiness and credibility of the research report is already presented. The trustworthiness of data can thus be considered as a means to measure the honesty and integrity of the researcher (Saldaña, 2014:604). The quality and inherently the trustworthiness of the data that was collected, transcribed, analysed and interpreted by the researcher was enhanced by focusing on credibility, transferability, dependability and conformability (Lietz & Zayas, 2010:191; Nieuwenhuis, 2016b:123; Schurink et al., 2011:419). The implementation of these four aspects throughout the research process are briefly discussed below:

- **Credibility**

The researcher bolstered the credibility of the data by presenting an accurate and credible account of the research findings, ensuring that the participants' perspectives on the subject were accurately and credibly conveyed. Throughout the research process, the researcher was therefore conscious of any biases that could emerge during data collection, data analysis, and data interpretation. This was accomplished through the use of reflective practice, peer debriefing, and the management of the risk of research reactivity (Lietz & Zayas, 2010:191, 192; Nieuwenhuis, 2016b:123; Schurink et al., 2011:420).

During data collection, the researcher was therefore conscious of research reactivity when conducting interviews and used a digital audio recorder to capture each interview in its entirety (Lietz & Zayas, 2010:192). In terms of reflective practice or reflexivity, the researcher was mindful of her influence on the collection and interpretation of the acquired data (Lietz & Zayas, 2010:192). Peer debriefing consisted of discussions of research decisions with other professionals and peers, which helped the researcher with critical reflection (Lietz & Zayas, 2010:196, 198). The aforementioned techniques thus assisted the researcher to reflect on the research process and data interpretation (Cresswell, 2013:251). In conclusion, the credibility of the study was supported by following a research design and research methods that were aligned with the research question, and that were based on a relevant theoretical framework (Nieuwenhuis, 2016b:123).

- **Dependability**

The researcher found the notion of dependability to question whether the research procedure was logical, adequately recorded, and inspected (Schurink et al., 2011:420). This was accomplished by providing a clear and traceable explanation of the methods followed throughout the implementation of the study, including the operational details of data collection and implementation of the research design (Lietz & Zayas, 2010:195; Nieuwenhuis, 2016b:124). The researcher is of the opinion that other research professionals will be able to replicate this study in its entirety based on the description of the research methods that were provided to the reader (Kumar, 2011:172). By establishing an audit trail, codebook, and utilising peer debriefing, an individual, not forming part of the study will be able to study and analyse the research process as it continued (Lietz & Zayas, 2010:195). Throughout this investigation, the researcher implemented an audit trail to verify that no data was lost, and the research processes were meticulously recorded. For the purpose of enhancing the auditability of the study, regular peer debriefings were also performed with the researcher's supervisor, an expert in qualitative methodology (Lietz & Zayas, 2010:196).

- **Transferability**

Transferability refers to the applicability of research findings to theory and practise (Lietz & Zayas, 2010:195). Therefore, transferability is the concept of determining if the knowledge acquired can be transferred from one context to another (Schurink et al., 2011:420). The researcher sought to make the findings of this study as transferable and applicable as feasible to increase the likelihood that they can be implemented in contexts and communities other than the one in which the study was done (Lietz & Zayas, 2010:195; Schurink et al., 2011:420). According to Schurink et al. (2011:420), this could be a challenging endeavour. The researcher presented the key concepts behind the study in depth and provided a thorough discussion of the research methods and findings so that other researchers can understand how the findings of the study may be applicable to various situations (Lietz & Zayas, 2010:195).

- **Confirmability**

The final element of the trustworthiness of the study, is confirmability. Confirmability refers to whether the findings of the study can be replicated and whether the study is truly objective and without bias (Schurink et al., 2011:421). Other researchers should thus be able to validate the researcher's conclusions if they were required to conduct their own data analysis (Schurink et al., 2011:421). In order to promote the objectivity of the research findings, the research practises of peer debriefing and reflexivity also increased confirmability (Lietz & Zayas, 2010:197; Nieuwenhuis, 2016b:123; Schurink et al., 2011:421). In offering a detailed account,

the research findings contained sufficient direct quotations to represent the participants' perspectives (Cresswell, 2013:252). The researcher is of the view that this will ensure that subsequent researchers can replicate the study's findings by establishing a clear connection between the collected data and the researcher's conclusions (Lietz & Zayas, 2010:197).

To establish the credibility of the study, the researcher had to ensure that a transparent procedure was followed, allowing the reader to follow the research process (Nieuwenhuis, 2016d:122). The quality of the study was also improved in the form of a pilot study, by testing the procedures for data collection.

3.2.4.5 Pilot study

During a pilot study, Greeff (2011:350) notes that a researcher should have a list of questions, gain community access, make contact, and conduct interviews. This will help the researcher to establish certain trends while deciding if they will be able to collect relevant data by testing the various questions, considering the financial implications, and creating community contacts (Strydom & Delport, 2011a:394, 395). As part of her pilot study, the researcher interviewed one participant and utilised a preliminary interview plan to guide her during her initial interview. This pilot study was done with one participant who met the study's inclusion criteria, allowing the researcher to assess the suitability and usefulness of the interview schedule (Fouché & Delport, 2011:75; Strydom, 2011b:237). The information gathered was transcribed and analysed to determine the usefulness and sufficiency of the interview schedule in answering the research question. Following the pilot study, the researcher determined that no adjustments to the interview schedule were necessary, as all pertinent information had been gathered. As the acquired data was suitable, it was decided to incorporate this data in the total data for analysis.

3.2.5 Ethical considerations

Ethical considerations in research are universally applicable to research studies that involve human participants, thus resulting in research being based on ethical principles such as honesty and respect for the rights of individuals (Welman et al., 2012:181). Maree (2016:44) notes that it is essential to focus on ethical considerations in research, and in particular the issue of preserving the identities of the study's participants. In addition, it is emphasised that researchers must familiarise themselves with the ethical policy of the institution in which they are conducting research. Prior to data collection, ethical approval was sought from the Research Ethics Committee of the Faculty of Humanities at the University of Pretoria. The evidence of ethical clearance is attached as Appendix B. In this section several ethical considerations that were employed throughout the research process will be examined. These considerations include the avoidance of harm, voluntary participation and informed consent,

privacy and confidentiality, deception of participants, debriefing of participants, actions and competence of the researcher, and the publication of findings.

3.2.5.1 Avoidance of harm

Extensive measures were taken to ensure that the participants of the study were not exposed to harm throughout the research process (Welman et al., 2012:181). Due to literature noting that the use of social media is associated with various negative experiences (Cookingham & Ryan, 2015:2; Hawk et al., 2019:65), the researcher was aware that the research process may place participants at risk for emotional harm when discussing their experiences of social media use during the semi-structured interviews (Strydom, 2011a:115). During the recruitment process, the researcher thus provided each participant with detailed information regarding the goal, nature and extent and duration of the study as well as the possible risks and potential influence of their participation in the study. This was essential in order to ensure full understanding of participation. The participants were informed that they have the right to refuse participation or to withdraw from the study at any time without negative consequences. In doing so, the researcher ensured that participants that might have felt too vulnerable to participate in the study were not included as participants (Babbie, 2017:63; Strydom, 2011a:115). Furthermore, the researcher was mindful of possible discomfort experienced by participants during the interviews (Babbie, 2017:66; McLaughlin, 2014:65). Provision was therefore made for possible instances where participants experienced emotional distress due to their participation in the research. The researcher indicated that participants could be referred for counselling, which could be conducted telephonically or in person.

3.2.5.2 Voluntary participation and informed consent

In accordance with the principle of voluntary participation, study participants were required to participate voluntarily and sign a declaration of informed consent (Welman et al., 2012:181). The informed consent letter is attached as Appendix C. Additionally, the researcher sought participants who were cognitively and legally able to provide informed consent (Strydom, 2011a:117; McLaughlin, 2014:60). All the participants in the study were at least 19 years old, which is above the legal mature age in South Africa, and none of the participants had any known mental difficulties. The researcher is of the view that the participants were able to provide informed consent and that their participation was voluntary. In the declaration of informed consent, the participants were given detailed information on the nature of the study and the implications of participation, as well as the potential risks associated with participation, the right to withdraw from the study at any time, confidentiality, and data storage. In addition, permission was acquired from the participants for the digital audio recording of the interviews and the publication of the results (Strydom, 2011a:116, 117; Welman et al., 2012:181).

3.2.5.3 Privacy and confidentiality

The ethical principle of privacy was adhered to throughout the research process by allowing participants to choose how much information to share with the researcher (Strydom, 2011a:119). Various strategies were implemented to ensure privacy and confidentiality (Strydom, 2011a:119-121), including the use of pseudonyms to identify participants and the secure storage of data. Other strategies were informed consent letters and interview transcripts, during and after the completion of the research, and in accordance with the requirements of the University of Pretoria. By alerting participants that only the researcher would be able to link a specific response to a participant, confidentiality was also maintained (Welman et al., 2012:201). The researcher is of the opinion that in the future, individuals who read the mini-dissertation will not be able to identify the participants, thereby preventing direct attribution (Babbie, 2017:67). Additionally, indirect attribution was also limited as the participants' variety of qualities and attributes are not identifiable by other individuals (McLaughlin, 2014:62). Pseudonyms were used to protect the privacy of all participants and did not highlight any participant features (Strydom, 2011a:119-121). Additionally, the researcher limited contextual information as the participants could be identified if the traits were too specific to a given case (McLaughlin, 2014:63). The participants were also told that the confidentiality principle applied to the potential use of the data for future study. Through the declaration of informed consent, participants were also provided with information on confidentiality.

3.2.5.4 Deception of participants

Throughout the research process, the researcher refrained from deception of participants by guarding against intentional or unintentional misrepresentation, and by not withholding information from participants to convince them to participate in the study (Strydom, 2011a:118,119). Welman et al. (2012:181) state that ethical principles already apply during the recruitment of participants. Thus, the researcher provided the participants with accurate information on the study from the onset and was prepared to, should any unintended deception have occurred, immediately clarify any misunderstandings with the participants (Strydom, 2011a:119).

3.2.5.5 Debriefing of participants

Debriefing offers participants with the opportunity to reflect on their participation in the study, to explain any misunderstandings that may have arisen, and to address any potential problems that may have resulted from their participation in the research (Babbie, 2017:71; Strydom, 2011a:122). The researcher followed the simplest method for implementing debriefing by discussing the participants' experiences about the research immediately after the completion

of each semi-structured interview. This allowed participants to process their emotions and openly discuss and share the thoughts and feelings they experienced prior to, during, and after the interviews (Curtis & Curtis, 2011:41; Strydom, 2011a:122). The researcher also afforded individuals the option to address any misperceptions they may have had and minimised the possibility of adverse outcomes for the participants (Babbie, 2017:71; Curtis & Curtis, 2011:40; Strydom, 2011a:122).

3.2.5.6 Actions and competence of the researcher

The researcher concluded that it is vital to guarantee that she is qualified to embark on a study to prevent possible danger of harm to the participants and damage to the reputation of the study (Welman et al., 2012:182). The researcher attended an advanced research module as part of the MSW Play-based Intervention programme, which expanded her research-related knowledge, skills, and competencies. The competency of the researcher was further increased by completing a comprehensive literature review on the topic under examination (Strydom, 2011a:123; Welman et al., 2012:182). Throughout the research process, the researcher received research supervision (Strydom, 2011a:123). In addition to being a registered social worker, the researcher conducted the study in accordance with the ethical duties and code of conduct set by the South African Council for Social Service Professions (n.d.). In addition, the research findings were presented accurately and honestly, with attribution to the work of others to prevent plagiarism (Babbie, 2017:72; Strydom, 2011a:123).

3.2.5.7 Publication of findings

The study's findings are available in a written report that will be accessible to the public. The written mini-dissertation serves as such a report to offer the reflections of young adults' social media use during adolescence and is provided in a clear and correct manner (Bless et al., 2013:36; Strydom, 2011a:126). In addition, the researcher reported the limitations and shortcomings of the study clearly and honestly, without altering the results (Babbie, 2017:72; Welman et al., 2012:182).

The following section will focus on the findings of the research and the interpretation of the findings.

3.3 EMPIRICAL FINDINGS AND INTERPRETATION OF QUALITATIVE FINDINGS

In this section, the empirical findings of the study will be provided in two separate sections. In section A, the researcher will describe the biographical profile of each participant. The findings of the research will be provided in the form of themes and sub-themes, in Section B. Findings will be summarised in table format, followed by a discussion of the themes and sub-themes. Each sub-theme will be discussed interpretively, using participants' verbatim quotations and by means of the integration of literature.

3.3.1 Section A: Biographical profile of the participants

The biographical information of the participants was obtained during the data collection process and is presented in the table below.

Table 3.1: Biographical profile of the participants

Participant	Age	Gender	Place of residence during adolescence	Race	Highest qualification
1	24	Female	The Willows Pretoria, Gauteng	White	Degree
2	22	Male	Centurion Pretoria, Gauteng	White	Matric
3	22	Male	Montana Pretoria, Gauteng	White	Matric
4	19	Female	East Lynne Pretoria, Gauteng	Black	Matric
5	19	Female	East Lynne Pretoria, Gauteng	Black	Matric
6	25	Female	East Lynne Pretoria, Gauteng	Black	Matric
7	23	Female	East Lynne Pretoria, Gauteng	White	Matric
8	23	Male	Silverton Pretoria, Gauteng	Black	Honours degree
9	20	Male	Pretoria Gardens Pretoria, Gauteng	White	Grade 10
10	20	Female	East Lynne Pretoria, Gauteng	Black	Grade 10

As indicated in table 3.1, the average age of the participants was 21.7 years. Five of the participants were male and five were female. Of the participants, five were black and five were white. Furthermore, two participants had obtained a tertiary qualification as their highest qualification, while six participants attained matric; two participants only completed grade 10. Nine of the interviews were conducted in English, and one interview was conducted in Afrikaans.

3.3.2 Section B: Themes and sub-themes

In this section, the researcher will present and discuss the data acquired from the semi-structured interviews with ten young adults regarding their reflections on their adolescent social media use. Six themes and numerous sub-themes were identified, which are summarised in Table 3.2.

Table 3.2: Themes and sub-themes

Themes	Sub-themes
Theme 1: The use of social media during adolescent years	1.1 Age of first use of social media sites 1.2 The purpose of social media use 1.3 Time spent on social media during adolescence
Theme 2: The positive and negative effects of social media use during adolescence	2.1 Positive effects of social media use • Emotional effects • Social effects • Cognitive effects • Physical effects 2.2 Negative effects of social media use • Emotional effects • Social effects • Cognitive effects • Physical effects
Theme 3: Factors influencing adolescent development in a milieu of prominent social media use and exposure	3.1 Influence of social media on self-esteem 3.2 Influence of peer pressure on social media use 3.3 Influence of social media use on moral development 3.4 Influence of social media on identity development
Theme 4: Perceptions regarding core aspects of social media	4.1 Likes and followers 4.2 False self-presentation
Theme 5: Possible threats related to social media use during adolescence	5.1 Privacy threats regarding social media use 5.2 Cyberbullying on social media 5.3 Communicating with strangers on social media
Theme 6: Parental involvement in adolescent social media use	6.1 The prevalence of parental involvement 6.2 The effect of parental involvement
Theme 7: Recommendations for the optimal use and avoidance of harmful social media use during adolescence	7.1 Extended age limit and supervised access 7.2 Including social media use in school programmes

The seven themes and sub-themes shown in the table above will be explored in the following section. It was essential to record each participant's authentic experiences; therefore, the researcher integrated detailed descriptions from the transcribed interviews to appropriately represent these findings. As the ecological systems theory served as the theoretical basis for this study, the participants' thoughts were also compared to existing literature within this framework.

3.3.2.1 Theme 1: The use of social media during adolescent years

Due to the internet and other technological advancements, social media is becoming increasingly and widely available and have started to serve several social functions (Reid & Weigle, 2014:73; Sajithra & Patil, 2013:69). Millennials are the first generation to grow up with instant worldwide connectivity because of the proliferation of these mobile technologies, including smartphones, tablets, wearable gadgets, and various social media platforms (Reid & Weigle, 2014:73). For this reason, technology plays a significant role in the lives of millennials, perhaps to an even greater extent than for those of a more senior age (Vițelar, 2019:263).

In accordance, research has shown that young adults and adolescents are the age groups that are the most likely to use social media, and that it has a significant impact on their lives (Glover & Fitch, 2018:171; Hausmann et al., 2017:714; Reid & Weigle, 2014:73). Beger and Sinha (2012:3) also found that access to smartphones, which give consumers access to the internet and social media, is available to 72 percent of young individuals between the ages of 15 and 24. Another research survey found that 95 percent of adolescents between 12 and 17 years of age have access to the internet; 70 percent of them use online platforms daily (Lenhart, 2011 in Reid & Weigle, 2014:73).

The above findings from research are also demonstrated in findings presented in the sub-themes below, where the researcher aimed to inform the reader about the age when participants first gained access to social media, the purpose of the social media use, and the average amount of time that participants spent on social media during adolescence.

Sub-theme 1.1: Age of first use of social media sites

The statements by participants below provide an overview of the ages when access was first granted to social media and evidently to a mobile device:

"I think I was in the sixth grade." − Participant 1

"I was 11. WhatsApp and Mxit." − Participant 6

"I was 14." − Participant 7

"I was 13." − Participant 8

"I was 16 years old. But then it was not my phone; it was my mom's phone. So that is when I started learning to use WhatsApp." − Participant 10

The researcher found the results of this study to be in line with findings stipulated in literature. According to the findings of another study the typical age at which children receive their first smartphone is 10.3, and the average age at which they create their first social media account is 11.4 (Brigham, 2018). Furthermore, by the age of 12, half of all children already have an account on at least one type of social media (Brigham, 2018).

It is evident from the findings of the current study that the ages of first social media use vary between 11 and 15 years of age, with the median age of participants gaining access to social media coinciding with the transition into adolescence and moving over to high school between the ages of 12 and 14 years of age. Evidently, this season of transition starts with the beginning of puberty, between the ages of eleven and thirteen, and lasts until the age of eighteen (Colman, 2015:14); this concurs with the mean age at which participants of the current study were first exposed to social media use.

The findings of the current study revealed that 80 percent of the participants first gained access to social media to communicate with their familial microsystem, with all participants receiving mobile devices from their parents or caregivers. As evidenced by literature, adolescents' developmental stage ultimately aims to prepare them to begin with the transition into young adulthood and to take on the duties and responsibilities of maturity in their community (Arnett, 2016:349; Louw & Louw, 2014:303; Rathus, 2017:450). The researcher is of the opinion that allowing young adolescents access to mobile technology and inherently limitless access to the microsystems in which they function (home, school, church, community) is a sign that parents view their children as being at an appropriate age to receive a mobile device, but with certain restrictions in place.

According to an article by Miller (2022), the readiness of a child to receive a mobile device and gain access to social media depends on factors such as their ability to interpret social signs, their impulse control, and their susceptibility to criticism or rejection. It is suggested that if a pre-adolescent has difficulty disengaging from consistently stimulating activities such as video games, they may struggle to resist the proverbial 'rabbit hole' that social media provide access to. Furthermore, a clinical psychologist, Dr Dave Anderson from the Child Mind Institute, advises that introducing social media to children during middle childhood can afford parents and caregivers the opportunity to oversee the impact of early exposure. It is then further hypothesised that parents and caregivers can then monitor the social media and internet use

of their younger children in exchange for the privilege of being granted access at a younger age. If done otherwise, it might result in parents and caregivers waiting until children are in high school to request permission to monitor their social media use, likely resulting in conflict and resulting in less parental control. This may in turn result in parents and caregivers never obtaining transparency from children regarding their internet and social media usage during childhood and adolescence (Miller, 2022).

The expansion of the internet and ICTs has not only enabled instantaneous communication between individuals but has also prompted new issues regarding the privacy and safety of children, leading to the establishment of the Children's Online Privacy Protection Act (COPPA), which was published in 1998 (Brigham, 2018). It has been found that a high percentage of children provide an incorrect age when first creating a profile on social media. As a seemingly protective measure, COPPA requires that even the most popular platforms, such as Instagram, Facebook, Snapchat, and TikTok, have a minimum age requirement of 13 years (Brigham, 2018). The act was promulgated in response to critics of the internet and ICTs expressing concern about children obtaining access to social media at an early age and due to the ease with which personal information can be obtained from individuals. An additional concern was that parental supervision of children's activities can easily be circumvented. Furthermore, marketers can easily collect children's personal information due to the rising usage of chat rooms, discussion boards, and giveaways, with the personal data frequently being compiled into databases, which can then be sold to third parties (Gadbaw, 2016:228). These regulatory limitations and the capabilities of social media that allows for personal information to be collected and for personalised content to be shared with each individual consumer is consistent with the innerworkings of the individual and broader macrosystem in which children grow and develop (Atkin et al., 1991 in O'Neill, 2015:39).

In the following sub-theme, the researcher will describe the reflections of participants regarding the various purposes that motivated their social media use during adolescence.

Sub-theme 1.2: The purpose of social media use

It has been revealed that social media use plays an essential part in fostering healthy youth development and future civic engagement, and that it is mostly utilised for socialising, recreation, and public life interests (Throuvala, Griffiths, Rennoldson & Kuss, 2019:4). The uses and gratifications theory claims that gratifications are the key motivators for adolescents' use of mobile social media. This is accomplished by emphasising the hedonistic, integrative, and mobility aspects of adolescent impulses (Throuvala et al., 2019:6).

The researcher found that it is essential to take the uses and gratifications approach into account when conducting research on social media, as the theory proposes that consumers actively select the forms of media that most effectively meet their requirements, and that these selections are further informed by the consumers' previous encounters with various forms of media (Fietkiewicz, Lins, Baran & Stock, 2016:3830). According to Fietkiewicz et al. (2016:3830), there are several elements, including functional, situational, and personal considerations, that influence the selection of social media use. Information, personal identity, amusement, integration and social contact are the four primary reasons that influence individuals to use different forms of media and communication technologies (Fietkiewicz et al., 2016:3830).

The research study revealed 10 main types of social media that the participants utilised during their adolescent years. The social media types included WhatsApp Messenger, Facebook, Instagram, Twitter, YouTube, Snapchat, Pinterest, Blackberry Messenger, Mxit, and TikTok. The researcher found the purposes of use for these social media types to be varied, with each contributing differently to the developmental and ecological spheres of the participants. The most common purpose that was shared throughout the dataset was that of communication, as described by the participants below:

"*I actually only went onto WhatsApp to communicate and to share photos or videos."* − Participant 1

"*In school, it was kind of like how you could communicate with your crush if you didn't know how to communicate with your crush yet* [Facebook]*. If you followed your crush and they followed you, then you could post pictures that you'd want your crush to see."* − Participant 1

"For the purpose of interacting [Facebook]. *I think at the age when we started getting into that, into social media, social media became a big thing, especially for me, being born in the 90's. We started, everyone started."* − Participant 2

"*WhatsApp had to do with communication with friends and family and exchanging information. For example, when you want to know why Mom isn't home yet and it's 5:00 o'clock, you text her on WhatsApp: "Where are you?" That's the fastest way for her to respond to you."* − Participant 5

"*For communication. If I am not at home, then I can let someone know that I will be late* [WhatsApp]. *If there is a crisis somewhere, then I can just sort it out."* − Participant 6

"To communicate with my family and friends [WhatsApp]*. Because my circumstances were different, you can't always catch up with them in a normal setting, so you have to do it over the phone."* − Participant 7

According to Reid and Weigle (2014:73), the use of social media has quickly emerged as one of the most important modes of communication among adolescents, and it is now considered an indispensable component in their everyday lives. From the findings presented above, the researcher is of the view that it is evident that the tried-and-true ways of communication that have been in use for a very long time are being displaced by brand-new digital tools. Millennials, for instance, are driven to use social media mostly because they have a strong desire to engage in conversation and connection with other individuals. Additionally, literature asserts that consumers who are between the ages of 17 and 34 are more likely to choose social media as a means of connection with friends and family, than individuals who are in older age groups (Fietkiewicz et al., 2016:2829).

The researcher found the statements of participants regarding the use of social media for the purpose of **communication** to be indicative that social media may have a direct impact on the functioning of individual microsystems, as well as the facilitation of communication between micro- and mesosystems, as clearly stated by participant 6 regarding the use of WhatsApp: *"Yeah, it helped me to stay in the loop of things in school and in the loop of understanding what's happening. Even at home, like there's something happening that you don't know. So, someone tells you about it."*

According to Bronfenbrenner's ecological systems theory, the microsystem is made up of the behaviours and interactions that take place in a child's immediate environment, such as their immediate family, their school, and their close neighbourhood, which include their friends (Berk, 2013:27; Louw et al., 2014:29; Rathus, 2017:23). The interaction between the microsystems defines the mesosystem. Thus, social media provides a platform for fostering relationships between two or more online social situations where the consumers engage in active and direct communication with individuals and groups in other systems (Fulantelli & Taibi, 2021:151). Social media can thus be regarded as a microsystem on its own, with the interaction between a parent and child directly impacting media use within the microsystem at home (Atkin et al., 1991 in O'Neill, 2015:39). In agreement with the purpose of communication, Watkins (2009, in Hendricks & Kanjiri, 2021:3) posits that several studies have demonstrated that social media is typically used to retain and enhance offline relationships rather than to replace them. Social media additionally provides young consumers with freedom of choice, as individuals can choose with whom they interact and share information on social media (Hendricks & Kanjiri, 2021:10). The findings of this research study by Hendricks and Kanjiri

(2021:1) among South African youth residing in rural Eastern Cape communities, are most relevant to the current study.

The second core purpose of social media use by participants during adolescence was revealed to be **educational advancement**, as depicted by the following statements from participants regarding the use of YouTube to excel both academically and in sport:

"*I understood it better. The graphics, the little cartoons, the little pop-ups. I think I learned visually. So, the picture got stuck in my brain when I was writing, and I was answering a question, and it said, "what is photosynthesis?" I saw the picture. Like, "Oh okay, that's photosynthesis," and I was able to translate it into words."* − Participant 4

"I think so. I really do because I knew nothing about hockey when I got to high school. Nothing at all, but when I started watching YouTube videos, my skills got better, and I also got moved up an age group because of that." − Participant 5

Apart from the academic and sports benefits that YouTube provided to participants during adolescence, the microblogging platform, Pinterest, furthermore, assisted participants who were interested in visual art to find inspiration for schoolwork or for the purpose of artistic expression, as evidenced by statements from participants below:

"*When I was in grade ten, I chose arts as one of my subjects. I then used Pinterest as a source."* − Participant 1

"Pinterest is something I use, but not that much. It depends on how I feel. However, as I began using it at the age of 14, I occasionally wanted to draw or paint. Then I just go to Pinterest to get inspiration." − Participant 6

In concurrence with the above findings, social media aids with communication and educational advancement. Literature asserts that social media use has been reported by adolescents to be beneficial with problem-solving and connection with other individuals and groups, as it provides quick and easy access to an innumerable number of individuals and groups that have knowledge about a specific impasse that might be experienced (Vitak & Ellison, 2013 in Berryman, 2014:3).

Social media use thus broadens the possible social interactions, the influences and exposure experienced, moving it from the immediate environment of an adolescent to any individual or group globally. According to Jordan (2004, in O'Neill, 2015:39), the ecological systems theory is significant because it simultaneously focuses on the features of the individual child, the

crucial family environment, and the pervasive cultural milieu. Jordan (2004, in O'Neill, 2015:39) advocated for the expansion of the notion that the home is a multimedia environment by asserting that media has become an integral part of home-based relationships. Adolescents thus move past their micro- and mesosystems into the macrosystem as the components that make up the macrosystem are passed down from one generation to the next through information distribution, usability, and socialisation processes enabled by the vast internet environment (Fulantelli & Taibi, 2021:151).

Additionally, Fulantelli and Taibi (2021:151) places emphasis on the importance of developing individuals building the required media and technological skills, in order for them to be able to interact in the online environment and grow inside the ecological model's school, home, familial and community microsystems. The researcher found Johnson and Puplampu (2008, in O'Neill, 2015:41) to highlight the significance of technology in the growth and development of children by concentrating on the ecological techno-subsystem. They also encourage a comprehensive investigation of the developmental effects of internet use during childhood, based on the mutual accommodation that takes place between the growing being and the immediate environment; thus, motivating for the techno-subsystem to be added to the microsystem of Bronfenbrenner's ecological systems theory.

YouTube and Pinterest thus provided participants with improved ways to understand material that was taught at school and to help build on and excel in interests that they had during adolescence. These findings coincide with literature by Quesenberry (2019:144), who found that adolescents spend 34 percent of their video content time on YouTube, compared to just 27 percent on Netflix and 14 percent on traditional broadcast television. The researcher found the above to be linked to the third purpose of social media use that was described by participants, namely **entertainment and leisure:**

"I think it was just like a moment where I can relax. I can just sit back and watch somebody else do the work, and then at the end of the video it shows the beautiful product that he or she has made and then I feel a kind of fulfilment, that I watched the whole video. That was so peaceful, and I'm relaxed right now." − Participant 3

"Yeah, exposure, but I did enjoy it. I used it for the comedic attributes of Twitter. All the jokes people post." − Participant 3

"*I could spend hours on YouTube just watching vlogs and new YouTubers and searching for movies. There was no such thing as Wi-Fi at the time. Data was expensive. So, you would use it wisely."* − Participant 7

"It became famous during lockdown [TikTok]*. When we were bored and had nothing to do, you had this app. You just scroll through, seeing people dancing, and it changes from trend to trend. This week we're talking about dancers; next week it's relationship trends; and the week thereafter, it's funny memes."* − Participant 4

The researcher is of the viewpoint that the findings regarding the use of social media like YouTube, Instagram, Twitter, and TikTok are consistent with assertions found in literature, which indicate that the use of social media for recreational purposes is becoming increasingly significant, even within the intricate framework of the integrated media consumption that takes place on social media (Stollfuß, 2020:1).

The researcher also discovered that the entertainment options provided by social media differed from those provided by traditional forms of mass media, such as television and movies, as demonstrated by participant 3 when he indicated that YouTube made him feel relaxed. Participant 4, in the same vein, explained that following various trends on TikTok made her relax. This finding can be explained by the fact that both media production and consumption, as well as various forms of interpersonal and mass communication, are all merged within social media settings, with the continued evolution of popular mobile screen entertainment being fuelled in large part by the proliferation of social media, particularly among younger media consumers (Cunningham & Craig, 2017:71). As a direct result of this, the entertainment-related functions of traditionally private, interpersonal communication channels appear to have been absorbed by social media, which include functions linked to socialising, creative expression, and self-presentation (Bartsch, 2017:10).

According to Quesenberry (2019:138) the immediate and almost real-time effect, and the short spurts of visual content that are generated by social media allow consumers to experience feelings of excitement, energy, and ingenuity as described by participant 3 as a dopamine boost: *"They added videos, and it's more entertaining to watch, like a short video of fifteen seconds* [referring to Instagram]. *That's going to raise my dopamine, like a quick dopamine boost."*

In conclusion, the researcher found communication, educational advancement, and entertainment/leisure to be the core purposes underlying social media use amongst the participants of the study during their adolescent years. The findings are supported by literature, which indicates that social media has been seen to help meet the fundamental human need for social integration and engagement (Maree, 2017:964). Although many adolescents with access to the internet are regarded as using social media for academic work, it has been found to be utilised more for social engagement, including the expression of personal viewpoints

through various interactive ways (Berryman, 2014:3); as social media provides users with the opportunity to communicate their ideas, feelings, opinions, interests, and activities with like-minded individuals online (Carr & Hayes, 2015:50). This can in turn shape how individuals think, feel and behave (Hendricks & Kanjiri, 2021:9). Furthermore, Stollfuß (2020:3) asserts that consumers can feel a certain level of satisfaction, pleasure, or affiliation because of the feedback-driven logic of social media, driving into the use of social media for entertainment.

Due to the varied purposes that participants utilised social media for during adolescence, the researcher is of the opinion that it is valuable to also discuss the amount of time that participants spent on social media during adolescence.

Sub-theme 1.3: Time spent on social media during adolescence

The subsequent statements from participants are indicative of the amount of time that they spent on various types of social media during adolescence:

"*Then WhatsApp. Coming in with WhatsApp. When I had my girlfriends during my adolescent stage, I was on WhatsApp 24/7. More hours than I could count. I think I woke up when I had to go to school. I woke up at about 7:00 in the morning. I was on WhatsApp until 9:00 or 10:00 o'clock at night, the whole day through. Just communicating because that is what adolescents do. They want to communicate with their loved ones at that stage, and their peers.*" – Participant 2

"During quarantine. Instead of doing schoolwork, you would sit on TikTok, and it used to say your screen time was eight hours. So, four hours TikTok, two hours Instagram, 10 minutes Spotify." – Participant 4

"During COVID-19, I think I always had my phone. And I was always just… my eyes were always on the screen. So, I'd say 10 hours." – Participant 5

"As a teenager back then I was in primary school at first and then you cannot just use… You are not allowed to use your phone. So, from after school until I got home, I did my homework for like an hour, and then I was on my phone until I fell asleep. So, we could probably say 6 hours during the week and then on weekends it was like maximum. I'd push it to like close to 20 hours. I'd make sure I slept on my phone. I would fall asleep texting and wake up, the first thing I do is text. It's a bad habit because you cannot go to bed consuming content and wake up consuming new content because it has a lot of influence on your thinking capacity." – Participant 8

From the statements above, it is evident that participants spent more than 6 hours per day on social media, especially when they were at home and felt that there was not something else to do, as described by participant 3: *"Uhm yes. So, in high school or since I started using apps, and when I was feeling like I have nothing to do. I can't play video games. I don't want to watch TV because it's that time of the night when it's only news on TV. Then I'd go on Twitter or Instagram. You must just go on Instagram quickly, scroll through it, and then when you're done, you get a dopamine spike because you see what's going on in somebody's life, you see photos that you like, where you want to be someday. Like in five years, I want to be there. I followed a lot of accounts from Switzerland and that gave me happiness, dopamine."*

It has been found that internet use amongst adolescents normally increases during the early onset of adolescence, and the frequency of daily and repeated use thereof is thought to increase as adolescents move through the developmental phase (Davel, 2017:32), as depicted by participant 8 above. The researcher is thus of the opinion that the complete immersion in social media can be considered a distinctive characteristic of modern adolescents, or rather millennials, as 91 percent of emerging adolescents have been found to spend no less than six hours per day utilising ICTs and being connected to the internet (Common Sense Media, 2016 in Young & de Abreu, 2017:5), as confirmed by numerous participants when they referred to their time spent on social media during adolescence. According to Vițelar (2019:263), even more than six hours of screen time per day can be observed, as adolescents have been found to dedicate nearly nine hours per day on consuming some form of media, either by gazing at a screen or using a device. Including the time spent multitasking, adolescents can thus be subjected to an average of nearly 13 hours of media use daily (Vițelar, 2019:263), with Mbati (2013, in Hendricks & Kanjiri, 2021:9) confirming that urban youths in South Africa spend the majority of their day on social media.

Literature supports the findings of the study, discussed above, that social media use is high amongst adolescents and concurs that it has become a significant role-player in the lives of this developmental group (Glover & Fitch, 2018:171; Hausmann et al., 2017:714). It is therefore undeniable that individuals use smartphones, personal computers, and tablets on a daily basis and that this may have a significant effect on how individuals behave and form habits. As evidenced by the research findings, literature confirms that the vast amount of time that is dedicated to digital media can thus have an effect on how individuals live their personal, professional, and social lives (Oberst et al., 2017:51; Tran et al., 2017:1; Zafar, 2016:46).

The research findings are furthermore indicative that the social spheres of young individuals are no longer cleanly segregated into time spent with family and time spent with peers or at school, as smartphones allow for the mobile use of applications such as e-mail and social

networking platforms, thus enabling adolescents and young adults to stay in touch nearly all day (Arnett, 2016:455). Modern media thus allows the worlds of others to be a near-constant presence in the lives of all individuals.

Thus far, it can be ascertained in literature that young individuals enjoy the comfort with which new media enables them to communicate and interact, even if only from a distance (Arnett, 2016:455). This assertion is confirmed by a research study that was completed in 2018 with 3,140 Finnish adolescents aged between 11 and 15 years, which revealed that sixty percent of adolescents communicate frequently with their closest friends. Girls, in older age groups, and the group with the highest health literacy reported greater communication with their close friends than all other demographic groups. A total of 22 percent of adolescents reported substantial online interaction with individuals they met online, whereas only 13 percent reported extensive online communication with strangers. Furthermore, 10 percent of adolescents reported using the internet daily to meet new people and to find individuals with similar interests; one-fourth of adolescents stated a preference for online rather than in-person exchanges of personal information (Lyyra, Junttila, Gustafsson, Lahti & Paakkari, 2022:1). The findings of the current study, and as specifically stated by participant 2 regarding the reason for the vast amount of time that he spent on social media during adolescence, confirm the above research and literature assertions. Participant 2 stated the following: "*Just communicating because that is what adolescents do. They want to communicate with their loved ones at the stage, and their peers.*"

The researcher is of the view that the limitless connection between loved ones and peers of adolescents, as described in the research findings, is strongly influenced by the macrosystem of the ecological systems theory. The macrosystem is the outermost layer in a child's environment and comprises the interaction between values, expectations, cultures, customs and laws. Each macrosystem thus has its own distinctive way of life, value system, and expectations regarding the development of a child. Although distinctive and culture dependent, the interaction between the microsystem and the macrosystem of a child has an impact on the development of the child (Rathus, 2017:24). The information distribution, usability, and socialisation processes that are enabled by the vast internet environment, and the complex ideas and behaviours that make up the macrosystem are thus handed down from one generation to the next. According to Fulantelli and Taibi (2021:151) this occurs because of the intergenerational transmission of information. A child's existence and development are therefore profoundly influenced by their macrosystem, even though the macrosystem only exerts a secondary influence on certain aspects of the child's life (Berk, 2013:28; Louw et al., 2014:29). The vast amount of time that adolescents spend on social media thus exposes them

to more information within their exosystem and those of others, and thus has a considerable impact on the psychosocial development of adolescents, as its use has become a widespread social practice (Bosch & Mutsvairo, 2017 in Hendricks & Kanjiri, 2021:3).

In the following theme the researcher focusses on the positive and negative effects that social media use holds for adolescents within their specific developmental stage.

3.3.2.2 Theme 2: The positive and negative effects of social media use during adolescence

According to Reid and Weigle (2014:73), it is imperative for those who work in the field of mental health to understand how and why adolescents are utilising social media, as well as the potential adverse effects these platforms may have on adolescent mental health and overall well-being. Using social media provides adolescents with several benefits, one of which is the ability to stay connected with their peers. At the same time, there has been a significant amount of public concern regarding the effects that platforms for social media have on the health and development of adolescents, especially due to their easy accessibility (Glover & Fitch, 2018:172; Hendricks & Kanjiri, 2021:2; Reid & Weigle, 2014:73).

The purpose of this research theme is to provide an overview of the various advantages and disadvantages that are related to the use of social media among adolescents. The researcher placed the focus of this section on the reflections of participants regarding the emotional, social, cognitive, and physical effects that they experienced during adolescence due to social media use. The positive effects will firstly be discussed, followed by the negative effects.

Sub-theme 2.1: Positive effects of social media use

Vițelar (2019:263) asserts that there are numerous possible positive effects of social media use on the lives of young individuals, such as strengthening social contacts, assisting with homework, and allowing adolescents to develop their identities and share creative projects. The researcher captured the following reflections by participants regarding the positive emotional effects that they experienced during adolescence because of their social media use:

“It's like you have a day where you spend a lot of time on Instagram, and then you have a day where you don't spend any time on Instagram. I think for me, back then, it mostly depended on how I felt that day. So, if I was feeling low, I would spend a lot of time on Instagram.” – Participant 1

“I think that it also gave me emotional security, knowing that I have direct access to the people I need in a state of crisis. My mom and my father would always be on my WhatsApp, and I

could WhatsApp them 24/7. If my girlfriend was at home, I could still speak to her, even though I'm sitting in a horrid class." – Participant 2

"A good one, because I would choose what I want to take in, and I would choose what I want to leave out. If I got something on social media that was not good, I chose to cut it off and would move along and replace that negativity with something positive. If I see a video that's not nice, I will go listen to a gospel song or just change my mindset as soon as I come across the negative thing. If I didn't do that, I would still chew on that negativity, and it would grow. By the time I realised it was not good for me, it was too big to take it out. As a teenager, I needed to start early with myself. I needed to say to myself: "As soon as you get something negative on social media, replace it with something positive." It helped me in the long run. If I didn't change it as soon as possible, it didn't to benefit me, and it didn't benefit other people around me." – Participant 6

"Social media kept me sane. It helped me in the way I needed. I needed someone to stand by me. At the time, I didn't trust anyone to come in. So, I turned to videos and so on." – Participant 9

From the statements above, it is evident that access to social media during adolescence provided varied forms of **emotional regulation** amongst participants. Participant 1 indicated that Instagram helped to uplift her mood. Participant 2 indicated that the notion of always being connected to his loved ones by means of WhatsApp provided him with a sense of emotional security, whereas participant 9 found his mobile device and social media to be his companion, combating his feelings of loneliness, all of which are indicative of how individualised emotional regulation is.

The ability to regulate emotional experiences as well as emotional expressions is referred to as emotional regulation (Young, Sandman & Craske, 2019:76). Individuals can self-regulate their emotions in a variety of ways, including thinking about the situation on their own, through problem-solving with friends, or by diverting their attention away from the emotion entirely, amongst others (Lennarz, Hollenstein, Lichtwarck-Aschoff, Kuntsche & Granic, 2019:1), and as evident from the research findings, by means of social media use.

The researcher found that participant 6 exhibited the most advanced form of emotional regulation, as she voiced how choosing what she exposed herself to has always been important to her. Participant 6 additionally used social media platforms like YouTube during adolescence to help shift her mindset back to a positive focus when she caught herself being negative. The findings above are supported by literature, which indicates that emotional

regulation is frequently used in everyday situations and through social media use to increase or upregulate positive feelings and decrease or downregulate negative emotions (Blumberg, Rice & Dickmeis, 2016:107).

According to Blumberg et al. (2016:109), the use of social media as a method of emotion management can be analysed through the theoretical lenses of the mood management theory (Zillmann, 1988 in Blumberg et al., 2016:109) and the mood adjustment theory (Knobloch, 2003 in Blumberg et al., 2016:109). According to the mood management theory, individuals are thought to engage with media in order to reduce or decrease their arousal state when doing so. In contrast, according to the mood adjustment theory, individuals are perceived as making media choices to regulate their mood. Individuals are considered to be engaging with media to fulfil or satisfy human needs such as acquiring new information or escaping boredom, according to the uses and gratification theory, which is another lens that may be used to examine media consumption from a theoretical perspective (Blumberg et al., 2016:109).

In addition to the positive and seemingly supportive emotional effects discussed above, the researcher found that participants who struggled with anxiety during adolescence utilised social media to assist with the identification and management of their anxiety, as evidenced below:

"With my emotions. I think social media exposed me to a lot of things, like discovering myself. I don't know how to put this. I'm a person that struggles with anxiety, so, social media was a very informative platform." – Participant 5

"I was watching a blogger on YouTube, and I just thought she was so cool. She suffered from anxiety, and she would sit and explain her anxiety attacks. By then, I started to notice all the signs. Then I was like: "I don't want to self-diagnose" and by grades eleven and twelve, I was like, "I'm pretty sure I've got anxiety." I liked being a part of that group. I liked knowing that she kind of struggled with the same thing." − Participant 1

"*It's really nice because you can prepare yourself."* – Participant 1

According to Meeus (2016, in Hendricks & Kanjiri, 2021:2), negative emotional affect and anxiety may lead to adverse psychosocial difficulties for young individuals, and that it is often exacerbated by the use of social media. It is evident from the statements above that social media can also assist individuals with the identification and management of anxiety, and that seeing what is happening in their microsystems via social media may diminish anxiety levels as they know what to expect. In contrast to the research findings, Barry, Sidoti, Briggs, Reiter and Lindsey (2017:2) assert that adolescents who struggle with feelings of isolation,

melancholy, or anxiety prefer to communicate with others in less direct ways, via social media. The researcher is however of the opinion that the perspectives shared by participants 1 and 3 above, are indicative that they utilised social media more for the identification and management of anxiety, than necessarily avoiding face-to-face interaction with peers.

It was also evident that participants experienced positive **social effects** from their social media use during adolescence. This was described in the following manner by participant 1 regarding her reflection of the advantages that social media hold for individuals: "*It's a language that's more than words, but it's also like a self-dialogue as well.*"

The researcher is of the understanding that the statement by participant 1 was indicative that social media use allows for communication to take place in written, visual, audio, and audio-visual forms; making it easier for adolescents to communicate their feelings and views in a manner that resonates with them. The statement by participant 1 also indicates that social media allows for a self-dialogue to take place, allowing for emotional recognition and regulation to take place. As coined by Blumberg et al. (2016:110), the use of written communication encourages self-regulatory behaviours such as self-organisation and the reflection of individual behaviour as a reaction to feedback received from others via social media. The following statements by other participants furthermore describe the positive social effects that social media use during adolescence afforded them:

"I think I had a lot of friends that I met through social media, and it was also a means of keeping in touch. If you met someone new, you went and added them on Facebook or Instagram, and then you were instantly friends, and you could keep in touch." – Participant 1

"Twitter actually brought me, my nephew, and my cousin closer together because we created accounts, followed each other, sent posts to each other, and stuff like that." − Participant 3

"It just helped me get to know my friends better, and then when we get to school, we can talk about the subject that we talked about that day. It made me and my friend's bond stronger through the time he was there and everything. So, I'll say it helped me and, I could at least communicate with my parents, and it didn't feel like they threw me away or anything." − Participant 9

As evident from the contributions made by three participants, social media assisted all of them socially during adolescence and added to their peer group experience. This coincides with the stage of adolescent development, as adolescents have been found to place a high value on friendship. Rathus (2017:527) emphasises that adolescent peer groups provide socio-emotional and physical support, and that adolescents start to long for independence from

parents or caregivers.

Participants 4 and 5 were still adolescents during the COVID-19 pandemic and had the following opinions on how social media assisted them socially when there was a national lockdown in 2020:

"It made it better. It improved the relationships, if I can say that, because then I got to talk to them more, through WhatsApp instead of calling. I have Wi-Fi at home, so I can just text you, WhatsApp call you, or video call you, if I miss you during lockdown. So, it was just easier. I wasn't going to be able to communicate, because now I can't come and see you. So, it would have been harder, and I think the relationships are going to decline a bit because we haven't spoken in like 5 months, so it takes a toll on the relationship." − Participant 4

"With friends, it was a positive thing because, now you're given more ways to communicate. So, when we go out from school, it's not the end of the conversation. I can always text you when I'm at home. Hey, remember the topic we were talking about and so on and so forth. I can video call you, especially when it was in lockdown. There was a very big advantage because you could see your friends. You wouldn't necessarily feel as lonely, because you were still communicating with the people that were close to you." − Participant 5

These statements concur with literature, which asserts that adolescents utilise the internet and social media to alleviate the negative effects of stress and feelings of isolation (Blumberg et al., 2016:110). In addition, social media was regarded as helpful for the general public in maintaining communication with friends and family in order to reduce feelings of isolation and boredom during the COVID-19 pandemic. As a result, the use of social media became an important recommendation for reducing the psychological impact of isolation at home (González-Padilla & Tortolero-Blanco, 2020:120, 121).

According to the findings of the current study and as stipulated by Blumberg et al. (2016:160), online interaction through social media can be regarded as a positive social venue for adolescents, as it has the potential to encourage a positive sense of self, allow for the development of new friendships, and facilitate closer relationships with existing friends, particularly among older adolescents (Blumberg et al., 2016:106). With this in mind, the techno-subsystem that is added as another separate microsystem, reinforces an additional zone of interaction with both living and non-living components of communication, information, and recreation technologies in the immediate or indirect ecological environments of children (Johnson & Puplampu, 2008 in O'Neill, 2015:40).

In addition to the positive emotional and social effects that using social media during adolescence had on the lives and development of participants, the researcher also found that using social media during adolescence had positive **cognitive effects**:

"*Education. Worldliness. I don't know if that's a word. I could see what people were doing overseas. I could see what the person on YouTube I watched who was in the UK, was like."* – Participant 1

"I think learning more about other things in the world, such as cultures and religions, is important because at home you are taught a certain thing and you grow up knowing about that, and you don't know about anything else around you. So, I think social media opened me up to that. It exposed me to other cultures around the world, other religions as well, and it made me even more understanding when I met a person from a different religion." – Participant 5

"I experienced good advantages because I could do research. You could look up on things, I could teach myself things that other people don't necessarily know about or are interested in. For example, if you're interested in painting flowers, you can simply conduct research on how to begin painting or drawing flowers. As a teenager, I believe you can simply build yourself up." – Participant 6

The theoretical framework underpinning the study is prevalent in the statements by the participants above, as the cognitive benefits shared by participants are indicative of macrosystem interaction. This is especially evident from the statement made by participant 5, which indicated that she was "opened up" to avenues of exploration outside of her micro- and mesosystems via the use of social media. This is once again explained by Fulantelli and Taibi (2021:151) as the macrosystem being passed down from one generation to the next through information distribution, usability, and socialisation processes that are enabled by the vast internet environment and the inner-workings of ideas and behaviours that make up the individual macrosystems.

The researcher furthermore found that the cognitive gains provided by social media use are not only relevant to the macrosystem of adolescents but also relate to the chronosystem, as transformations in the chronosystem can be brought about by either the child's own disposition or by the conditions of their environment (Berk, 2013:29). As children get older, they are responsible for a greater proportion of their own experiences and settings because of external factors such as the possibilities offered to them by their surroundings and the characteristics that they themselves possess (Fulantelli & Taibi, 2021:151). The above is made possible due

to the vast expanse of social media and the freedom of exploration that individuals have on the internet and inherently on social media.

Social media can furthermore be used by adolescents to boost their learning opportunities since they enable individuals to gain access to nearly any material beyond the classroom and the consumer's social life and allows for the exchange of information on homework, assignments, and projects, as described by participants 5 and 6. The use of social media further fosters inventiveness and provides possibilities for reading, by providing individuals access to sources containing inspiration for the development of new ideas and projects, as well as providing consumers with daily access to current news and occurrences. As a result, educational institutions and classrooms around the world have started to make positive use of social media, as these platforms provide individuals with the opportunity to communicate with one another and share course material online (Westerman et al., 2016:56). The above is comparable to what was seen in 2020 because of the COVID-19 pandemic, as evidenced by the statement by participant 5 below:

"For me, it had a very positive effect on my schoolwork because before COVID-19 and the whole Google Classroom thing and YouTube and WhatsApp groups, being in a classroom environment, there are a lot of distractions. Especially for me. I pick up on things easily, and I get distracted very easily. So, when someone is talking behind me, my focus will shift from a teacher to that conversation, and I always felt that was one of my biggest weaknesses. Moving from there to online was better for me because now there aren't distractions. Although when you got to YouTube, there was that one video that would pop up and you'd be like, "Let me just watch this for a second," but I think it was a very huge advantage for me personally." − Participant 5

The findings of the current study also play into theory surrounding adolescent brain development which the researcher identified from the following statement by participant 6:

"I would say a positive one, because, like when I need to study, I know how to put it away. I know how to just put it somewhere and say: "Okay, it's not going to run away." It doesn't have feet. I will get back to it, and then I can focus. But also, it's a mindset that I need to change from when I was a teenager, especially. You will be like, "Oh, this person messaged me." But, as you will know, you will have to do your schoolwork. So, I just needed to tell myself, "It's just a phone; it's just social media." It won't run away. It's still here even though we get older, so we just need to adapt to that way of life. Do something else even though you know you need to answer this person but do your schoolwork because that's priority for you now." − Participant 6

As evidenced from the above and in accordance with the cognitive development hypothesis, Davel (2017:32) states that early exposure to ICTs facilitates the development of mental skills and that the vast opportunities provided by social media enhance adolescents' ability to execute rapid mental switching and scanning. Therefore, the amount of time children and adolescents spend using digital technologies may influence their brain development, given that the usage of ICTs requires attention, the evaluation of incentives, and impulse control (Davel, 2017:23).

Although not as varied as the emotional, social, and cognitive gains that have been identified throughout the dataset of the current study, the researcher is of the notion that participants also experienced positive **physical effects** from their social media use during adolescence. The positive physical effects are depicted in the following reflections by participant 2:

"I do think that it did change me. Even though... okay, so let me put it this way. It changed me positively because it put me into a better habit. It got me motivated, or at least at that stage, not fully motivated, but I wanted to do something about the topic [referring to obesity]*. So, there was that positive in it. It guided me into a healthier lifestyle, and healthier way of living, and all of those things."* – Participant 2

"Yes, different perspectives, and even though I might have a certain view on it, just pushing me in that direction. I knew I was overweight, and I wanted to lose weight. But my parents were also overweight. My brother was overweight, so there was nothing that pushed us, or me, or my brother to move forward. Social media was that for me." – Participant 2

As evidenced by the statements of participant 2, he was able to obtain exposure to motivational content outside of his familial microsystem, where his family members also struggled with weight management and could thus not support him in his longing to change his lifestyle. Accordingly, social media has been noted to promote interventions relating to health and behaviour change and is thus available to adolescents who do not have access to generic health intervention programmes (Ramo et al., 2019:12), or in the case of this specific participant, are not able to draw from their familial microsystem for support and guidance. According to Kordan and Itani (2013:16), social media has been found to be effective in encouraging behavioural and health-related changes in individuals.

In agreement with the findings of the current research study, literature has indicated that the numerous advantages that social media use holds are believed to have quickly become some of the most popular tools for health promotion worldwide. The advantages, as also discussed in this section, include the following aspects: The use of social media serves as a conduit for social support and makes it easier for individuals to feel connected to one another. It enables

the dissemination of communication and information that is consumer-centric and consumer-controlled, allowing anonymity or personal connection depending on what is desired, and can be an affordable approach to reaching large audiences despite the distance between them (Kordan & Itani, 2013:16). The widespread adoption of social media across all sociodemographic subgroups was furthermore identified as the most noteworthy development in providing individuals with educational and motivational content relating to health topics (Kordan & Itani, 2013:16). The researcher will present the negative effects of social media use during adolescence in the following sub-theme and will accordingly also focus on the emotional, social, cognitive, and physical effects that negatively impacted participants.

Sub-theme 2.2: Negative effects of social media use

Apart from all the positive effects of social media use that have been discussed above, participants also shared their views regarding the negative effects that they experienced because of social media use during adolescence, especially as depicted by participant 2: *"*I was never and still am not a big fan of social media*. I don't like social media. I think it causes more harm than good."*

The researcher found some of the negative effects identified by literature to include a shortened attention span, an ongoing need for entertainment, increased anxiety, exposure to bullying, negative peer pressure, and a lower sense of self-esteem (Vițelar, 2019:263). In this section of the research report, the researcher discusses the emotional, social, cognitive, and physical effects of social media use that negatively affected participants during adolescence. Participants identified the following negative emotional effects that they experienced due to their social media use during adolescence:

"It triggered a lot in my life [Instagram], *and I wanted to bring that in because of what happened in grade eleven. At that time, there was a transition when I realised, I wasn't getting likes, and some people thought I was weird. So, then I changed over, and I started taking a lot of selfies like my friends were, and then I had this whole identity crisis, and I went to a psychologist because I was so upset."* – Participant 1

"It's an emotional thing for kids. Social media is an extremely emotional thing. It was an emotional experience for me because there was always someone who had something better, and you didn't." − Participant 2

"When you use applications where you see people all the time, I think it takes away the important feeling of going out and meeting people because you see them every day online. You see happy people every day. Then you look at your own life. You say, "Why aren't I happy every day?" – Participant 3

"Like I said, it also has a bad effect because there are people who just make a joke out of mental health, so that just makes me feel as if I can't show that, you know, I'm struggling with this, and I can't communicate with other people because it's seen as a weakness of some sort. I think that really messed with me, and I think that also made me very closed off. So, I don't talk about my emotions as much because of what I see on social media when someone says, "You know, I'm going through this and that." They will, if you look at the comment sections, there will be a lot of people being like no, you're just being weak. You're just being a baby, and so on. So, it just made me very closed off." – Participant 5

As described by numerous participants, social media use during adolescence had an individualised **emotional effect** on each of them. Participant 1 felt the need to change the content that she posted on social media in order to gain acceptance from her peers, causing an emotional low, whereas participant 2 was emotionally affected when being exposed to what other individuals have and necessarily exposing what he does not have. The statements of participants 3 and 5 also indicated that social media use made them wonder about their own happiness, and in the case of participant 5, they caused her to purposefully not post any emotional content on social media to protect herself from the potential emotional harm from others. The above was termed by literature to be the "happiness illusion" that is caused by social media use, as it places pressure on young individuals to generate impressions and appearances that are inconsistent with reality (Hendricks & Kanjiri, 2021:8). This is consistent with the findings of Verduyn et al. (2017, in Hendricks & Kanjiri, 2021:8) who contended that social media use enables consumers to present themselves in a more idealised manner than reality would reveal.

As evidenced by literature, adolescents have been identified as being among the most susceptible individuals in society when it comes to the risks associated with using the internet and social media. In addition to this, both their self-regulatory mechanisms and emotional regulation are still in the process of developing, and more individuals are turning to the internet on a daily basis for the fulfilment of their information needs. Adolescents, on the other hand, do not have a fully developed capacity for self-regulation (Throuvala et al., 2019:4), thus explaining the emotional effect that social media use had on participants during their adolescent years.

Additionally, and as with the case of participant 1 above, an increase in the level of mental distress and the need for treatment for mental health disorders have been found amongst young individuals over the past decade (Abi-Jaoude, Naylor & Pignatiello 2020:136). Participant 2 furthermore voiced that social media use worsened his depression and anxiety during adolescence: *"I deleted the and stayed off the app. Because when I see people having*

fun, especially during my adolescent stage, that placed me into a worsened state of depression, which just worsened my depression and pushed my anxiety levels through the roof. So, then I'd just delete the app and stay off it for two or three weeks. Then I see that we must go back to school, especially when it was during the holidays, and everybody has to go back to school. I would then reactivate my account because I knew were all stuck in the same boat now. It's not like anyone's going on holiday. That's what I did."

According to Woods and Scott (2016:45), the emotional investment that is placed on social media and the overall use thereof have been associated with anxiety, depression, low self-esteem, and sleep deprivation. Individuals who spend their time on social media, engaging in negative interactions, such as discussing difficult topics, have been found to have a higher level of depression (Berryman, 2014:3), as also described by participant 2. In addition, participant 5 also struggled with anxiety during adolescence and therefore avoided social media. This seemed to have more of a negative social effect on her relationships with others, as evidenced by the following statement: *"It made me closed off. I wouldn't go on Instagram. I wouldn't even speak to people on WhatsApp. I would just look at the messages on the notification bar and just ignore them. I think that also had an impact on my relationships with people, because now they're thinking, "She's being rude; she's ignoring me."*

The following statements made by participants describe the negative **social effects** that they experienced during adolescence because of their social media use:

"It's a social buffer. I am a stickler for being early to social events. I would always show up five minutes early. My friends would always be late, so then I would stand there not knowing anyone, but I still don't want to introduce myself to anyone. So, I would just stand there on my phone." − Participant 1

"A lot of people had relationships over WhatsApp when I was younger; we called it a phone relationship. You would only talk to the person over the phone, and you would never go chat with them in person. You would be scared to talk to them in person. I don't know; for us, it was always like if you talked to them too much over the phone, you weren't going to be able to talk to them in person. It was a huge thing for us." − Participant 1

"I think the only negative aspect is that it takes away time that you could be spending with your parents or with your family. Because instead of going to the living room and sitting and chatting with them or going to sit in the kitchen while they're making food and chatting to them, I would just lay on the bed and scroll through Instagram and Twitter or chat with my friends on WhatsApp." − Participant 3

"They even make technology more convenient for you to check who is texting you. But to be honest, it's making you more and more disconnected from your family and your friends. There are days where I feel like I want to make new friends, and I already have a lot of friends. I just feel like they're not as interesting as they were at the beginning. Now I need something new. I don't know about back then, but now the power we have with social media breaks the relationships we have with our partners. Because it's simple for me to find a picture of a new girl who's fascinating, and it's just a filter, and I then think it's this amazing person. But it's just a filter." − Participant 8

"I'm going to say it had a negative effect because I didn't know how to communicate with people. Sometimes I still don't know how to communicate with people, and I find it difficult." − Participant 9

It is evident from the statements above that the participants also experienced negative social effects with regards to social media use, including using these platforms as a 'social buffer' when surrounded by individuals whom they did not know (participant 1). The researcher found this 'social buffer' to be similar to phubbing, which is the act of paying attention to one's phone while in the company of other individuals and has been dubbed to describe the increasingly common practise among young individuals where they interact with one another on their phones while in the same room as other individuals (Abi-Jaoude et al., 2020:137).

Participants further reported feeling disconnected from those around them (participant 3); struggling to communicate with individuals in person (participant 9); feeling confused with how much one communicates with another virtually; and feeling uncertain when seeing that person in real life (participant 1). As indicated by participants 3 and 8 above they felt that social media created a divide between them and their parents; accordingly, literature has found that social media use can create disturbances in family life and parent-adolescent relationships, leading to conflict. According to Spies Shapiro & Margolin (2014:2) family life and relationships are becoming separated and revolve around social media. The researcher is of the opinion that this phenomenon is ironic in nature, as social media provides communication opportunities while decreasing contact with those who are closest and most accessible.

The researcher found that the social compensation theory best described the experience of participant 9, who said, "*I didn't know how to communicate with people."* According to the social compensation theory, it is likely that online communication will be used for social compensation and social facilitation to make up for a lack of social skills or issues with peer face-to-face contacts and peer disengagement. This is because online communication allows for greater anonymity than face-to-face interactions (Throuvala et al., 2019:6). In addition to

the various negative social effects discussed above, two participants also voiced how social media use caused confusion with regards to the communication that they received and sent to others:

"It was more like he hid behind messages, and then when I got home, he'd pretended the message didn't exist." − Participant 1

"Yes, but as you get older, you realise that WhatsApp can make you to miscommunicate with someone. It's difficult to know what the other person on the other side of the phone feels or does, or if they're busy. So, when you communicate with that person, the first thing you do if they don't reply is think that they are angry at you, or you did something wrong, and then it makes you to miscommunicate." − Participant 7

As a result, literature claims that social media provides a highly intimate setting in which social context indicators such as a person's appearance and facial expressions are always unavailable (Arnett, 2016:366). The researcher is of the view that a contributing factor to the above uncertainty can be attributed to the cognitive development theory, which asserts that the development of adolescent self-consciousness is caused by distorted thinking patterns during adolescence, causing adolescents to become more aware of those around them. This also links to the creation of an imaginary audience, which arises due to the poor ability of adolescents to discriminate between their own thoughts and those of others (Arnett, 2016:366). In addition, adolescents perceive the possibility of others reading and interacting with their postings because of the over attribution of an imaginary audience being present in the mediated environment. As a result, individuals are more likely to engage in inappropriate behaviour when using social media (Shao, Shi & Zhang, 2021:4). Concurrent to literature, social media use had a negative effect on the cognitive development and functioning of participants, as evidenced by the following statements:

"Social media had a negative effect on my schoolwork, because it took up a lot of my time and didn't allow me to do the necessary amount of work that I was supposed to do. Because social media placed me in a more depressed state than normal, that also affected my effectiveness at schoolwork. I became sleepy, so I'd go sleep earlier at night, doing less work. I'd fall behind in my homework. So, social media often had a very negative impact on my schoolwork." − Participant 2

"When I got Instagram, I loved it. I spent hours on it. Then for a while I left it because it was consuming my time too much, distracting me from my schoolwork, and making me introverted." − Participant 7

"I was negatively affected because my uncle was fighting with me a lot. Then he took away my phone for the time we were writing exams, and we had to learn." − Participant 9

"There is no solution, because all you are doing is punishing the child by taking the phone away for two months. So, you just tell yourself, "After two months, I'm going to get the phone back, and I will be back to whatever I was doing." − Participant 10

The findings above indicate that participants struggled to find a balance between schoolwork and using their mobile devices to access social media, as coined by participant 8: "*I would not study and would be on my phone and it was a waste of time".* This disruption in schoolwork may have a negative impact on the cognitive development of adolescents, as social media seems to keep them away from completing their schoolwork, as clearly stated by three participants.

Adolescents unfortunately do not have access to executive brain functions such as impulse control and self-regulation, and their ability to think ahead of time has not fully matured at this stage (Young & de Abreu, 2017:4). Access to the internet and the opportunities for virtual communication that come along with it thus make it easier for adolescents to develop patterns of behaviour that are addictive and obsessive, which may have a negative influence on an adolescent's ability to interact socially and perform well in school (Salmela-Aro et al., 2017:343). Furthermore, adolescents who have more trouble paying attention or controlling their impulses may be lured to the format of communicating with other people that is provided by social media since it is quick and easy to access (Barry et al., 2017:2), thus confirming the views of participants.

In addition, millennials are more likely to develop problematic internet use due to their lack of self-control, which can be defined as the capacity to resist an inclination, drive, or temptation to carry out an action (Wang et al., 2013:63). As a result, millennials have a higher risk of developing problematic internet use (Berk, 2013:257). To their credit, as time passes, adolescents are able to gain wisdom from both their successes and their failures, acquire information about the factors that influence decision-making from others, and think critically about the ways in which they arrive at their conclusions (Berk, 2013:257). In line with the literature above, participant 8 struggled to study during adolescence, deeming his social media use *"a waste of time."* Further along in his statement, participant 8 affirmed the above with the following words: "*I became mature and in varsity and I was independent. I could put my phone down and say, "Okay, it's time for me to study." It took time though."*

The two participants who were still at school during the peak of the COVID-19 pandemic experienced difficulties in studying timeously, as they did not know when they would be able to return to school. However, when they knew that they would be returning soon, they employed self-discipline to catch-up on their schoolwork, as depicted below:

"I believe it was three weeks before they said we could return to contact learning, and then I was like, "Okay, now I have to push my schoolwork." So that's when I spent less time on my cell phone and more on books." − Participant 4

"Very, because I always thought, what if I'm missing out on a trend? Because I would delete the app [TikTok] *and then think, "Wait, what if I'm missing out on a certain trend?" Then I would go and re-download it."* − Participant 5

As seen above, participant 5 tried to delete TikTok in the hope that she would be able to focus on her schoolwork. Unfortunately, she succumbed to what literature has found in the field of social media behaviour and has characterised as 'the fear of missing out' (FOMO). FOMO refers to the feeling that one is absent from something that other individuals are participating in or experiencing, "the need to stay consistently linked with what others are experiencing" (Fabris, Marengo, Longobardi & Settanni, 2020:1, 2). FOMO furthermore results in anguish surrounding the prospect that other individuals are having valuable experiences while the individual in question is missing out on them, thus leading to increased levels of participation on social media (Barry et al., 2017:2; Fabris et al., 2020:1, 2). The fear of missing out can be understood through the lens of the self-determination theory, particularly in relation to the psychological need for connectedness with other people as a component of efficient self-regulation and psychological well-being (Fabris et al., 2020: 1, 2). This fear of being left out can have a negative influence on an adolescent's self-esteem and cause sleep disruptions, as well as feelings of anxiety and even depression (Bryant, 2018:18), which links to the negative **physical effects** that participants experienced during adolescence.

Although minimal, two participants identified how social media use affected them negatively with regards to their physical activity and their physical perception of themselves, as evidenced below:

"It took a lot of my time. It would spike my dopamine, and then when I'm done, I don't have the need or the attraction to go do something practical like go to the gym or go for a workout, go for a walk, or something like that because I already received the dopamine from the social media app. So, my brain won't trigger, and it won't tell me to go do something practical where you can be proud of yourself." − Participant 3

"I've been very emotional, and with my health, I've been "fluffy" all my life. I was never happy about how I looked or appeared to other people. I always thought, "What is that person going to think of me?" and then I would just hide in my shell again, behind my shield." − Participant 9

The researcher found the experiences of the participants to differ from each other, as participant 3 could not motivate himself to be active when indulging in social media use, while participant 9 developed low self-esteem as a result of his physical appearance and was scared to share any photographs of himself on social media. In concurrence with the abovementioned findings, the researcher found that there is some literature that suggests that there is a general connection between the use of social media by adolescents and unfavourable health markers, such as difficulties sleeping, sadness, anxiety, and a decrease in self-esteem (Woods & Scott, 2016:43; Barry et al., 2017:1).

The physical development of adolescents, which encompasses all characteristics of the human body that are visible to the naked eye, is one of the spheres in which social media use have the potential to be disadvantageous. An individual's changing view of their own body is referred to as body image. It is not static but can change in terms of mood, physical experience, and environment. It includes how the body looks, feels, and moves. It is moulded by perception, emotions, and physical sensations. Adolescence is a time of many physical changes brought on by puberty; these changes can influence how individuals view their bodies. Because of all these changes, adolescence is a particularly vulnerable phase, and it is easy for impressions of the body to have an effect on both confidence and self-esteem during this time (Bryant, 2018:7), as was the case with participant 9.

Participant 9 struggled both with low self-esteem, as discussed above, and insomnia, as depicted in the following statement: *"I'll stay awake in the evenings, and when I go to sleep, I think about it."* Accordingly, literature stipulates that insomnia and extended lengths of time spent on social media may potentially play a role in the development of obesity in adolescents (Barth, 2015:206; Spies Shapiro & Margolin, 2014:3), adding to the low self-esteem predicament of participant 9. In addition, it has been discovered that the use of social media causes sleep disruptions, which in turn cause sadness, anxiety, and low self-esteem (Rathus, 2017:472).

The sleeping pattern of participant 8 was also affected by his social media use during adolescence, and upon reflection, he believed that it still had a negative effect on him as a young adult, as indicated in the following statement: *"Sleep definitely. Now I suffer from insomnia because I was supposed to go to bed at like 9, but I'm still up at 1 in the morning*

and I'm holding my phone. Back then, the phones didn't have blue light filters. So, I think I've damaged my eyes to a certain extent."

Research asserts that sufficient sleep is a biological requirement that is essential for coping with the rapid biological changes that occur during puberty; however, surveys indicate that most adolescents get, on average, less than seven hours of sleep each school night. They report feeling tired during both school and extracurricular activities, thus affecting cognitive and physical development (Rathus, 2017:472). Due to the chaotic schedules that include after-school jobs and activities, homework, family duties, and evening or late-night emailing, texting, and chatting with friends, it can be challenging for adolescents to get sufficient sleep (Rathus, 2017:472), as was also evident in the research findings of this study.

The following statement by participant 10 can be regarded as a culmination of both the positive and negative effects that social media use hold for adolescents. It is indicative of how adolescents develop towards their journey to adulthood and how both positive and negative experiences seem to shape who they become: *"To be aware of your surroundings is important and to not just believe anything. I feel like for me, it built my confidence. At some point, I noticed that the world was not going to be filled with cupcakes and sweets. It's never going to be. We're not going to sit around and look at it and be like, "Oh, this is nice though." There is going to be bad stuff like with the stuff that we are taught, but until you experience it you don't know. You don't know until you're in the situation. I've been in that situation with social media. Somewhere it built my self-confidence."*

In the following theme, focus is placed on the influence that social media use and exposure may have on adolescent development in the spheres of identity development, self-esteem, peer pressure, and moral development within a milieu of prominent social media use and exposure.

3.8.2.3 Theme 3: Factors influencing adolescent development in a milieu of prominent social media use and exposure

According to Glover and Fitch (2018:172), it is important for professionals to be aware of the possible effects and risks involved in the use of all digital technology. With the above in mind, it is imperative for the researcher to place focus on how social media use can affect adolescent development.

The researcher is of the opinion that the development of an adolescent's identity can be considered an important task associated with their use of the internet, with this task being

facilitated by the adolescent's ability to connect with others to distinguish role confusion from the process of identity formation (Erickson, 1968 in Throuvala et al., 2019:4). The formation and maintenance of friendships, in addition to the supply of social support for the growth of behaviours, aspirations, and attitudes, can all be made easier when using social media. By using social media as a model for their own identity and by acting as a model for the identities of others, adolescents put themselves in a position where they are subject to the peer review that is necessary for the construction of an identity, the establishment of a social reality, and the negotiation of a status (Throuvala et al., 2019:4).

Based on the above, it is the researcher's opinion that self-esteem, peer pressure and moral development have an influence on identity development during adolescence. The influence that social media use has on each of these elements will be discussed in the sub-themes to follow.

Sub-theme 3.1: Influence of social media use on self-esteem

According to Rosenberg and Rosenberg (1979, in Alblooshi, 2015:9), self-esteem can be defined as an overall favourable or unfavourable opinion of oneself. The following statements from participants are indicative of the influence or effect that social media use had on the social status and thus self-esteem of participants during adolescence:

"If you posted something with someone who people thought were cool, then it was like huge. Then, when you are with your friends, they'd be like, "Oh, you were invited to that party?" – Participant 1

"We determined our status amongst each other through means of social media. As teens, we all did it; the whole school did it. The more likes you got, the more popular you were." − Participant 2

"I compared a lot. If I didn't get the likes I wanted, then I'd be like, "You're not good enough." I had bad self-esteem, and then, for me always wanting to fit in, I didn't like that, because then I didn't fit in." – Participant 1

From the statements above, the researcher is of the view that it can be understood that the level of self-esteem of the participants was highly dependent on who they were friends with, and with whom they were seen on social media, as asserted by participants 1 and 2.

In accordance with the findings stated above, Davel (2017:34) asserts that the need to belong is a moderating factor in the relationship between self-esteem and social media use. Although this might seem like a negative aspect, other research studies were found which concluded

that individuals who have inherently low self-esteem may find that using social media as a means of interpersonal communication, were provided with an opportunity to engage in public behaviour with a reduced risk of humiliation and reduced levels of social anxiety. This can be one way in which people's needs for positive self-esteem can be satisfied (Alblooshi, 2015:9). However, evidence also suggests a vulnerability to self-image criticism and peer comparisons, as both have the potential to cause a low sense of self-worth, which could then raise the risk of developing eating disorders, depression, and obesity (Throuvala et al., 2019:4).

According to the findings of a study that was conducted by the University of Salford in the United Kingdom regarding the effects of social media use on self-esteem and anxiety, fifty percent of the participants admitted that their use of social media has caused their lives to become more difficult. According to the findings of that study, the participants admitted that it influenced their sense of self-worth whenever they evaluated their achievements in relation to those of their online acquaintances (Alblooshi, 2015:9), as also stated by participant 2 above. In the same vein there is a substantial potential of adolescents comparing themselves to influential members of society on social media, and adolescents can then fail to develop naturally as themselves and instead succumb to peer pressure-induced wants, resulting in an identity crisis (Hendricks & Kanjiri, 2021:8).

To explain the varied viewpoints and findings from literature and to ascertain whether social media use has a positive or negative correlation with adolescent self-esteem, the researcher found the following theory to explain the above. According to Leary and Baumeister's (2000, in Throuvala et al., 2019:6) sociometer theory, an individual's level of self-esteem is a direct outcome of the relational value and the degree of social acceptance that they experience inside their own unique social context. These relational benefits in using social media have been scientifically demonstrated but is influenced by a variety of other individual variables, such as having a strong purpose in life and having high self-esteem (Throuvala et al., 2019:6). The effect that social media use has on adolescent self-esteem can thus be mediated by the type of content that individuals are exposed to in their microsystems. The researcher also found a link to exist between the self-esteem of participants and taking selfies, as evidenced by the following statements made by participants:

“Sometimes, I wouldn’t say all the time. If I did take a selfie, then I would sit and zoom and then nit-pick. I think overall, taking selfies of yourself can make your self-esteem worse.” – Participant 1

“I don't like it at all because it can be very bad for a person’s self-esteem, especially when a person is very vulnerable. So, you would put up a picture on social media expecting to get 500

likes, and then you just get 10 likes, and then you're thinking: "What's wrong with this picture?" Is there something wrong with me? What happened?" Then there is also the thing of competition as well, so you always want to compare yourself to other people. You always want to be better than other people. I don't think that's a good thing, because now you're not being yourself anymore. You're turning yourself into other people because you want to be better than them." − Participant 5

"I wanted to take a picture every minute of the day, if I felt like I was pretty or something" − Participant 10

The findings from participants presented above were once again varied, indicating that it depended on the reaction that participants received from the selfies that they took and the reaction that they received when posting the pictures on social media, thus indicating that the feedback received from individuals in their micro- and mesosystems regarding the selfies that were posted had a direct effect on their self-esteem.

This relates to literature that has found profiles on social media and other online platforms to often be carefully constructed to create an idealised self-image, which allows for unrealistic comparisons to occur between the media image and the real self. Consequently, this may result in an individual developing a distorted view of how their peers look and what they are doing (Glover & Fitch, 2018:174). As a direct effect of this seemingly self-centred phenomenon, the comparisons have the potential to bring about feelings of worry, low self-esteem, and self-consciousness if still not accepted by the individual peer group (Glover & Fitch, 2018:174; Kelly et al., 2018:60).

Research related to individuals who have poor self-esteem has shown that these individuals tend to be more involved with the trend of taking selfies as well as the use of social media to mediate their interpersonal contact to fulfil their self-esteem needs. Literature indicates that the above is because individuals with low self-esteem tend to feel the need to fulfil their self-esteem demands (Alblooshi, 2015:1). Evidence for the above assertion was provided by Blades (2014, in Alblooshi, 2015:1), who reported on research with the goal of determining whether or not there is a correlation between the number of selfies an individual takes and their level of self-esteem. In that study, there were a total of 2,071 participants from the United Kingdom. According to the findings of that study, 39 percent of the participants preferred taking pictures of themselves as opposed to their families, partners, or pets; and they admitted to having judgmental inhibitions and concerns about their physical attributes. When asked how they felt about their appearance and relationships, only 13 percent of the participants mentioned that they felt confident in their own skin, and 60 percent admitted to having low

self-esteem. Therefore, it may be deduced that the number of selfies taken and one's degree of self-esteem were indirectly connected with one another (Blades, 2014 in Alblooshi, 2015:1).

In addition to the effects that the individual experience has on adolescent self-esteem in terms of social status, social acceptance, and an inherently shaped perception of the self (Alblooshi, 2015:1), the researcher found that the overall emotional status of participants had an effect on how feedback from social media was assimilated individually, as evidenced by the following statements of participants:

"I've never been depressed because I think I have always been ahead of my time. So, I was the cool kid, so I did not need to trend on social media to be cool." – Participant 8

"It depends on how emotionally strong you are. It depends on things that comes from inside yourself - confidence, self-love, self-worth - all those kinds of things. It all starts with you. So, if you now want to go on social media, knowing that you're not strong enough, people are always going to try to bring you down, whether you like it or not." – Participant 10

Individual emotional health, as stated above by participant 10, has a direct influence on adolescent self-esteem, as does the effect that social media use has on individual self-esteem. According to literature, the uncontrolled merging of face-to-face and online networks does not benefit the most emotionally sensitive individuals (Arnett, 2016:366). Individuals who are vulnerable offline can thus be thought to be more at risk of being harmed because of their participation in online activities; and just as offline and online social media platforms converge, so do offline and online problems (Arnett, 2016:366).

The researcher has found adolescent self-esteem to also be directly connected to the cognitive development that takes place during adolescence, especially in terms of the distorted thinking patterns that have been noted in literature regarding this developmental stage, across decades (Arnett, 2016:366). The development of distorted thinking patterns in adolescents contributes to the development of adolescent self-consciousness, and these patterns cause adolescents to become more aware of others who are in their immediate environment (Arnett, 2016:366), as evident from the statement by participant 5: "*Then there is also the thing of competition as well, so you always want to compare yourself to other people. You always want to be better than other people."*

A frequently used distorted thinking pattern that leads to adolescents assuming that everyone is always paying close attention to what they say and do is that of an 'imaginary audience', which emerges because of the limited capacity of adolescents to differentiate between their own thoughts and the thoughts of others. Adolescents have been noted to spend a

disproportionate amount of time contemplating their own thoughts and are thought to be acutely aware of how they come across to others. Adolescents thus incorrectly assume that others are doing the same thing and tend to have an inflated view of how others perceive them, which leads to them creating a picture of a roaring reaction for their appearance and behaviour (Arnett, 2016:366). This is especially evident when the statements by participants 8 and 10 are taken into account. Participant 8 thought himself to be ahead of his time, which in the opinion of the researcher indicates that he thought himself to be above his peers, whereas participant 10 felt that it is an individual's responsibility to know how strong they are because there will always be others that exert a negative influence on them.

As discussed in the literature review, the influence of one's parents and other carers wanes during adolescence, whilst the influence of one's peer groups grow (Berk, 2013:579; Crone & Konijn, 2018:1). Therefore, the influence and viewpoints of an individual's peers are instinctively regarded as being more significant than those of one's parents or primary carers (Berk, 2013:577, 579). However, support from both parents and peers is essential for the growth of an adolescent's self-esteem during this formative period (Berk, 2013:461; Rathus, 2017:522). Adolescents who have the perception that they are supported by their family and friends are therefore more likely to have positive feelings about themselves than those who have the perception that they are not supported, which is beneficial for the process of identity building (Berk, 2013:461). In the following sub-theme, the influence of peer pressure on social media use during adolescence will be described.

Sub-theme 3.2: Influence of peer pressure on social media use

Peer pressure can be defined as the act of one individual exerting influence over another individual (Gil, Dwivedi & Johnson, 2017:85). The following statements by participants are indicative of how they experienced peer pressure during adolescence by means of social media use:

"I think my teenage years were very much like wanting to fit in, so if someone had something, I would get it just because I didn't want to be the only one who didn't have it." – Participant 1

"It was basically just a means of fitting in, I think, because everyone started to get into that. recall that my brother and I used to make our own profiles. We were only allowed to start at 13, but we started logging into our own accounts before we were 13 years old. But it was just to fit in with the rest of the school or the rest of my peers." – Participant 2

"I used to think that peer pressure applied to kids only, but it applies to everybody. In every stage of life, there are people who are going to make bad decisions because of their friends.

As kids, we saw 25-year-olds who posted half-naked pictures on Instagram, and they got 10,000 likes and had men who send them gifts. Some kids thought about that and didn't even focus on school anymore, and they wanted to live that life." – Participant 8

"So, the biggest place where teens get peer pressure is on social media. So, if my contacts see me out at a flashy place where I'm spending money, they'll want to go see it, like: "Okay, so he went here and bought this and this." They will want to go see how much I've spent, and they're going to try and top me off. As a kid, it was even worse because the peer pressure that I experienced was when my friend had the latest shoe. I wanted to get the better one, and I used to import. So, I was putting a lot of pressure on my parents also." – Participant 8

"I started seeing that these are not the people I can hang out with. So, I called my aunt, and I told her what I was going through. I said that it made me feel less of myself, and she said, "What are you looking for, and what makes you feel that you need to have peer pressure towards your age? What is it that they do that makes you feel bad? You go out, drink, and do all of these things, but how does it affect your life?" I think then I started realising that my social media was a problem, and then I was 17. I started noticing that this is not where I need to be." – Participant 10

From the above statements, the researcher deduced that participants turned to the use of social media as a means to fit in, as mentioned above by participants 1 and 2. Therefore, the need to belong, and thus to fit in, is a fundamental human need that influences a wide range of mental, physical, social, economic, and behavioural outcomes. A sense of belonging can thus be defined as the subjective sensation of a deep connection with social groupings, geographical locations, and individual and communal experiences (Allen, Kern, Rozek, McInereney & Slavich, 2021:87). Longaretti (2020:41) furthermore examined school belonging in terms of relational, behavioural, and emotional components, concluding that the core concepts of belonging are being and doing, feeling, or living connection, and acceptance. Both participants 1 and 2 felt pressured to try out different social media applications and even went beyond parental restrictions to create profiles before the age of 13. This seemed to be due to the inherent need to fit in and to be able to say that they also had profiles on the same social media platforms as their peers. A sense of belonging has been identified in literature to have a strong predictive power for the life satisfaction and well-being of young individuals (El Zaatari & Maalouf, 2022:2), thus indicating that it might also have a positive effect on self-esteem.

Participant 8 particularly focused on how peer pressure that was relayed by social media influenced him and his peers to believe that having many followers and 'likes' was important

and influenced which clothing brands and items he requested from his parents. Concurrently, adolescents learn how to behave in a manner that is appropriate for the sociocultural milieu in which they find themselves through the influence of their peers, which is an essential factor throughout this stage of development (Sherman et al., 2016:1028), pointing to the macrosystem influences that culture and society inherently have on the behaviour of developing individuals. The researcher further found that when children reach adolescence, the concept of proper behaviour begins to lose some of its meaning. Belk (1988, in Gil et al., 2017:84) consequently argued that adolescents attempt to define themselves by acquiring and amassing a variety of consumer goods in order to fill in the gaps in their identities. Others, however, conclude that adolescent media and consumer consumption centres on particular "things" that peers use, which are referred to as the "correct things," as a means of fitting into their social circle (Gil et al., 2017:84), which is indicative of microsystem influences. The researcher furthermore found literature to suggest that adolescents need to maintain this precarious equilibrium between their own self-identity and their engagement in society, which may even appear to be in conflict with one another (Gil et al., 2017:84), causing disequilibrium between individual microsystems. Due to this need to conform, adolescents may find themselves adopting values that are consistent with those of their peers and even having quite similar interpretations of the world around them (Gil et al., 2017:84), thus assimilating beliefs and behaviours from their peer and school microsystems into their identities. Peer pressure can thus influence how adolescents dress, the types of music they listen to, and the types of behaviours they engage in, even risky behaviours such as using drugs, smoking cigarettes, drinking alcohol, and engaging in sexual activity (Gil et al., 2017:85). Peer pressure can thus be maladaptive when it leads to the reinforcement of risky behaviours (Sherman et al., 2016:1028), such as underage drinking, as experienced by participant 10.

According to literature, the most intense levels of peer pressure occur during the middle years of adolescence, when most of the physical growth has already occurred (Reis & Youniss, 2004 in Berk, 2014:527). Participant 10 expressed how age affected her final realisation that she was negatively affected on social media by her peers, during adolescence. Adverse peer pressure has been found to influence a developing individual negatively when they are exposed to a group of peers with destructive and anti-social tendencies. Rathus (2017:527) asserts that giving in to peer pressure throughout adolescence may be related to the importance that adolescents place on friendship, as peers provide both social and emotional support, while adolescents simultaneously begin to crave independence from their parents or carers during this time in their lives (Rathus, 2017:527). The risk of a developing individual being influenced by the so-called "wrong" group of friends to participate in anti-social or destructive activities that do not fit in with the moral value system of the nuclear family, as

discussed in the literature review of the current study, is thus a concern that is often shared by the majority of parents and caregivers who have adolescents (Berk, 2014:527). This indicates that the data in the current study can be linked across sub-themes, supporting a sense of unity.

In contrast, the researcher has found Rathus (2017:525) to indicate that the behaviours of adolescents who are friends with one another are very similar. These behaviours include academic goals and accomplishments, ethics and values, interests in sports and culture, as well as dress and music. Positive and deep connections during adolescence also allow for significant progress in the development of a healthy self-concept, psychosocial adjustment, and a healthy level of self-esteem. These are all aspects of development that are most crucial (Rathus, 2017:525). The researcher is of the view that participant 6 already had a strong self-concept during adolescence as she did not allow her peers to influence her negatively. The following reflection by participant 6 is indicative of the above:

"It had a good influence [referring to social media] *because, I don't take anything that's not for me. If there's a problem, I sort it out. So, I won't take it personally. I sorted things out. So, I would say that it had a good influence because it's something that needs to help a person, not break them. As soon as it breaks you, you need to change that pattern, because why would it break you? Why would someone break you down?"* – Participant 6

Campbell et al. (1996, in Gil et al., 2017:86) indicate that adolescents are in the process of forming their adult personalities and identities. Examining one's self-concept is helpful in this regard since it sheds light on the ways in which an adolescent's individuality, through their views and purchase patterns, might be communicated to the outside world, as with participants 6 and 8. The degree to which individuals are consistent in their perceptions of themselves can be measured with a scale, referred to as "self-concept clarity." This is the degree of consistency with which individuals see themselves (Campbell et al., 1996 in Gil et al., 2017:86). A self-concept that has been adequately developed is less likely to be swayed by the opinions or actions of others. Individuals who have a clearer picture of themselves are better able to manage the effects of stress and engage in more physically and mentally healthy behaviours, such as positive self-talk and improved cognitive abilities (Gil et al., 2017:86), as evident from the statement made by participant 6.

Thus, the influence and pressure exerted by peers on social media can either encourage prosocial behaviour or lead to dangerous behaviour (Sherman et al., 2016:1031). It has furthermore been discovered that adolescents are drawn to the idea of self-expression and that this often results in competitive behaviour for attention, both online and face-to-face. This,

in turn, can lead to bolder social and even sexualised behaviour online, which can place adolescents at risk and negatively affect their socio-emotional well-being (Cookingham & Ryan, 2015:2, 3). All the foregoing is especially risky for adolescents because of their immature capacities in terms of both judgement and the ability to self-regulate (Cookingham & Ryan, 2015:2).

In conclusion, the researcher has found that little research has been done on how the characteristics that are specific to social media platforms contribute to peer influence. For instance, face-to-face communication and online communication differ in terms of the quantitative interactions they make possible (Sherman et al., 2016:1028). In contrast to the qualitative nature of face-to-face communication and the element of subjectivity that it entails, many online environments provide entirely quantitative feedback. For example, the ability to 'like' an image, piece of text, or other piece of information is a function that is included in the vast majority of social networking tools. This provides a plain and uncomplicated method of gauging the level of endorsement from one's peers. This quantifiable social endorsement may act as a potent motivation, particularly for adolescents, who are more sensitive to the opinions of their peers (Sherman et al., 2016:1028). In the following sub-theme, the influence of social media use on moral development during adolescence will be discussed.

Sub-theme 3.3: Influence of social media use on moral development

The end-goal of moral development can be regarded as the creation of a self-reliant, accountable individual who sees others as having the same rights and obligations as themselves, who can make reasonable decisions, and who is able to make the best decisions for themselves, society, and the overall natural world (Globokar, 2018:553, 554). A moral personality acts independently, responsibly, and sensibly when making judgements (Globokar, 2018:553, 554). Although not broadly and specifically reported during the data collection process of this study, the researcher did find instances where participants showed insight into their behaviour and were able to reflect on what they experienced because of their activities on social media. The following statements by participants are indicative of the moral growth the researcher was able to identify:

"Yeah, I participated quite a bit. I was part of quite a rude group of girls. And then I would say, sorry for the language, but we were bitchy. After grade seven I realised, my mom had sat me down… I realised who I had become, and my mom would not let me go to the same high school as those girls. So, then I realised I actually had no friends, and I had to work through that to get friends. I hurt a lot of people, so then I changed." – Participant 1

“My family is also very religious, and, in that sense, it wasn't that they told me I couldn't ask these questions, but I just didn't want to. If I found someone that was a negative figure, I would feel guilty watching them.” – Participant 1

"I realised then that now is the time to study. But I think the trigger for me to stand up and go to the fridge is because I would be seeing my phone. I would look at the time. I would open up the phone, unlock it, open up the app, and then I would say, "No, I can't be using this app right now." – Participant 3

“There are certain rappers you can't follow because of profanity, drugs, or alcohol. Then they would expose you to their music, and as a teenager, you're susceptible. You think it's right. Yes, the specific content. I also saw that it wouldn't work for me, but it was based on the moral compass that was instilled in me." – Participant 4

"You have these news channels with Twitter accounts, and they broadcast news into that. Then you have everyone's opinion on how they feel about this or how it affected them. Especially when gender-based violence was rife, then you were like, "Okay, it’s hard out here… We all come from different backgrounds and different religions. Now everyone on social media wants to have an opinion on what's right, which forces you to really sit down in school and think, "Is my life right? Is this religion okay for me? Am I supposed to study this or that and then get false information on top of all of that?" − Participant 4

“I don’t really know, sometimes I would see a video, or I will see something that happened on social media and it will make me sad. So, I will let that emotion out and stuff, but I won’t carry it with me. I would just feel for them even though I don't know them but then I will just move on. So, I won't say it had a bad influence. It just showed me the bad side of social media, and what is really going on in the world.” − Participant 7

When reflecting on their social media exposure, the researcher found that participants 1, 3, and 4 thought of their parents and the values that they were brought up with, such as listening to your parents and showing respect towards them. Anioke (2017:117) asserts that a sense of morality is acquired through upbringing, thus functioning on a micro-level when it comes to the daily lessons we learn from our parents or caregivers throughout childhood, within the familial microsystem. In addition, a significant portion of what is known about the globe comes through digital and social media. Individuals learn the values of society, including what kinds of behaviours are penalised and rewarded. Social codes are also acquired, which include the expected behaviour for different genders (Anioke, 2017:117). In addition, the internet is increasingly functioning as a new social environment in today's modern culture, causing

macrosystemic influences to mould moral development within the microsystems of individuals throughout childhood. Individuals thus learn through observing the behaviours of adults and imitating those behaviours, and they learn through watching others and copying what they see individuals around them doing. Therefore, children's offline ways of living are highly influenced by their interactions online (Anioke, 2017:117).

Macrosystem influences relate to culture and upbringing, as referred to by participants 4 and 7 when indicating that social media exposed them to knowledge about negative occurrences and environments globally. In concurrence with the above findings, Berk (2013:485) asserts that morality is sustained in all cultures by a generalised social structure that creates rules for appropriate conduct while also having morality engrained in every core component of individual psychological make-up. In addition, the political, economic, social, and moral facets of all human societies have been significantly influenced by social media use (Alshare, Alkhawaldeh & Eneizan, 2019:171). Social media use has triggered a communication revolution, causing a substantial shift in the communication landscape of the world and subsequently changing consumer behaviour and the moral and social norms of young individuals. This is triggered by the exchange of culture and information on social media, introducing both positive and negative content and information to the consumer community as well as institutions, resulting in deviation from some moral, social, and cultural standards (Alshare et al., 2019:171).

According to Globokar (2018:554), the skill of critical thinking needs to be fostered from a young age when it comes to moral growth. It is even more important in the modern age we live in, due to the milieu of prominent social media use and exposure that millennial children are exposed to daily (Globokar, 2018:554). Adolescents additionally begin to acquire the capacity for abstract thought and reasoning (Arnett, 2016:363), which offers countless opportunities for introspection during adolescence. The exploration of other religions, sexualities, personal styles, and other topics by adolescents as they try to define their identity and sense of self can also lead to conflict with parents and other caregivers while also promoting moral development (Berk, 2013:256; Rathus, 2017:491). This was prominent in the statement made by participant 1, when she stated that she rather turned to social media to explore topics that she knew her parents would not approve of. This not only answered her questions about seemingly taboo topics and reduced conflict with her parents, but it also fostered a sense of guilt in this participant when she came across negative content while browsing social media.

In addition to the above, the researcher found the statements by participants 1, 4, and 7 to be indicative of the vast amount of information that social media make available to online media

consumers. Social media consumers are exposed to a vast amount of information online and not just the information available in their microsystems, which contributes to moral development. In agreement with the above, Globokar (2018:554) asserts that social media and the internet have made worldwide access to knowledge a reality. The researcher is of the opinion that this seemingly limitless and vast connection that the internet holds, makes it possible for individuals from different cultures to collaborate on specific projects and engage in cross-cultural dialogues online. Although they are understood differently in various cultural contexts, Globokar (2018:555) identified certain universal moral principles, such as respect for the dignity of human life, freedom, equality, the prohibition of all forms of discrimination, tolerance, and justice (Globokar, 2018:555). In the following sub-theme, the influence that social media use had on the identity development of the participants will be discussed. This sub-theme will conclude this theme on the factors influencing adolescent development in a milieu of prominent social media use and exposure.

Sub-theme 3.4: Influence of social media on identity development

According to Cookingham and Ryan (2015:2) social media can be considered safe spaces for adolescents to explore identity formation. Below are statements made by participants that are relevant to the effect that exposure to social media had on the identity development of participants during adolescence:

"Social media changed my religion and my religious perspectives. I was raised in a very strict Afrikaans family household. So, being exposed to all the different types of religions and all the different ways of doing things piqued my interest and changed my religion to a large extent." – Participant 2

"Yeah, because as you go through your adolescent stages in grades 8, 9, and 10, you think you know who you are, and then you get all these other influences from social media, and it changes your idea that actually I don't like this or that. *I saw it on social media. I think I resonate more with that person, or, for example, a religion. If you see certain tweets and quotes about a particular religion and how they do things, and you're not a member of that religion, and you feel like this makes me feel safer or more content, or I resonate more with that, you can't express yourself without it, and you go through a mean stage, a nice stage, and a realising who you are stage through social media, I think."* − Participant 4

"There's one specific thing I learned about myself because of social media. The LGBTQ community became popular on social media. I got really interested in that. When I was younger, I always knew that there was something different about me; I just couldn't pinpoint it because I didn't know. So, social media opened me up to that, and I got to find out that I'm

bisexual. So, I think that was one benefit of social media in terms of helping me find myself. − Participant 5

The researcher found that most participants regarded social media as having assisted them positively in their identity development, as is evident from the statements above. Participants 2, 4, and 5 were able to explore different religions and sexual preferences, which the researcher believes to have influenced their moral development and their interactions within their microsystems. A microsystem influence seems prominent when macrosystem influences such as religion and sexuality change the interests of a developing individual, as those changed interests may result in different search phrases online and presenting oneself differently on social media, thus attracting different friends and followers. In accordance with the above finding, literature asserts that adolescents experiment with their identity by creating online representations of the type of individual that they strive to be. In addition, the function of the majority of social media platforms, which allow consumers to share their likes and dislikes publicly, provides opportunities for self-disclosure and identity formation (Spies Shapiro & Margolin, 2014:4).

Adolescents also engage in increased self-discovery and experimentation in order to discover their place in the social world (Louw & Louw, 2014:342), as was the case with participants 2, 4, and 5. This search for identity can be best explained and fulfilled by the inherent need that adolescents have to voice their own opinions and feelings within the context of their caregivers, peers, and society, which is pressuring them to conform to specific age, gender, racial, cultural, religious, ideological, and political stereotypes and expectations (Carter et al., 2014:35; Rathus, 2017:516). Exploration and investigation into previously held values and beliefs and the testing out of various social roles are all activities that occur during the period of identity formation (Louw & Louw, 2014:342), all with the goal of developing a consistent sense of self or ego identity (Rathus, 2017:516). Berk (2013:469) explains the core objectives of identity development during adolescence clearly, when stating that the creation of an identity requires to firstly figure out who you are, what your core beliefs are, and the direction you want your life to take in order to be successful.

Jane Brown and her colleagues established a useful model of the roles that all forms of media play in adolescents' lives (Brown, 2006 in Arnett, 2016:396). The model suggests that adolescents' media consumption is active in a variety of ways and that adolescents do not all consume media in the same manner. It was rather found that each adolescent's identity influences the media goods they consume. Thus, paying attention to certain media goods, resulting in contact with them, which means that those goods are assimilated and understood (Arnett, 2016:396). The researcher found the above model to be evident in the research, as

indicated by statements from two participants:

"It never changed my ideas, because, like I said, I choose what I want to listen to, what I take in, and who I listen to. That's very important to me, like who I listen to and what I want to listen to." − Participant 6

"*Social media isn't a platform; it's not there to form your identity; it's not there to make you who you are. You should be your own person and be who you are without it. So, it's just there to benefit you in a certain way. Pinterest was great for me in that sense. When I saw drawings, I started drawing, and now I'm painting, and I also get my inspiration from there."* – Participant 7

As stated by participants 6 and 7 regarding their views on how social media might have shaped their identities, both voiced that they felt that social media did not have a direct effect on their identity development. From their statements, the researcher found the abovementioned model by Brown (2006, in Arnett, 2016:396) to be applicable, as the evolving adolescent identity was postulated to influence media choices. As a result of the proposed model, individuals are believed to actively base their decisions on their interpretation and relevance to them individually (Arnett, 2016:397). This was the case with participant 6, who mostly used YouTube for listening to music, and participant 7, who preferred Pinterest for finding inspiration for drawings and paintings. It therefore seems that the interests of the participants thus influenced their social media consumption and inherently added to their identity development due to the content they were exposed to.

In accordance with the above assertion, Davel (2017:34) found that the innovative capability of technology enabled adolescents to meet their interpersonal needs in an infinite number of ways. The researcher is of the opinion that this is central to adolescent social media use because it helps to strengthen the self and foster identity development during adolescence. Furthermore, it has been discovered that adolescents with a stronger sense of self-identity are more connected to their peer group by smartphones and other forms of digital technology (Walsh et al., 2010 in Davel, 2017:34). The following statement by participant 4 was relevant to the actual pressure that is placed on adolescents by their peers when it involves identity development:

"Teenagers don't know who they are. You don't know who you are. You're trying to figure out what you like and don't like, and certain influences are not right for you. It's a lot of pressure. It puts a lot of pressure on teenagers, especially their peer groups." − Participant 4

The statement above clearly indicates that identity development is difficult and that the process is made more challenging because adolescents experience pressure from their peers via social media, as stated earlier. According to Johnson and Puplampu (2008) as cited in O'Neill (2015:40), the idea of an ecological techno-subsystem is relevant to all millennials, and it adds another dimension to the microsystem. It also adds an additional zone of interaction with both living and non-living components of communication, information, and recreation technologies in the immediate or indirect ecological environments of developing individuals. Adolescents who use social media are thus inextricably linked to their peer groups and social media followings via the ecological techno-subsystem. This means that adolescents never have a break from trying to gain approval from their peers, as they are connected permanently by means of digital technology.

The findings in this section show that mobile phone, and inherently social media use has become an essential component of the identity building process for some young individuals, as also asserted by Davel (2017:34). The development of an identity is thus an essential step in the maturation process. The way in which an individual perceives the self, as well as the way in which other individuals perceive them, frequently serves as a reflection of identity. It makes itself known through the interactions an individual has with others, as well as through an individual sense of self and sense of reputation (Martin et al., 2018:216). Social media thus penetrate the peer group, one of the most crucial environments for identity formation during adolescence and the transition to adulthood. According to Manago (2015:2), social media have to an extent converted electronic screens from places where young individuals consume commercial entertainment media into settings for peer interaction mediated by the youth's production of their own multimedia material.

Martin et al. (2018:216) further assert that when individuals visit different social media platforms and webpages, they use a variety of tools to demonstrate or hide different aspects of their identities. Some of these tools include photographs, avatars, likes, and favourite's lists. The various modes of self-expression have moreover been hypothesised to contribute to the formation of an online identity, that can in some instances be different from the individual's actual self (Martin et al., 2018:216). However, when online resources transfer to the real social microsystems of individuals, social networking platforms may prove to be quite advantageous to the formation of an individual's identity (Manago, 2015:7). The following theme will focus on the influence that core aspects related to social media use had on the overall wellbeing of the participants.

3.8.2.4 Theme 4: Perceptions regarding core aspects of social media

Throughout the completion of the current study the researcher found that different social media platforms share similar core aspects that were continuously referred to by participants, thus resulting in the establishment of this research theme. This theme consists of discussions on the perceptions that participants have regarding the use of likes and followers and experiencing a false representation of the self, either personally or from their friends and followers on their respective social media platforms.

Sub-theme 4.1: Likes and followers

The majority of participants had strong viewpoints regarding the use of likes and having followers on social media, as evidenced by the following statements:

"It was a huge thing to see how many followers you had on Instagram and how many friends you had on Facebook. That was like popularity. It would be like a discussion among friends. You'd be like, "Oh, did you see she has Instagram now?" or "have you seen what she's posted?" Then it would be like, "Have you seen how many followers she has?" or "Did you notice how many likes they got?" Then, if you didn't get a certain number of likes on a picture, you had to remove it. I compared a lot of things. If I didn't get the likes I wanted, then I'd be like, "You're not good enough." So that was mainly more of an effect for me. But that was really only Instagram; it was never Facebook, it is very strange." – Participant 1

"I hate likes on social media. To me, social media is a form of expressing your status in society, which I don't like, and that's why, for instance, I didn't follow a lot of friends on Instagram. It pushed my form of narcissism during that stage because, why don't I get 800 likes? Why does she get 200 likes, and I only get 40 likes if I post a photo? I'm acquainted with many of my peers; we determined our social standing through social media. As teens, we all did it; the whole school did it. The more likes you got, the more popular you were. There wasn't ever a bragging session about it. But I think when I got back home and saw it had an effect on me. It was never spoken about with my peers, but I knew. Then it had a negative impact, and it exacerbated my body dysmorphia because I simply never felt good enough." – Participant 2

"If it's like, let's say somebody I know in person because I went to school with them or they are family. I would like the picture just to kind of support the picture." – Participant 3

"The use of likes creates a competition that wasn't necessarily there, because now when this person posts a picture of their vacation pictures and they get 100 likes, you want to outdo that person and get 110 likes. So, it creates a sense of competition amongst each other, which then leads to a dark hole of all these weird things that people do in order to get likes or to get

content. I don't know. I may have been apprehensive about the thought of sharing myself on social media because everyone has an opinion and some people are just mean, and I don't think I'd be able to deal with all the negative feedback." − Participant 4

"I don't like it at all because it can be very bad for a person's self-esteem, especially when a person is very vulnerable. So, you would put up a picture on social media expecting to get like 500 likes, and then you just get 10 likes, and then you're thinking, "What's wrong with this picture?" Is there something wrong with me? What happened? And then there is also the thing of competition as well, so you always want to compare yourself to other people. You always want to be better than other people. I don't think that's a good thing, because now you're not being yourself anymore. You're turning yourself into other people because you want to be better than them." – Participant 5

"I don't have an opinion, because, like I said, I'm not a person who likes to have competition on social media. I do social media for myself, to build myself up, not to be like, "Oh, you have 100 likes, I just have 20." Let me quickly build myself up with whatever. I don't even know what, and it's possible that the person with 100 likes doesn't share my interests. So, to compare myself with that person, it's not going to be fair to me because it won't build myself up. It will build me on social media, but not as a person. So, I always tell myself that I'm not going to be that person who likes everything. Considering social media as a venue for competition. It's not a competition venue. So yeah, I just don't use it as a competition venue. I think that is also the main thing that people want on their social media platforms. They don't want to spread positivity or help the next person; they want to see how many likes and followers they can get, and in a certain way, it's very sad, because I think social media must be a platform where you build each other up and where you care for the next one. When you do a good deed, don't be concerned with how many followers and likes you have on your social media platforms, because that doesn't define you. What are you going to be without your followers and without your likes? Where are you going to be? It's not even yours. So, in my opinion, most people are too focused on their followers and likes rather than making a difference. – Participant 6

"So, with likes on social media, I think we use them to boost our confidence. Like I said, if you post a picture and you only get 50 likes, you're going to think it's small. When I was a teen, I used to get something like a maximum of 40 to 50, and I thought it was bad because I had a girlfriend who was getting something like close to 1000, like she was instafamous. With the beginning of Instagram, like, my girlfriend at that time was booming, and I was like, "How do you do it?" But it's more like, if you post things that people relate to or want to see, I'm going to get likes from people like my friends. And it's strange because you can check the

interactions on your page and your likes, and you can see that in a month you had 15K interactions but only 50 likes, which can now affect you psychologically. Like, am I ugly or what? I have so many people coming to my page, but I don't get their likes. That could also lead to you committing suicide, right?" − Participant 8

From the statements made, the researcher found that most of the participants felt that seeking likes and followers had an emotional effect on them and on their peers; with a few participants reporting that it had a negative effect on their self-esteem. Additionally, four participants were of the viewpoint that likes received on social media caused a comparison to take place between peers, and three participants felt that it caused competition between peers. Participants furthermore felt that popularity was determined by receiving likes and having a large following, as evidenced by the statements from participants 1 and 2. Participant 6 was strongly opposed to the use of 'likes' on social media, as she felt it not to be uplifting, whereas participant 3 felt that liking the posts of his peers showed that he was in solidarity with them. Similarly, participant 8 felt that receiving likes on his posts boosted his confidence.

Literature contains a plethora of information regarding the influence of likes and followers on the well-being of young consumers. The ease with which individuals can like content that has been posted on social media has been found to have led to an explosion of popularity for the action, with almost 4.5 billion likes being given daily and approximately half of all social media consumers liking at least one post that they view each day (Pew Research Center, 2014 in Burrow & Rainone, 2017:232). There is also an increasing body of research that points to receiving likes having a beneficial influence on an individual, as receiving affirmation on content that has been posted virtually, correlates positively with feelings of self-esteem and subjective well-being and adversely with feelings of isolation. On the other hand, if individuals need the approval of others to feel good about themselves, it may be a sign of reliant self-worth, which can be detrimental to individual well-being over time (Burrow & Rainone, 2017:232). Evidence thus exists to argue that there is a discrepancy between the predicted number of likes, and the received number of likes that result in the experience of unpleasant emotional responses by social media consumers (Sciara, Contu, Bianchini, Chiocchi & Sonnewald, 2021:2).

As stated by participants 1 and 2, having a large following on social media was a means of measuring popularity during adolescence. According to Barth (2015:203), it is indeed possible for consumers of social media to amass substantial numbers of friends and followers on their social media, but it has been found that the quality of relationships developed on social media is superficial. Relationships on social media furthermore do not necessarily contribute to the sense of connection and social support that adolescents seek by spending a lot of time and

effort on achieving a large following (Barth, 2015:203).

According to Berryman (2014:2), the use of likes on social media can cause individuals to become more competitive and envious of one another, as described by participants 4, 5 and 6. This in turn has been found to influence the nature of what an individual chooses to portray online, which can be either an accurate or distorted representation of the self (Berryman, 2014:2). Literature asserts that it is becoming increasingly common for adolescents' social standing to be displayed publicly on social media; as a result, these platforms may increase the risk of emotional distress for adolescents whose social status is in jeopardy. According to Lee, Jamieson, Reis, Beevers, Josephs, Mullarkey, O'Brien and Yeager (2020:2142) social media consumers often submit content, such as a link, an image, a joke, or a personal disclosure on the respective social media platforms, and anticipate that other consumers will indicate their acceptance of their contribution by liking it to express their support, which was also the viewpoint of participant 3.

Young individuals believe that their participation on social media will have an effect on their social standing (Manago, 2015:11; Blumberg et al., 2016:105). Furthermore, receiving likes from other individuals when expressing oneself on social media have been found to stimulate sentiments of validation, conferring with positive status and regard, and therefore leading to positive emotions. Receiving likes on social media can thus be regarded as quantifiable and visible signals of status. In the same vein, receiving a lower number of likes than other individuals can be an indication that an individual's social status is low (Lee et al., 2020:2142). Young individuals thus associate social support on social media with higher numbers of followers and friends paying attention to their status updates, which suggests that attention to the self is becoming an important social resource of the digital age (Manago, 2015:11).

The decision to write oneself into being on social media continues past the creation of an often-detailed individual profile, as social media consumers broadcast status updates to the network, upload images, share links and news stories, and likes or comments on the post of someone else in their newsfeed. Social media consumers thus have full control of the image that they create for others to see on their social media accounts (Manago, 2015:8). It has further been noted by Manago (2015:8) that the conversations that take place on social media are asynchronous, which means that they are not necessarily spontaneous, as social media consumers can revise and reflect on the types of messages they wish to convey and which content they like, providing them additional control over how they express themselves. It is believed that when an individual has more control, they also have greater responsibility for building an image of themselves for other individuals to consume. This additionally translates into possibilities for individuals to promote romanticised elements of themselves to their friends

and followers (Manago, 2015:8), as believed by participant 5 when she voiced the following: "*You're turning yourself into other people because you want to be better than them.*"

Findings by Blumberg et al. (2016:106) have also shown that adolescents' postings on social media are intended to reflect their identities in the way they want others to perceive them. In accordance with these findings, adolescents delete photographs, comments, or tags that they believe could be harmful to their social status, as evidenced by the following statement that was made by participant 1: *"It wasn't accepted by the public, so you had to delete it."* Consequently, it is possible for adolescents to revise the information and media that they post and take preventative measures to manage their online reputations through social media for the purpose of impressing other individuals (Blumberg et al., 2016:105, 106).

Having a public profile can thus result in more followers and more opportunities for feedback by means of likes, comments, and reposts, but it can also result in greater exposure to the opinions of other individuals and a greater danger of one's own optimistic expectations of obtaining a vast amount of likes and followers being let down (Sciara et al., 2021:1). This in turn may result in receiving insufficient social validation, which may occur when not receiving sufficient positive responses from other individuals about what was posted. According to Lee et al. (2020:2142) this is a common experience among young individuals who use social media and could be considered a risk factor for these individuals (Lee et al., 2020:2142; Sciara et al., 2021:2). The majority of participants voiced that they perceived the accumulation of followers and likes to have a negative effect on their emotional well-being. Furthermore, receiving delayed feedback, whether in the form of comments or likes, is also regarded as an indication of lack of approval (Sciara et al., 2021:12). Situations that are therefore important to individual status might elicit powerful emotional responses, with numerous status-relevant events helping adolescents to adapt and develop by evoking positive emotions, such as pride and respect, or negative such as being excluded, neglected, rejected, or humiliated (Lee et al., 2020:2142).

Scaria et al. (2021:2) concur with the above as they assert that individuals who place value on the opinions of others, are thought to be the individuals who are most likely to benefit from positive feedback received on social media, but that they are also the ones who will suffer the most when confronted with obvious and tangible social disconfirmation. It is thus evident that keeping a public profile on social media can result in inconvenient circumstances for individuals, as it will expose them to the opinions of a larger number of individuals (Sciara et al., 2021:2), who do not form part of their micro- and mesosystem. It therefore seems that individuals who form part of the ecological techno-subsystem might not be aware of the vulnerabilities of the individual behind the profiles that have been created on social media and

as Barth (2015:203) asserts, adolescents commit a significant amount of time and energy in building a sizable audience on various social media platforms, often resulting in superficial relationships.

The researcher found another possible disadvantage of having easy access to peers, namely the ease with which friends and followers may be acquired on social media. This observation is supported by Manago (2015:8) who states that it may direct the attention of young individuals to the transience of popularity as a goal throughout the process of identity development. In solidarity with the above, participants 1 and 2 both thought that amassing likes and followers was seen as a sign of popularity when they were adolescents. It has been found that placing an emphasis on popularity when an individual is young may cause a devaluation of the significance of deep, intimate connections as contexts for identity development. Young individuals may then increasingly seek approval within vast, shallow networks rather than smaller, more intimate communities. When popularity is actively sought, young individuals need to promote a socially desirable self (Manago, 2015:8). In the following sub-theme, the perceptions that participants have regarding experiencing others creating a false representation of the self, online, and about their own authenticity on social media, are described.

Sub-theme 4.2: False self-presentation

The use of social media can promote a false presentation of the self, which, based on false-self theories, the researcher found in literature described to be unhealthy (Rogers, 1959 in Gil-Or, Levi-Belz & Turel, 2015:1). The researcher found the following statements by participants to describe their perceptions regarding ‘wearing a mask’, or rather how individuals create a false self-presentation on social media:

"I would use Pinterest pictures as my Instagram profile picture. So, if there was, say, a blonde girl watching a sunset. If it was a very cool photo, I would take it and pretend that it was me. I just put it on there. If someone asked, I'd say I got it from Pinterest, but I'd just leave it there." – Participant 1

"It is a mask. Hiding from who you truly are. It is, without a doubt, a mask. I think if I had posted all the things that I wanted to, it would have had a more negative effect on my emotional well-being. Specifically, because I would then refer back to the number of likes that I would have received. The biggest mask of them all is that nobody posts something when things are going bad, so kids, teenagers, and even me, myself included, will then have the image that my life is so worthless, but all of their lives are perfect. So that's why I say it's a form of pornography. It's not what really happens behind the curtains, but it's used as a mask for everything or

whatever, and there can be 100,000 reasons why." – Participant 2

"You see happy people every day. Then you look at your own life. You ask, "Why am I not happy every day?" But I soon realised that not everything you see on social media is actually true. It's not true. People sometimes manipulate the photos to make it seem like they have happy lives, but that's not it." – Participant 3

"Because social media is like an escape, I'd like to think. If your life is horrible and you don't want it, it's like a little escape where you get to create this world that you would like to be in one day, which is like a coping mechanism. You get to see all these other people, and you get an escape from your life." – Participant 4

"I don't think anyone would necessarily ever be that transparent to the whole world. Yes, I'll give a little bit of information, but I won't completely explain it in detail because that's a personal thing. I believe that content creators over-dramatise it. It got to the point where a lot of content creators started faking it, which is really not a good thing. They're not going to tell you everything about their daily lives. Mostly the positives will be there; they'll never tell you, "Oh, I had a panic attack today." Especially celebrities. They won't tell you: "I got stopped at a red light because I was speeding." They won't do it. As a fan, you feel like you know this person. I know this person; I know everything about them, but realistically speaking, you don't." – Participant 5

From the statements above, it can be deduced that participants either changed their own self-representation online, or clearly noticed when other individuals were not true to themselves, or only shared their positive moments and experiences as stated by participant 3. Participants 2 and 5 both indicated that they did not favour online friends or people that they followed, who never posted any negative or depressing content on their social media accounts. Although not viewing false self-presentation online positively, both participants 2 and 4 voiced that altered or restricted representations of themselves online was a means of hiding from others and escaping their reality.

To a certain extent, the researcher found that the creation of a false self-presentation is not a phenomenon that only emerged with the advent of the digital age. According to Gil-Or et al. (2015:1) individuals across time have been found to frequently present themselves in a manner that is incongruent with who they truly are, as well as the views and values that they hold. This phenomenon was coined by Rogers (1959, in Gil-Or et al., 2015:1) as incongruity, which means that there is a gap between the real self and the ideal self, which might lead to

the construction of a false self. A false self is thought to be a more defensive and protective self that masks the true self of an individual (Gil-Or et al., 2015:1).

It is generally accepted that presenting a false self-image on social media is easy and presents less danger than doing so in real life (Gil-Or et al., 2015:2). The above also falls in line with the developmental stage of adolescence, where more exploration and experimentation is done by adolescents in their search for their social identity (Louw & Louw, 2014:342); as previously discussed in the research report. The inherent need that adolescents have to voice their own opinions (Carter et al., 2014:35; Rathus, 2017:516) runs parallel with the exploration of various self-presentations on social media during adolescence. The exploration and investigation of previously held values and beliefs, and the testing of oneself in a variety of social roles are furthermore regarded as activities that take place throughout the identity formation stage (Louw & Louw, 2014:342), all with the goal of constructing a consistent sense of self or ego identity (Rathus, 2017:516). With an increasing proportion of adolescent social life shifting to contexts that are conducted on social media (Gil-Or et al., 2015:2), the researcher is of the opinion that adolescents in the millennial age increasingly explore various self-presentations online rather than face-to-face.

According to literature, adolescent online self-presentations vary in several ways (Herring & Kapidzic, 2015:1). Adolescents for example choose their profile pictures primarily based on whether they think they look nice in them (Herring & Kapidzic, 2015:5). This is known as selective presentation, as consumers of social media can publish whatever content that they choose, which is intimately connected to the concept of self-presentation, as social media consumers have been found to choose profile pictures that can help them construct a positive self-presentation while entirely being able to hide the pictures and content that are unfavourable (Huang, 2018:19). This finding by Herring and Kapidzic (2015:5) was confirmed by the statement made by participant 1. This participant indicated that she would often find an appealing photograph of a girl that looked like her from afar, or from the back, and would utilise it as her profile picture on her social media accounts, pretending that it was her. According to Huang (2018:19), the utilisation of other text and pictures for the purpose of self-presentation online is made possible by access to the internet and to social media, creating a low access barrier and thus often resulting in highly false self-presentations; as in the case of participant 1.

As a result of internet access making it easier for individuals to alter their self-presentation, it has been found that individuals who have personalities that are prone to being vulnerable, may establish online personas that are significantly more satisfying and alluring than their genuine identities (Gil-Or et al., 2015:2). The researcher found the above to be accurate, as

participant 2 voiced that he found the self-presentation of others online to be false and personally only kept his social media self-presentation limited, as truly sharing what he felt would in his opinion have resulted in more emotional distress. Participant 4 also viewed social media as an escape from reality as it afforded her with the opportunity to create a virtual world that she felt more comfortable with. Gil-Or et al. (2015:2) are therefore of the view that the disparity between an individual's true-self and their online-self might be greater when the individual is dissatisfied with their real life, or has a low sense of self-esteem and, as a result, creates an alternative environment to compensate for real-life deficiencies. Thus, by sheltering individuals from their true selves, a natural compensation-defensive mechanism, that protects individuals from both internal and external challenges to their genuine selves is established (Gil-Or et al., 2015:2).

The researcher found that in order to have a comprehensive understanding of how individuals present themselves through online social media, a realisation needs to occur that, despite the fact that social media platforms are virtual, the pictures that individuals present through the platform also have certain characteristics of reality (Huang, 2018:19). Virtual platforms and individual profiles, as discussed above, furthermore allow adolescents to create a representation of themselves or of the type of individual that they strive to be on social media that entice them and allow them access to groups and societies that fit with the identity that they are busy creating (Cookingham & Ryan, 2013:2). It has been noted by Gil-Or et al. (2015:2) that positive outcomes are more likely to follow when an individual acts in accordance with their real self, and when they also possess a distinct and unmistakable identity. This approach applies to settings on the internet as well, as individuals who portray their real selves and are authentic on social media have been noted to develop relationships with their online friends that are truthful, healthier, and last for a longer period of time. These ties, in many different contexts, are also carried over into the real world (Gil-Or et al., 2015:2). In agreement, both participants 6 and 7 verbalised that they believed being true to who they are, or rather presenting a true self-representation on their social media accounts was more important than pretending to be different or happy, as evidenced by their statements below:

"I don't have an opinion, because that's how people live. It's not how I live; what you see here is what you will see on social media, and if I feel like that day I don't want to post, then I don't post. Then some people will be like, "Why didn't you post today?" Then I'm like, "Because I'm not in a mood to post." If I'm going to post today, I'm not just going to post something that's negative. That's unnecessary. So, I always tell myself that if I'm not in a good space, I'm not posting anything. Then I'd rather do research to put myself in a good space, because some things you must deal with yourself. There's no one else who can replace that negativity with

positivity; you need to go sit down and do it with yourself. So, I'd just replace it myself and let the rest of the world do whatever they want. And if I reach someone, that's cool. If I don't, that's also cool." – Participant 6

"I think showing who you really are is always better than wearing a mask and pretending to be someone that you're not. Because even on dating sites, they will say they are this person, but when you meet them, they're different people. So, I would say it's the most important thing. If you do anything right, that should be the one thing that you do right about social media. Just be who you are and be the real you. Wear no masks; just be yourself, and if people don't accept you, so be it. Well, that's their problem." – Participant 7

From the current study, the researcher observed that what individuals display to the world from behind their masks can be considered as a social and cultural mentality. This notion furthermore falls in line with the macrosystem of the bio-ecological systems theory. However, according to Huang (2018:20) the differences in culture and society are revealed on the surface of each type of self-presentation online, and that the degree of advancement of the actual society always illuminates from the background of posts on social media. Thus, the researcher is of the understanding that from a macrosystemic viewpoint, the conduct of individuals online continues to mirror the real society; and when viewed from a microsystem perspective, the behaviour of individuals online displays a real individual. The manner in which individuals therefore self-represent and the content of their statements cannot necessarily be tracked, as they are subject to a variety of different mechanisms and systems in their environment (Huang, 2018:21).

Based on the above-mentioned findings, the author found that false self-presentation online can ultimately have harmful consequences. Social media platforms require consumers to reveal not only their names, but also their friends, activities, feelings, and interests. This is because social media are based on the premise that people like to connect with others who share similar interests and experiences. Thus, consumers make the conscious or unconscious decision to present an identity or version of themselves that differs from their true self. It is possible that these consumers will self-enhance their true identity to match a desired one, but it is unlikely that they will downplay their own identity (Gil-Or et al., 2015:1). The next research theme will place focus on the research findings that relate to the threats to physical, social and emotional safety that the researcher was able to identify from the reflections of the participants.

3.8.2.5 Theme 5: Possible threats related to social media use during adolescence

According to Fire, Goldschmidt and Elovici (2014:2) consumers of social media are in general unaware of the security risks that are associated with communication online, causing threats to consumers. Some of the threats that is identified by literature include, but are not limited to, invasions of privacy, theft of identity, infection with malware, the creation of fake profiles, and sexual harassment (Fire et al., 2014:2). Zhang-Kennedy, Mekhail, Abdelaziz and Chiasson (2016:389) agree with the above and identified specific categories of threats that can be encountered by children while using the internet. From the categories that were identified by Zhang-Kennedy et al. (2016:389), the researcher found the risk of contact and the risk of behaviour to be relevant to the current study. The risk of children being contacted by predators or users with malicious motivations is referred to as the risk of contact, and the risk of children's conduct have to do with the actions of children themselves (Zhang-Kennedy et al., 2016:389). The risk of behaviour pertains to all three sub-sections of this research theme, namely: privacy threats regarding social media use, cyberbullying on social media, and talking to strangers on social media, whilst the risk of contact pertains more to the sub-section related to talking to strangers on social media.

The majority of participants have been exposed to or made aware of the threats that will be discussed in this section. These threats are in line with other research findings, indicating that the threats identified and experienced by participants are commonplace amongst adolescents who have access to social media. This is evidenced by Martin et al. (2018:114) who found that the clustering of dangerous activities, such as publishing the name of a school, making an email address public, talking with unknown individuals, initiating online sexual activity, the perpetration of online harassment, and bypassing internet filters and blocks, may place vulnerable children in jeopardy (Martin et al., 2018:114). These threats to the individual safety of adolescents will be discussed in the sub-themes below.

Sub-theme 5.1: Privacy threats regarding social media use

According to Fire et al. (2014:5) the proliferation of social media increases the risk of consumers becoming vulnerable to dangers to both their privacy and their security; the sharing of personal information online is indicative of a purposeful decision made by an individual to compromise individual privacy (Watson & Hill, 2015:298). The following statements by participants are indicative of the choice that they made regarding their individual privacy:

"I remember during this period of Facebook and Instagram, and the predators on the other side. We all, I mean, during my sixteen and seventeen ages as soon as you access someone else's Facebook account, I'd continuously get random messages on my WhatsApp, and on my Facebook page because you put your personal cell phone number on the application." −

Participant 2

"It is quite safe if you're, I don't want to say tech savvy, but if you understand the least number of principles of cyber security. Just don't share your password with anybody. Don't click on links that you don't trust or random people sending you links, then click on those links. I feel as a teenager... let's say when I was 13 to 14, I was still naive and I would have clicked on any link that was sent to me and by doing that, people will hack your accounts." − Participant 3

"I would say if you do it for the right reasons, and if you limit yourself. It can be a safe platform. But if you don't, then it can get really dangerous, and you can find yourself in a situation where you don't want to be in. Just because you put your whole life on this platform and it didn't work out, because you never know what's going to happen at the end of the tunnel. So, it's important to just limit yourself, and first test the water and see what's going on before you just go full stream." − Participant 7

"It's a very bad place and I don't think it was intended to be like this, but they did not know the power it was going to give people. Because now anybody can find you. There were so many cases of people who are in my age group who are being abducted and kidnapped by like random people; and I think at that time, was the beginning, where most of my peers and I realised that. This place is not safe, like you are giving so much information. Like with the one thing that we don't notice that with Facebook you can allow people to track every movement where you go because back then we used to be so obsessed with it. Because you can check in and you check in, I'm here, from there you are there, from there you are at home. Which, to a certain extent makes your privacy basically transparent, like there's no privacy." − Participant 8

As evidenced by the statements of participants above, there were varied threats to privacy that were experienced and openly perpetrated by participants when they were adolescents. Participant 2 indicated that he placed his personal cell phone number on his profiles, resulting in strangers contacting him directly, whereas participant 3 indicated that he used to open links sent by strangers when he was younger and before he knew about safety and security online. Participants 7 and 8 both indicated that it was dangerous to share too much personal information on social media as it may cause them to be vulnerable, and be contacted by individuals that they do not know personally.

Participant 8 provided an example of how dangerous social media can be to individual safety by explaining the functionality of some social media platforms that alert your friends and

followers where you are; making it easy for a stranger to find you or target your home, knowing that you are not there. Stollfuß (2020:4) however asserts that the dissemination of personally identifiable information is considered to be a prerequisite for the involvement in social media, causing a difficult situation for social media consumers. As evident from the research findings, the disclosure of sensitive and personal information on social media places consumers in a vulnerable position, which could be used by individuals who have malicious intent. The researcher found this to be evident when looking at the statement by participant 8, as the same capabilities that enable social media consumers to connect and share information could be exploited to perpetrate mental and emotional abuse (Kwan & Skoric, 2013:18).

In the same vein it has been found that online media consumers rely on outdated models when it comes to technology and computer security, which can result in incorrect decision making (Zhang-Kennedy et al., 2016:389). As mentioned by participant 3, Martin et al. (2018:215) concur that individuals need to be cautious about permissions whenever they download files, media, or anything from the internet, and that understanding the concepts of identity theft, data theft, online viruses, and online scams is essential. Furthermore, according to other research studies, many consumers of social media reveal private and sensitive information about themselves, their peers, and their relationships as well, either by posting pictures or by directly providing information such as a home address and a phone number as was described by participant 8. This can occur whether the users choose to reveal this information by posting photos or by directly providing the information (Fire et al., 2014:2). Thus, when it comes to sharing information about oneself and others online, individuals need to be aware of appropriate and inappropriate limits (Martin et al., 2018:215), as also described by participant 7.

Although it is believed that adolescents compromise their privacy without any thought, Marwick and Boyd (2014:1052) found that the fact that adolescents frequently share digital content does not imply that they share anything and everything, nor does it indicate that the content they do share is meant for a particularly large number of individuals. The researcher believes that the statement made by participant 3, indicating that he was naïve when he was younger, may point to the reasons found in literature for some adolescents to place their personal privacy at risk by placing too much personal information online.

Literature asserts that even while there are technical models of personal control over individual pieces of information that is shared publicly, critical research demonstrates that privacy is inherently tied to context (Marwick & Boyd, 2014:1053). Privacy can be explained as a social construct that reflects the values and norms of individuals within cultures. This means that the ways in which individuals conceptualise, locate, and practise privacy are extremely diverse

due to the fact that privacy is a social-cultural construct (Marwick & Boyd, 2014:1054). This is in line with the theoretical framework that underpins the research, as the cultural differences that determine the levels of how much personally identifiable information is shared online are in line with the macrosystem of Bronfenbrenner's ecological systems theory. As noted previously, macrosystem influences are passed down from one generation to the other by means of information distribution, usability, and socialisation processes enabled by the vast internet environment (Fulantelli & Taibi, 2021:151). This makes it difficult for a universally accepted definition of what personal privacy should entail. Due to the accessibility of social media that expose consumers to the practices of various cultures across the world, it is understandable that adolescents misunderstand online privacy.

In line with the macrosystem, the researcher also found literature to assert that individuals' conceptions of what constitutes private information are influenced by a wide range of factors. These factors include the local physical environment, the audience, the social standing, the task or aim, motivation and intention, and the information technologies that are being used at the time. This concept of privacy furthermore comprises of a variety of distinct techniques that individuals might take, with each one being utilised by the individual in accordance with how well it fits their unique set of circumstances (Marwick & Boyd, 2014:1054). Unfortunately, it is perceived to be difficult to manage distinct social worlds at the same time, which is made even more difficult when the rules and values of these distinct social worlds are different. The resulting "context collapse," in which audiences that appear to be very different from one another co-exist, frequently results in a feeling of lost privacy by individuals. It can thus be concluded that adolescents possibly conceive privacy as the ability to control their circumstances, including their environment, how they are regarded, and the information that they share, in order to manage a world in which information may be quickly reproduced and disseminated (Marwick & Boyd, 2014:1056). The researcher is of the view that the above literature can be regarded as a possible explanation as to the reason for participants to forfeit their privacy on social media.

Even though adolescents also have the ability to regulate what they post on their social media by adjusting their privacy settings, they have much less influence over what their peers write about them or how the behaviours of their peers determine how they are perceived by others (Marwick & Boyd, 2014:1057), which relates to the following sub-section on cyberbullying. Adolescents can thus not rely on having sole control over the manner in which their information is disseminated while they are operating in a networked environment. What their peers share about them and what they do with the information they receive cannot be technically regulated and must instead be handled socially. This includes what their peers do with the information

that they receive (Marwick & Boyd, 2014:1061). The following sub-theme explores participants' experiences with cyber-bullying on social media when they were adolescents.

Sub-theme 5.2: Cyber-bullying on social media

As discussed above, consumers of social media cannot control what is said or shared about them by others online, which can thus result in a form of bullying that is referred to as cyberbullying. The following statements by participants are indicative of different instances when they were exposed to cyberbullying, and their perceptions regarding cyberbullying on social media:

"WhatsApp was a huge form of cyberbullying when I was in high school. So, groups were made with a bunch of people on them where they would purely just gossip about people on the group. Yeah, and then that was just how it was. Or if you weren't in a specific group people would try and like block you out of conversations, because they'd be like: "Oh, but this is according to this group." − Participant 1

"Uhm, there was this one girl who was very quiet. In my year she was dating a matric learner, and we were in grade eight. She had sent pictures to her boyfriend at that stage that were revealing, and her boyfriend then sent them around school. And it was a thing. Everyone saw them, everyone saw her naked. It's horrible and no one wanted to be her friend, and after a while I started talking to her. Then after a while I started to realise that she is mean because everyone has seen her naked, and people treat her horribly, that's why." – Participant 1

"I don't like it. I hate it actually, and that's going back to the fact of only accessing social media platforms at a later stage in your life. Then when you receive a bullying comment, or a post, or photo, WhatsApp message or whatever the case may be. Through receiving that, you then just know to block the person or to not be in contact with them. If you bully an individual in person, it's a little bit different. You have that person right in front of you. You can't run away in essence, but if someone bullies me over the internet and I was, thinking back now if I knew what I knew now, you could just block the guy. You could just block them or don't speak to them, or you could not reply to them. Yes, the words that they will say then will have an effect on you, a tremendous effect on a kid." – Participant 2

"It's a big thing. Bullying is a very big thing on social media, I think some people aren't necessarily aware that they are taking part of bullying. Especially towards celebrities or big names on social media. There's a lot of hate towards them. And people tend to forget that they are human too. They have emotions. Not only that, but just your everyday person as well can get bullied on social media because of something very small like. What can I say? Maybe their appearance? Someone can get bullied because of that, and people are not necessarily aware

of it, or they don't care for other people's emotions, they just speak. I didn't necessarily want to talk over text, because I had that fear of you know, what if this person screenshots our conversation and goes and shows it to other people and then it becomes a whole joke." − Participant 5

"I think the harm that can be caused in someone's life or just the scars that you can leave in that person's life, is forever. Leaving that one comment that you could have kept for yourself, or saying something that you didn't mean, but you said it. So, you can't take it back. It can influence a person's life in so many ways that you don't even know. The people I followed were treated badly and obviously they show their raw emotion on their platforms. That's why it doesn't really matter where you say it, or how, or when you say it. It matters that you don't say it at all. If it's not something good, don't say it at all." − Participant 7

"Cyberbullying is something we cannot shy away from because for somebody to bully you, it's as little as somebody leaving an ugly comment on your post. Then to even make things worse. There are people that have a ghost account and it's your friend and they just say bad things about you. But because they don't have the guts to say to your face. They go and create a fake account and they will bash you." – Participant 8

Of all the participants, participant 2 was the only participant who indicated that he personally experienced cyberbullying as an adolescent. He shared that he wished that he had the cognitive and emotional capacities, that he now has, to know that he could have blocked or unfriended the individuals that sent him negative content; even though seeing the content would still have had a negative emotional effect on him. Other participants were able to share what they observed to happen with peers at school and with celebrities that they followed. Participant 1 furthermore shared how instant messaging platforms can be used to perpetrate cyberbullying and how adolescents were deliberately excluded from groups created online, causing isolation.

A common thread that was also visible in the statements made by participants 1, 2, 5, 7, and 8, were that bullying online was as easy as leaving a comment or sharing a derogatory image. According to Berryman (2014:6) simply providing consumers of social media with textual material is sufficient to elicit emotional responses, meaning that face-to-face communication is not needed. Kwan and Skoric (2013:16) assert that there is now an equal amount of social interaction that takes place in the context of technology as there is in the context of face-to-face interaction. In addition, the proliferation of social media and content-sharing websites has drastically altered the character of individuals' day-to-day interactions with one another in important ways, as consumers are able to communicate with one another through social media

by leaving comments on each other's profile pages, sending private messages, commenting on each other's postings, uploading pictures and videos, organising group activities, and joining interest groups. As mentioned by participants these same tools, which make it easier for individuals to engage with one another, could also be used to harass others online and constitute as cyberbullying (Kwan & Skoric, 2013:16).

According to Fire et al. (2014:15) bullying that takes place within technological communication platforms, such as emails, chats, phone conversations, and social media, is thus considered to be cyberbullying. Cyberbullying furthermore constitutes an aggressor using the platform to harass a victim by sending repeated hurtful messages, sexual remarks, or threats, publishing embarrassing pictures or videos of the victim, or engaging in other inappropriate behaviour online (Fire et al., 2014:15; Martin et al., 2018:115). As referred to by participants 1 and 7, in contrast to bullying that takes place face-to-face, where perpetrators can be held accountable for their acts and words, cyberbullying enables the diffusion of accountability. According to Kwan and Skoric (2013:18) the large number of individuals participating in the same activity online, and the audiences caused by cyberbullying may have the perception that they are less directly accountable for disseminating content. The researcher is thus of the opinion that the element of cyberbullying may have a larger effect on an individual, as with the example provided by participant 1, who shared that the account of a peer who was bullied and isolated by her peers in school for sharing a revealing picture with her boyfriend at the time. This affected the remainder of her high school career and possibly altered her sexual preference, as evidenced by the following statement from this participant*: "She did like one dumb thing and it showed her for the rest of their high school career, and then she actually turned out to be attracted to females after that. It really affected her."*

Cyberbullying therefore causes increased levels of distress and sadness, and it can even lead to attempts at taking one's own life (Martin et al., 2018:114), as also stated by participant 4: *"I've seen kids who've gone through it, and the effects that it has had on their lives. Some have committed suicide. Like the girl last year, whose video went viral of her where she was getting beaten up. Social media did that, because it was doing its rounds and now she felt as if everyone knew she had gotten beaten up and now she is this victim. Then she took her life."*

Although devastating, as indicated by the incident described above, Martin et al. (2018:114) assert that the use of social media has the potential to either favourably or negatively influence behaviour connected to suicidal thoughts or attempts. Literature has shown that young individuals are frequently exposed to content about suicidal thoughts and ideas on social media, but that these platforms can also play a role in preventing suicide by promoting mental health awareness (Martin et al., 2018:114). The statement made by participant 7 proves the

above, as it reminds individuals that *"if it's not something good, don't say it at all."*

As evidenced by the research findings, cyberbullying poses a great threat to adolescents who are consumers of social media due to the uncontrollable and widespread nature thereof, and is one of the most talked about dangers associated with the use of social media by adolescents (Martin et al., 2018:115). The researcher is of the opinion that cyberbullying is a phenomenon that is not in control of the consumers of social media, and thus agrees that it poses a great threat to the individual socio-emotional well-being of adolescents. Cyberbullying takes place in the ecological techno-subsystem. The ecological techno-subsystem is the internet and social media, and can be influenced by other individuals in the peer and the school microsystems of individuals.

The final threat that will be discussed in this section involves the choice made by an individual to talk to strangers on social media, which seems to be a more controllable threat than that of cyberbullying. This threat is prominent due to adolescents not yet having formed complete awareness and capacities to protect themselves in the digital world, which is proven by the fact that they are willing to accept friend invitations from persons they do not know (Martin et al., 2018:122).

Sub-theme 5.3: Communicating with strangers on social media

The prevalence of social media use among adolescents is considered to be a "recipe for trouble" since it in essence can bring together naive young individuals, predatory adults, and a medium that easily connects them (Mico, 2019:124). The following views were shared by participants when they were asked about their knowledge and experience of communicating with strangers on social media during adolescence:

"There was a lot of predators on social media platforms or, whatever the case may be, sexual offenders, for lack of a better word, that would prey on young kids now activating Facebook and Instagram accounts and then just speak to them. Because Facebook is an extremely open platform or personal information to go onto, my mom thought that I would be in a better capacity to act at the age of thirteen, than the capacity to act at the age of eleven, or better understand what I am doing with the app. My intention was not to put all of my personal details on the app at that stage. When I was a bit older, I went to random girls' Facebook pages and then we started to direct message on Facebook and Instagram, not knowing what I was doing or who I was speaking to. Until it was publicly announced that listen there are these people that are portraying to be a certain individual, but they aren't a certain individual, which is something that you don't realise." − Participant 2

"In primary school when I was talking with my friends, they would say they would be talking with random people and so late at night, or there are games they're playing on Mxit. I think that opens a whole new door for people using Mxit. Like this is a total stranger, but I do trust the stranger to some sense because we're chatting." − Participant 3

"There was once where an older lady, she sent me a direct message on Instagram. She was like, you were on my "for you page" and it said that we have a lot in common, and I thought we could be friends. And I was just like... I don't want to do that. That lady could have easily been, I don't know, a 40-year-old man being a predator. I think as females, we're not as safe on social media because of that, especially when looking for work or something like that. I recently got interested in modelling, then I looked on social media platforms for modelling agencies and so on. I don't think I had a lot of trust in them because there are a lot of scammers also on social media. So, it's not as safe anymore because of that. So, I think I just stay away from that. I think I'm more of a person, if I meet you in person then I would start getting to know you, but on social media there's a lot that can go wrong, because the person that I see in a picture that might not be the person that's behind the phone." − Participant 5

"On Facebook it was more of a controlled thing, it was me and my close friends, and then the older you get, the more you expand into trying to meet new people who you've never met, based on their pictures. Like if you think you're attracted to the picture they have you would add them as your friend, and then hopefully it can turn into a conversation and then you meet. Which is strange now. I think the one thing every person has to admit is that as a kid, you're more gullible to anything, and I'm going to say most of the kids have secrets which their parents don't even know. Like very deep secrets, that if your parents knew they would break down. I think the one secret which a lot of kids have is having conversations with a total stranger and until this day you still don't know if this person was actually genuine or not, and to a certain extent I've shared my location too." − Participant 8

The researcher found that the threat of talking to strangers on social media was experimented with by all the participants; fortunately, none of the participants were negatively affected by the strangers that they interacted with or by the individuals that contacted them. In the case of participants 2 and 8, they reached out to strangers on social media with the goal of broadening their social circles and only at a later stage realised that it posed a significant risk to their safety. Fortunately, participants 3 and 5 were able to discern from a younger age that interacting with strangers could pose a risk to their personal safety. In the opinion of the researcher this difference in the actions taken by the participants are indicative of the

ecological systems within which the participants were reared, indicating that the microsystem and macrosystem influences of an individual can shape their behaviour as they develop.

According to Awan and Gauntlett (2013:123, 124) the risks posed by strangers online can be mitigated by the adoption of a variety of strategies including: not accepting friend requests from unknown individuals, only accepting friend requests from individuals who have a direct association with existing friends and family members and making use of the privacy settings on online accounts. Although seemingly protective, Fire et al. (2014:2) and Martin et al. (2018:123) do not agree with accepting friend requests from individuals who have an existing association with your friends and family members as an individual is still inadvertently disclosing their private information to individuals they have never met before. Fire et al. (2014:2) continue to assert that this information can be put to nefarious use, which can be detrimental to social media consumers in both virtual and the real worlds. These threats are furthermore believed to become greater when the consumers are younger children or adolescents, who are, by their very nature, more open to danger and susceptible than adults are (Fire et al., 2014:2), as confirmed by participant 8 when stating that "*as a kid, you're more gullible to anything.*"

As indicated by both participants 2 and 8, they accepted friend requests from strangers and also sent friend requests to strangers, based on the profile images that they displayed. Martin et al. (2018:123) indicate that young individuals respond favourably to friend requests in order to be able to broaden their social circle and raise their profile visibility on various social media platforms. As asserted, the majority of individuals are however unaware of the potential repercussions that could result from their activities, which highlights the importance of microsystem education from a young age, and for adults to continuously monitor the child and adolescent use of social media as well as the nature of the information that they are accessing (Martin et al., 2018:123).

Fire et al. (2014:14) explain that the threats that can be caused by communicating with strangers on social media include but are not limited to the use of chat rooms for interactions with strangers, discussion of sexually explicit topics with strangers, and providing private information and personal pictures to strangers, which in turn could generate anxiety regarding the safety of a child. Fortunately, and as evidenced by the statements from participants, communicating with strangers on social media seems to be a choice that each individual makes. The researcher is however of the view that mitigating circumstances, such as individuals' ages and their ecological background can also play a role in choosing to communicate with strangers, as children are direct products of their environments and if a

behaviour is accepted and replicated, a child will do the same. This notion is also supported by the ecological systems theory that underpins this research study.

The following research theme that was prominent in the research findings was the involvement of parents and caregivers in adolescent social media use, which will amplify the findings that have been presented thus far in this chapter.

3.8.2.6 Theme 6: Parental involvement in adolescent social media use

According to Barry et al. (2017:1) in order to further understand the role that social media use plays in the adjustment of young individuals, it is also important to consider the perspectives and knowledge of parents and caregivers regarding the use of social media by their adolescent children.

In addition, it is believed that parental oversight and deeper parent-child interactions on social media may promote more adaptive uses of social media; and that a separation between adolescent social media use and parental awareness may be potentially deleterious in terms of the mental health of adolescents. The researcher found that this awareness on the part of parents may be especially important considering recent research that has begun to record how specific experiences on social media may translate to difficulties in the behavioural and emotional adjustment of adolescents (Barry et al., 2017:1). The research themes presented in the following section involve discussions regarding the prevalence of parental involvement in adolescent social media use, and the effect that the involvement of parents had on the well-being of the participants when they were adolescents.

Sub-theme 6.1: The prevalence of parental involvement

From the data that was collected during the study, the researcher found the following statements to be indicative of the prevalence of parental involvement pertaining to the use of social media by participants when they were adolescents:

“I remember I had to write up like a contract for my parents for me to use it. So, in my family, my mom wasn't very big on social media so when my brother got Facebook, he wrote up a contract saying he'd only use Facebook on the weekends. That he wouldn't have any friends that he doesn't know. It was more like protection things, and then like hours that he would use it and that he wouldn't let it get in the way of his schoolwork. Then, when I wanted Facebook, I did the same thing and then my mom would sign it and my stepdad would sign it, and I would sign it. But otherwise, my mom was super chilled. She never wanted to see our phones. She never went onto our phones. She always thought of it as private. She always knew that she could. We always had an agreement that if she really wanted to, we would give her our

phones." – Participant 1

"So, my parents tried to. My parents, when I was about fourteen, they started. When I started showing severe symptoms of depression and they could see the marks on my body. They would go on to my phone, on a regular basis, to see what I was looking for, what I was searching, who I was speaking to, what the messages would entail, whether or not I sent for instance, sexual photos to my girlfriend, if she sent them back to me. All those different things. But being a teenager, the information that I provided was only as bad as what I tell you they are. Then, due to the fact that we received new telephones and touch screens, and you could hide everything, and you could block contacts, hide photos, delete photos then retrace them back to your phone after they're deleted." – Participant 2

"They did know about Twitter. I think they only knew about Twitter and WhatsApp. That was the only ones I actually used in primary school. But in high school, 2015 I started using Facebook, Instagram, Pinterest all of those and they didn't know about that. I think they didn't have any reason to doubt me. I was a kind of a people pleaser during my school years. I wouldn't, if I had a lot of respect for you, I would rather die than let you down. I would do the extreme just to not let you down and I knew it would let my parents down if I did something wrong on the apps, and I knew I wouldn't be doing anything wrong on the apps. It wasn't of any interest for me to do the stuff that I wasn't supposed to do." – Participant 3

"Strictly WhatsApp until grade 7 to 8. That's when I was allowed to have Instagram and Facebook. Because my mom said certain content is not going to be good, some are graphic, some are going to introduce me to the use of substances. Well, she regulated WhatsApp from grade 6, to 8 and then I think from grade 9 I had a bit more freedom to get these other apps. I think she realised that this person is a teenager and she's not in an era like her era, where there was just solely no internet, but now we're more technologically advanced and everything is internet and technology. So, I think she realised that I can't really put a grip on that, because this is her era, and this is how she's supposed to grow up. This is the era she's growing up in." – Participant 4

"She knew, but she wasn't as involved. I think she just wanted me to experience it myself, but she did warn me of the negatives of social media when I started using social media. She told me that there are negative people out there and I should be aware of that. That there are people with ill intentions and there are people who would bash at a 13-year-old just for the sake of it. She just told me to be careful." – Participant 5

"Yes, they did. But like I said, it's something personal. So, no one is going to come to me every day and be like what are you on social media now. They are just going to leave you. But until a certain age people just think she can do it now. She doesn't need to have someone to look over a shoulder. Then they just move on." – Participant 6

"No. Till now I don't even allow my parents to see my WhatsApp status because they'll probably die, because I post everything and anything. Like if I'm out and I'm having fun, I post it. I'm driving fast, I post it. I mean I grew up in a very strict household, so the only time I had my phone was holidays and that's after a long time. Like you have a whole two months of school, so I was forced to participate in sports and play outside, but as soon as I was like 16 and I was like mature I guess, I was always on my phone." − Participant 8

"No, they just always just left me. It's good for my privacy. It's my piece of mine, but also, as it could have prevented the fighting and stuff." − Participant 9

From the statements by participants, it was found that the majority of parents were aware that their children were active on social media, but that true monitoring and access control was only done before their children were adolescents, as per the statements made by participants 3, 4 and 8. As the participants grew older, only participant 2 was strictly monitored by his parents. This was due to this participant struggling with his mental health during adolescence. Furthermore, the parents of participants 1, 4 and 6 were aware of the social media platforms that their children frequented, while the parents of participants 3, 5, 8 and 9 were not aware of the social media platforms that their children used.

From the above it is pertinent to note that adolescents are given more freedom of choice and less supervision by their parents with regards to both media associated activities; this is confirmed by Davel (2017:20). Višnjić et al. (2015:64, 65) are of the view that the considerable increase in the availability of smart devices and access to the internet that adolescents have, relate to the above and is a core reason for a shift towards parental beliefs that adolescents would benefit from technological exposure as it is what the growing information age and education system requires. This notion is supported by the statement of participant 4 who voiced that: "*this is her era, and this is how she's supposed to grow up."* This statement by participant 4 shows that the notion by Davel (2017:25), that due to previous generations not growing up with the technology that the youth of today have access to, causes difficulty for parents to comprehend that young individuals now need a technological tool to strengthen their self-awareness, self-understanding, and their social interactions, is less relevant in 2023.

Both participants 2 and 8 indicated that they actively hid their social media use from their parents, whereas participant 3 indicated that there was no need for his parents to monitor the content of his social media. In line with the above finding, Barth (2015:204) states that adolescents become more secretive about their online and offline social lives as they gain independence from their parents and caregivers. Some adolescents may thus not want their parents and caregivers to be involved or carry much knowledge about their online activities, resulting in secretive behaviour for some (Barth, 2015:204; Davel, 2017:20). Social media platforms are therefore regarded as a forum that is often shielded from supervising adults (Oberst et al., 201:52).

The parents of participant 1 had a different approach to monitoring access to social media by allowing their children access to the platforms after the signing of a contract with terms of use pertaining to their safety, giving the responsibility to their children from an early age. As noted, research regarding parental guidance have been conducted focussing on the importance of parent's involvement in the online media activities of young individuals, which influences their media-induced learning, play, and social development. According to Nikken and Schols (2015:3424), various kinds of advice could be given to parents, the majority of which were referred to as "parental mediation," which can be defined as any approach parents use to manage, oversee, or interpret media content for children as with the case with the parents of participant 1 who decided to create a contract for their children to sign.

The different approaches of the participants' parents fall in line with Vygotsky's (1986, in Nikken & Schols, 2015:3424) theory on the development of children, as parental mediation is seen as a key strategy in developing children's skills to use and interpret online media, foster positive outcomes, and prevent negative effects. Experiences that a child has physically, emotionally, and socially, such as the use of online media, and the social interactions that are related to these activities with parents and siblings, provide a scaffold for the child's development. This is especially true when these experiences take place within the child's zone of proximal development. In the context of the consumption of online media by young children, this indicates that whenever a child is participating in certain media-related activities, a parent should employ a type of mediation that is suitable from a cognitive and emotional growth perspective of their child. The methods that parents use to mediate conflicts with their children are thus extremely diverse, both in terms of the strategies they employ and the frequency with which they do so (Nikken & Schols, 2015:3424). The researcher found the above to be relevant to the findings that were revealed in the research, as no clear-cut manner for parental control and involvement was evident; it was varied and seemed to be influenced by individual age and circumstance. Physical health, mental health, social skills, and even behavioural

challenges are all linked to children's media consumption. Thus, as the primary influencers of their children's media habits, parents set the tone at home when it comes to their children's online media use and play a significant part in shaping their children's media consumption habits (Lee, Young Kim & Kim, 2022:1), thus shaping the familial microsystems of their children. According to Bronfenbrenner (1977, in Navarro & Tudge, 2022:1) he established his ecological theory of human development based on the science of children in odd environments. As explained above, this theory is still relevant in the modern era since developmental and family sciences routinely study the pervasive environments in which children and adolescents learn, play, and mature, including the technological and virtual environments (Navarro & Tudge, 2022:1).

With the above in mind, the researcher also better understood the different reactions toward parental involvement and social media use by participants, as ecological systemic differences shape individual behaviour and how the systems react to individual behaviour (Navarro & Tudge, 2022:1). This could be seen as a reminder that the individual background of each individual should be taken into account when providing services and that literature is thus used as a guideline for intervention and for the establishment of varied hypotheses in order to assist individuals, and especially developing children who are negatively affected by social media use. The following sub-section places focus on the views of participants regarding the effect of parental involvement pertaining to their use of social media during adolescence.

Sub-theme 6.2: The effect of parental involvement

Even while the impact of peers has become more significant for adolescents, it has been found that their parents continue to be the most important individuals in their lives (Fardouly, Magson, Johnco & Oar, 2022:1457), with studies indicating that the involvement of parents in their children's online activities has been shown to be an important safeguard against the risks associated with having poor experiences on the internet (Livingstone & Smith, 2014 in Ghosh, Badillo-Urquiola, Guha, LaViola & Wisniewski, 2018:1). Participants shared the following regarding the involvement of their parents in their social media use during adolescence:

"Thinking back, I don't know what I would have done differently. I don't know what I could have done to make it for lack of a better word, better for myself. I think the support, taking a look at it now, it was fantastic, and I couldn't have asked for anything better. I was glad that my mom stopped me, and withheld access to the applications until the age of thirteen. It's still a young age when I think about it now but being a little bit safer than what I would have done. If it was me, I would have activated the account at the age of eight, or when it came out first. But then I know what issues that would have resulted in for both me and my family." – Participant 2

"As we get older, we start realising that you know what, what mom said is true. I experienced that myself, because when I was young, I was very curious. Now when I look at the world, I'm like. You know what? What mom said is true." − Participant 5

"I would say it was positive because I had one time where someone limited me for like three months and then that stuck with me for a very long time. So, I started limiting myself and I was very strict on myself. So, for me it was a good thing. For me it was a positive thing because I could limit myself" − Participant 7

From the information provided by participants it seems clear that they viewed the guidance and limitations instituted by their parents regarding their social media use during adolescence to be positive for their well-being. Participant 2 was the only participant who needed stricter guidelines during adolescence because of the mental health difficulties that he disclosed and views the support that he received from his parents to have been valuable for his well-being. The findings above concur with literature that has noted social support during the developmental phase of adolescence, from especially family and peers, to have a significant effect on the emotional awareness and management of an adolescent (Berk, 2013:207).

Participant 5 reflected on her mother being accurate in the guidance that she provided to her during adolescence, coinciding with active parental mediation of social media use. Active mediation takes place when a parent discusses with their child the character decisions, core themes, or other aspects of a piece of media that their child is taking in with the goal of encouraging their child to think critically about the media (Collier, Coyne, Rasmussen, Hawkins, Padilla-Walker, Erickson & Memmott-Elison, 2016:789). Active mediation furthermore works well in conjunction with the self-determination theory, which gives more independence to the actions and perspectives of children and adolescents in general, as well as in relation to social media use. Open communication between parents and children beginning at a young age may increase the possibility that adolescents will communicate openly about their peers, school, and daily activities, including their media intake (Kerr & Stattin, 2000 in Collier et al., 2016:790). Thus, instead of demanding that a child or adolescent conform to the parental standards of media consumption, parents should educate and clarify their media standards, which will make it possible for their children to develop critical thinking abilities (Collier et al., 2016:790), as was the case with participant 5.

Participant 7 was grateful that her caregivers had taken away her social media privileges when she was unable to limit her own time online, and it affected her academically. The limit that was instated once, was enough for her to instil positive social media boundaries for herself.

The practise of setting rules that restrict the amount of time spent on social media is referred to as restrictive mediation by parents or caregivers (Fardouly et al., 1457). Fardouly et al. (2022:1457) are further of the notion that if parents supervise their children's use of social media and limit the amount of time they spend on these platforms, it is possible that their children will be exposed to less material that could be detrimental to their mental health. Furthermore, if adolescents spent less time on social media, they might have more time to participate in other offline activities that could improve their emotional well-being, and in the case of participant 7, provide academic benefits. When reflecting on the theoretical framework of the study it is also important to note that parenting behaviours and restrictive mediation of social media use are also influenced by the characteristics of and individual. This may make it more difficult for parents to control the use of social media by adolescents who struggle with mental health (Fardouly et al., 2022:1457).

According to the findings of research conducted on these processes, each type of parental mediation appears to function initially to change children's perceptions of the material offered in the media or the medium itself, regardless of whether this was done intentionally or not. The subsequent attitudes or behaviours exhibited by young individuals are a direct result of these distorted perspectives (Collier et al., 2016:790). A second conclusion that can be drawn from these findings is that parents have an expansive view on the function that the media plays for their children, one that extends beyond the risk-benefit paradigm. When it comes to striking a healthy balance between their young children's media use, parents not only take into consideration the positive educational and learning effects of screen devices as well as the negative effects of media content, but they also take into consideration the complexity of the media as well as the practical value of the media for structuring their family life (Nikken & Schols, 2015:3432). The final research theme that will be covered in this chapter includes the recommendations made by participants for the optimal use and avoidance of harmful social media use during adolescence.

3.8.2.7 Theme 7: Recommendations for the optimal use and avoidance of harmful social media use during adolescence

The researcher is of the view that the discussion that will take place in this section of the research report will hold specific value for social workers and other practitioners that work with children and adolescents, as it provides the views of the participants themselves pertaining to recommendations for the optimal use and avoidance of harmful social media use during adolescence. Throughout the current research, participants were able to identify an extended age limit and supervised access to social media, and the incorporation of social media use

and education into school programmes as possible recommendations to professionals that might curb some of the threats and harmful effects that have been discussed throughout this chapter.

Sub-theme 7.1: Extended age limit and supervised access

During the data collection process participants were asked if they believed social media to be safe for adolescents to use; they were requested to share their views on the age that they believe would be the safest for adolescents to be exposed to social media. The following statements are indicative of their opinions:

"I think 16, 17 should be the age when teens are allowed to have access to social media platforms. Except WhatsApp, except communication platforms, but social media platforms the age of sixteen, seventeen, eighteen. I think that will be a better option." − Participant 2

"I think 15 to 16 is where the person or the teenager will understand the basic concept of cyber security. Don't share your password with anybody. Don't share your email. Don't trust people you don't know and stuff like that." − Participant 3

"If I'm being honest with you, we are in too deep. A kid of two years old can already operate a phone. They know how to open the phone, where to go and now my question is, if they accidentally go into a porn site or a pop-up ad of a porn comes up and it clicks, then he's only two and he sees that, he's damaged for his whole life. The best way is for parents to intervene. But then again, even if you as a parent, you're doing your job. And the next parent is not doing their job. Your kid is going to see that. Like, I've seen a video of things that if my parents saw it on my phone, I'd be grounded for years. Like what is this doing on your phone?" − Participant 8

"If they're a little more mature, like from 18, I'll say. Maybe it'll be better because then they understand better about how to live and can learn how to communicate better with people in person." − Participant 9

"I think for some people that get matured quickly, any age around 16. But for me, 18 was a point for me. But with children nowadays, we cannot trust anything. So, for me I feel that we should be preparing young teenagers for such things, or we let them know you can do this and this, and this and this. But whatever you do is going to affect you and stuff like that. A teenager shouldn't have a phone. Because I said, if they don't have a phone, they won't know what's going on through the weekend. They don't know this weekend we are going to groove

because it all starts at the phones nowadays, to get to hear about something." – Participant 10

From the above statements by five of the participants it became evident that upon reflecting on their time spent on social media during adolescence, as young adults, participants viewed social media use to be unsafe and that individuals should rather be given access from a later age; with 16 being the median age amongst participants. Burnette et al. (2017:115) are of the view that most social media companies have an age restriction of at least 13 years of age before consumers may sign up. It is therefore reasonable to assume that social media are aimed at populations of adolescents and older individuals and that there are attempts made to prevent young individuals from accessing these platforms (Burnette et al., 2017:115), but from the statements made by participants it might not be restrictive enough to keep children and young adolescents from the harm that has also been discussed throughout this research report.

Although social media platforms have set in place necessary age restrictions on their platforms, Richards, Caldwell and Go (2015:1155) assert that it is hard to enforce age limitations in the context of the internet because the validation of age, or even name, is not necessary. The researcher is of the opinion that it is therefore necessary to teach children about the risks and dangers associated with using the internet and social media. This is confirmed by participant 8, who stated: "*The best way is for parents to intervene."*

In the same vein, previous research has shown that demographic factors, such as the age, gender, level of education, and level of income of parents, are also associated with the degree to which parents guide their children in their use of various forms of digital media, as well as the specific tactics that the parents use. The researcher found the following factors to also be relevant to the above, namely parents' personal media consumption and abilities, as well as variables concerning the family's context, such as the size of the family, the marital status of the parents, and the number of media screens in the home (Nikken & Schols, 2015:3424). This in part refers back to the theoretical framework underpinning this study, in particular the microsystems and the mesosystem in which parents function and were reared as it shapes the individuals that they become, and thus their parenting decisions. According to Bronfenbrenner's theory, understanding the relationship between various microsystems is essential to understanding that individual development is progressing. In addition to this, the theory contends that all environments include a wealth of instructional resources that are necessary for healthy human growth. In this way, each microsystem is responsible for providing support to the other microsystems in order to foster the development of each

individual (Fulantelli & Taibi, 2021:154), including the parents of children.

Richards et al. (2015:1155) are of the view that the education of the individuals who are responsible for providing children with the needed media education, such as parents and educators, is a prerequisite for beginning the process of teaching children how to use social media. To effectively educate children and young individuals about the risks that may be associated with using social media, it is thus essential for parents and educators to be aware of the factors that may compromise the safety of social media use for children and young individuals (Richards et al., 2015:1155).

When linking with the theoretical framework of this study, it is reasonable to believe that children, particularly very young children, have a limited media literacy and are, as a result, more susceptible to the harmful influences of media, as they have not received extensive microsystem exposure and do not have the developmental capacity to understand the content that they consume. Research has revealed this to lead to the implementation of additional limits on the use of digital media by young children or to an increase in the amount of supervised digital media use and co-use with parents (Nikken & Schols, 2015:3425), which indicates that children that are currently adolescents might already be facing more restrictive and supportive parental supervision.

This is further confirmed by Nikken and Schols (2015:3425), who found active mediation to be most commonly used by parents in relation to educational television programmes, websites, and social media use, and restrictive mediation to be used more frequently by parents in situations in which their children show an interest in inappropriate forms of content (Nikken & Schols, 2015:3425). Research further revealed that older children are to a certain extent subjected to more active and restricted mediation from their parents, independent of whether or not the older children are able to utilise electronic media (Nikken & Schols, 2015:3431). This indicates that parents are already showing more support towards their children with regards to supervision of social media use. As to the extended age limit for social media use that were alluded to by four participants, the researcher is of the view that the possibility thereof lies solely with the parents of individuals, as it has been asserted above that young individuals already bypass the age restrictions put in place by the social media platform itself. In an attempt to explain the above, the researcher is of the view that the macrosystem, in which the broader companies that own the social media platforms operate, does not form part of the systems in which individuals can assert actual control. This thus voids the possibility of extending the age restrictions placed on social media use, as it can only be mediated by parents and caregivers who remain aware and educated about the social media use of their

children. The following sub-theme will focus on the latter, thus focussing on social media education for young individuals in order to avoid potential harm.

Sub-theme 7.2: Including social media use in school programmes

The researcher found the following statements by participants to hold value with regards to the suggestions made by participants when requested to make suggestions to assist parents and professionals in curbing the harmful effects that social media use can have on adolescents. This sub-theme suggests that the incorporation of social media into home and educational systems could assist with safeguarding children and adolescents from the possible harm that social media use can expose them to. This is illustrated by the following reflections from participants:

"If it's shown to them, that YouTube can be used to explain something in class that you don't understand, or you can use YouTube to do this and ask them, "Have you seen this Instagram page where they promote this?" I know about a lot of schools that are actually doing TikTok pages for their schools. It is like they're trying to speak the language. I fully believe it can help, teaching children not only how to use the application but also what can happen. Tell them that these are the pros and cons, and to look for the positive in social media platforms rather than fall victim to the negative aspects of social media. So, the same as schools do with sex education." – Participant 1

"Make it known that it's not a bad thing to speak about it. For example, if you discuss sex education at school, everyone knows how it works. It's an open platform for discussion. Speaking about social media, you won't be the only kid speaking about how you messed up on social media, and I think it should be done at the same stage. To do one workshop on sex education, one workshop about all the adolescent stages. During the adolescent stages, especially given what we're exposed to, teenagers go through it and learn what the safety risks and precautions are behind it and how it works. They can figure out the application themselves. It takes two seconds for a teenager. But to just explain, "If you feel this way, contact this person or speak to someone," awareness about the seriousness of social media, and then you could do bullying workshops on social media. Bringing that into the aspect of physical and emotional bullying in schools, as well as doing it on social media." − Participant 2

"Be open for questions. When this person asks you, "But there's certain content," "I feel like this and this." They don't necessarily get to ask this at home, but the professionals can answer them. They need to reconsider the Life Orientation curriculum because life orientation is a

mess. It's a lie. They don't really talk about what really happens; they just talk about the surface level, drugs, and alcohol. Don't do drugs, don't drink alcohol, and don't smoke. But they don't really talk about it in depth. What leads you to alcohol consuming alcohol at a young age? What can you do when you start drinking alcohol?" − Participant 4

"In a sense, with certain things, yes. I was curious. As in, why don't you want me to do this? I want to see why. So, I think it depends on the person, but educating them is the best way, honestly. Just like with me, when my mom warned me about social media, I actually took her warnings to heart. I think educating them in a way that they can understand is important." − Participant 5

"I think listening is a very important aspect when it comes to teenagers. Myself, I'm more open to talking to people who want to listen. A person who won't tell me not to do something without giving me a reason So, I think if professionals, parents, and teachers just listen and take in what teenagers have to say, they will have an understanding, and then that can be used as an advantage to find a solution to what to do next. Also, by understanding why the platform is there. I got a clear vision that social media was there to uplift me. Social media is there to do research about anything. I can go on social media and it's there; it's available, and someone can help you through what you are struggling with." − Participant 6

From the statements made by participants, the researcher found overarching similarities between their assertions, showing that they value professionals and parents listening to adolescents (participants 1, 2, 5, and 6) and that they should be open to answering questions from adolescents (participant 4). Furthermore, participants 2, 4, and 5 believed education regarding both the benefits and harmful use of social media can be included in school programmes and subjects such as Life Orientation, which all South African children in public schools have as a subject until they matriculate.

From the similarities in the statements made by participants, the researcher found the following literature to support the argument that the benefits of including social media use into education and schools may have tremendous benefits for adolescents, as it is the "language that they speak" (participant 1). Many individuals still believe that social media platforms are where today's youth spend most of their time because it is so closely associated with young individuals. There is however also a great deal of uncertainty and fear regarding the more far-reaching effects that social media use will have on the education and wellbeing of young individuals, as there are those who believe that social media is ruining the educational system and will lead to a significant drop in grades, which they believe is a problem that can only be

fixed by restricting learners' access to cell phones and other forms of information and communication technology (ICTs) whilst at school. Others however view social media as having the potential to re-energise the experience of education and believe that the use of such technologies will inevitably benefit all parties involved, because it will force formal education to embrace new forms of informal and interactive learning (Miller, Sinanan, Wang, McDonald, Haynes, Costa, Spyer, Venkatraman & Nicolescu, 2016:70).

These findings are in line with the statement made by Uhls et al. (2017:S69) where they state that children should be instructed in digital literacy from the beginning of kindergarten and that it should continue until they finish school. It is furthermore suggested that in order to raise awareness of social media behaviours and the effects they can produce, parents and professionals should examine both the social media use of children and of their parents, and parents should be encouraged to have conversations with their children about how they use social media. It is furthermore suggested for parents to set up their own profiles on these platforms and to assist their children in developing responsible usage habits (Uhls et al., 2017:S69), which correlated with the viewpoints of five participants. Megele (2015:415) furthermore states that for the purpose of boosting learning processes and the overall experiences of children at school, the affordances of technology use at school present both new and exciting opportunities and some crucial problems. The development of children's e-professionalism as well as their talents in blended communication are believed to be vital to the educational development of millennial children.

Research conducted by Miller et al. (2016:78, 79) revealed that there was still a particular reluctance to social media use in education amongst educators at a number of their field sites. This reluctance was a result of the pervasive assumption that the use of social media by young individuals is detrimental to their academic progress. Educators with this belief are frequently burdened with the responsibility of policing these boundaries by enforcing limits on the use of social media and ICTs whilst on school grounds. As suggested by participants 2, 4 and 5, the researcher found literature that recommends the necessity of teaching methods that incorporate the abilities of technology use into the curricula that is taught in schools (Miller et al., 2016:79). The literature furthermore challenges the assumptions that not only educators are the best qualified to judge what technology should be taught, but also that the knowledge taught in schools is useful for life because it is filtered to fit the best interests of children and adolescents, whereas the knowledge obtained at home on social media and the internet is incidental and unfiltered (Miller et al., 2016:79).

The theory of connectivism regards learning as a dialogue and suggests that learning experiences do not stop but continues inside the different networks that an individual is connected with (Gikas & Grant, 2013:19), such as the school and familial microsystems of adolescents.

Finally, the benefits of allowing social media use in the classroom and providing guidance into education settings include providing learners with anytime access to educational and course content as well as the ability to communicate with peers and educators regardless of their physical location. In addition, mobile technologies allow learners to search, identify, manipulate, and assess existing knowledge; individuals can also successfully incorporate newly acquired knowledge into their existing knowledge base and can share it with others (Gikas & Grant, 2013:19), thus broadening the knowledge base of young individuals. Young individuals are furthermore given the opportunity to work together, debate the material with their peers and educators, and construct new meaning and comprehension through the use of mobile devices (Gikas & Grant, 2013:20).

3.9 SUMMARY

In this chapter of the research report, the research methodology that was utilised during the course of the study, was presented. This included an overview of the research approach, the type of research that was conducted, the research methods, and the ethical considerations that were applied throughout the course of the research. The empirical findings of the research were thereafter presented in two separate sections. In section A, the biographical profiles of the participants were presented, and in section B, the empirical findings, in the form of themes and sub-themes. The outcomes of the research, as well as the researcher's analysis and interpretation of the data regarding young adults' perceptions of their use of social media when they were adolescents, were thus presented to the reader and discussed by substantiating the research findings with existing literature.

The concluding chapter of the research report is aimed at providing the reader with an overview of the empirical findings of the study. The chapter includes an analysis of the goal and objectives of the study, as well the presentation of the key findings and conclusions that the researcher was able to make from both literature and the findings of the study. Suggestions will furthermore be made for practitioners in the sector as well as for future research on the effect of children and adolescents' use of social media.

CHAPTER 4
CONCLUSIONS AND RECOMMENDATIONS

4.1 INTRODUCTION

This is the concluding chapter of the research report on young adults' perceptions of their social media use throughout adolescence. The researcher will discuss the extent to which the goal and objectives of the study were met. The key findings of the study will be presented; conclusions will be made based on literature presented and on the findings of the study. Regarding the overall influence that social media use has on children and adolescents, suggestions will be provided, both for the practitioners in the field of social work and education, as well as for future research.

4.2 ACCOMPLISHMENT OF THE RESEARCH GOAL AND OBJECTIVES

To determine if the intended purpose of the research has been accomplished, the researcher will describe how and to what extent the goal and objectives of the study have been met. The way in which the above was accomplished, and the viability of the research will be discussed in the sub-sections that follow.

4.2.1 Goal of the study

The goal of the research was to explore and describe young adults' reflections on their experiences of social media use during adolescence. The researcher was able to collect valuable data from young adults by exploring their perceptions of their social media use during adolescence, through employing the relevant research methodology. A combination of purposive and snowball sampling was used to identify ten young participants for semi-structured interviews. Furthermore, a case study design was utilised and a qualitative research approach was followed. The data that was gathered throughout the interview process was analysed by means of thematic analysis. In the sub-section that follows, the researcher will indicate how the research objectives were attained.

4.2.2 Objectives of the study

Short discussions of how the researcher obtained the research objectives are presented below:

- **Objective 1: To theoretically conceptualise social media and to contextualise it within the South African context**

Objective 1 was achieved by means of a literature review, presented in chapter 2. Both South African and international literature were integrated in this presentation. The concept 'social

media' was described by providing a definition of social media, and by discussing the various types of social media, including social networking sites, blogs, microblogs, forums, video podcasting and messaging platforms. This was followed by a presentation on the prevalence of social media use internationally, and in South Africa (section 2.2 of chapter 2).

The prevalence of adolescent social media use was then reviewed (section 2.3 of chapter 2), indicating that social media use amongst millennial adolescents are unavoidable due to access to the internet and mobile ICT devices. Thereafter emphasis was placed on the role of parents in adolescent social media use (section 2.4 of chapter 2), which the researcher found to have been indicative that the role and effect of parental involvement is individualised and may largely depend on the parenting style of the parents.

In addition, the researcher examined adolescence as a life stage (section 2.5 of chapter 2), which provided insight into the different developmental challenges that adolescents encounter, including their biological growth, which includes physical, emotional, social, and cognitive development. The significance of identity formation and the building of a moral value system during adolescence was also reviewed. Subsequently literature was presented that placed emphasis on the effects of social media use on adolescents (section 2.6 of chapter 2). This was accomplished by reviewing the emotional, social, intellectual, and physical effects of adolescent social media use. The researcher aimed to review literature that focussed on both positive and negative effects of all the categories listed above.

Problematic internet use (section 2.7 of chapter 2) and the prevention and treatment of problematic internet use (section 2.8 of chapter 2) was also reviewed with the goal of preparing the researcher for the interviews with participants. The above assisted with the formulation of additional questions if a participant were to have experienced symptoms of addiction to social media as an adolescent. The researcher was able to achieve the goal of the research by continuing with the remainder of the research process after obtaining current information from participants and by reviewing relevant prior research.

- **Objective 2: To explore and describe participants' use of social media during their adolescent years**

As mentioned in the discussion above, social media was conceptualised in chapter 2 and the researcher described the different ways in which adolescents were affected by social media use. During the data collection process, the researcher explored the participants' use of social media during their adolescent years. Participants were asked to share their experiences during adolescence pertaining to the age that they were first allowed to have access to social media,

the purpose for which they used social media, and the amount of time that they spent on social media during adolescence. These empirical findings were presented in chapter 3 of the research report. The research prompts that were mentioned above in order to obtain objective 2, were discussed under theme 1 (The use of social media during adolescent years).

To substantiate the research findings, the researcher presented verbatim quotes by the participants to convey their perceptions throughout the presentation of the empirical findings (themes 1 to 7). Literature was incorporated in the presentation of the empirical findings to correlate with the perceptions of the participants with previous research, existing literature, and the theoretical framework that was followed throughout the research process. The researcher is thus of the view that the second objective was accomplished successfully by exploring and describing participants' use of social media during their adolescent years.

- **Objective 3: To explore and describe the participants' perceptions of positive and negative influences of social media use on them during adolescence**

This research objective was achieved by collecting relevant data from participants during data collection. The perceptions of participants pertaining to the positive and negative effects of social media use were explored in a holistic context. This holistic context was augmented by the literature review on the effects of social media use on adolescents, as presented in section 2.6 of chapter 2. During the process of data analysis, the researcher identified four themes in which participants shared their perceptions of the above (themes 2, 3, 4 and 6).

In theme 2 of chapter 3, the researcher presented an overview of the perceived positive and negative effects that participants experienced in terms of their emotions, the social effects, the cognitive effects, and the physical effects of social media use during adolescence. The above directly linked with the literature review and provided the researcher with an optimal frame of reference. The two sub-themes that were relevant to the above were thus, positive effects of social media use (sub-theme 2.1) and negative effects of social media use (sub-theme 2.2). In each sub-theme the four core aspects mentioned above, which are crucial for adolescent development, were discussed.

In theme 3 the researcher shifted the focus away from the biological aspects of adolescent development towards the external factors influencing adolescent development in a milieu of prominent social media use and exposure. The theme comprised of four sub-themes that focused on other prominent aspects that influence adolescent development, namely self-esteem, peer pressure, moral development and identity development which were presented in sub-theme 3.1 to sub-theme 3.4.

The researcher also found two of the core aspects of social media use to have both positive and negative influences on the participants during adolescence, which resulted in the development of research theme 4. The theme encompassed two sub-themes, namely likes and followers (sub-theme 4.1) and false self-presentation (sub-theme 4.2).

During the data analysis process the researcher found that participants perceived social media use to hold certain threats to the self, resulting in the development of theme 5, which entailed an exploration of the possible threats related to social media use during adolescence. The core sub-themes that emerged during data analysis were, privacy threats regarding social media use (sub-theme 5.1), cyberbullying on social media (sub-theme 5.2), and communicating with strangers on social media (sub-theme 5.3).

When considering the research themes presented in achieving objective 3, the researcher is of the opinion that a holistic account was provided in chapter 3, regarding the positive and negative effects of social media use experienced by participants during adolescence.

- **Objective 4: To obtain suggestions from the participants on promoting optimal use of social media by adolescents.**

Although not suggested, the researcher found participants to have welcomed involvement and intervention by their parents and caregivers pertaining to their use of social media during adolescence. This research data was presented in theme 6. In this theme the data on parental involvement in adolescent social media use was presented in the two sub-themes. The sub-themes examined the prevalence of parental involvement (sub-theme 6.1) and the effect of parental involvement (sub-theme 6.2). Moreover, in sub-theme 7.2 the researcher incorporated suggestions by participants to parents and professionals to ensure that the optimal use of social media during adolescence can take place. This objective was therefore achieved.

- **Objective 5: To obtain the participants' suggestions for curbing harmful effects of social media on adolescents.**

Research objective 5 was achieved in the presentation and discussion of the findings in theme 7. This theme focused on recommendations for the optimal use and avoidance of harmful social media use during adolescence. The two sub-themes were extended age limit and supervised access (sub-theme 7.1) and including social media use in school programmes (sub-theme 7.2). In this section participants made several relevant recommendations that can be provided to professionals working with this population group.

In sub-theme 7.1 it was concluded that the only real solution to ensuring an extended age limit would be when parents and caregivers become more actively involved in their children's social media use. In sub-theme 7.2 practical and relevant recommendations that can be made for professionals to curb the harmful effects of social media use by adolescents and young children, was presented. The final objective that was established for the accomplishment of the goal of the research was therefore achieved.

In accordance with the goal and objectives, the research question for this study was: *What are young adults' reflections on their experiences of social media use during adolescence?* The research question was answered through the research process and presented as empirical findings in chapter 3. The answer to the research question is summarised as key findings in the following section.

4.3 KEY FINDINGS

The following key findings emerged from the research:

The **age of first social media use** was between 11 and 15 years. Each social media platform that was used aided participants' development in different ways. **Communication** was the common purpose. The second shared purpose was **educational growth**, with YouTube and Pinterest assisting participants in studying the school curriculum and cultivating and excelling in adolescent interests. YouTube and TikTok supplied **entertainment**, as well. In addition, participants spent **more than six hours per day** on social media, particularly when they were bored at home.

Several ways to **regulate emotions** on social media were evident. Social media improved mood, emotional security, and combatted loneliness through connecting with individuals. Participants who avoided unpleasant social media content had better emotional regulation capabilities. Participants with anxiety used social media to identify and manage it.

The study found that social media helped adolescents **socialise and enhanced their peer group experience.** Participants also **gained cognitively** from the use of social media during adolescence. Participants reported cognitive gains from macrosystem contact and social media inquiry outside of their micro- and mesosystems. These cognitive gains also related to the individual chronosystem. Exposure to motivational content outside the familial microsystem via social media during adolescence had positive **physical benefits** for participants.

Additionally, use of social media during adolescence **negatively affected** the **emotional, social, cognitive, and physical development of participants.** Changing social media posts to make them more acceptable to peers resulted in emotional lows. Using social media during adolescence increased emotional stress by causing anxiety and sadness. Relationships were negatively influenced by avoiding social media to avoid anxiety and emotional harm.

Other **negative social effects** included using social media as a 'social buffer,' leading to phubbing, or looking at one's phone while around others. Further findings showed participants felt alienated from those around them, struggled with in-person contact, felt confused about how frequently an individual talks with another digitally, and felt uncertain when encountering that same individual in person. With regards to the **negative cognitive effects** caused by social media use during adolescence, the findings revealed participants to struggle with finding a balance between schoolwork and using their mobile devices to access social media.

Negative physical effects included low self-esteem and less willingness to exercise. Sleep disturbances and sleeplessness were further physical symptoms. The study revealed that participants' self-esteem was substantially influenced by their social media connections. Participants also reported that comparing their achievements to those of their online contacts affected their self-esteem.

Participants used social media to fit in, which drove them to obtain accounts before the age of 13. Participants also experienced **peer pressure** to have many followers and 'likes' to show their social status. This view affected participants' profile content, clothing brand preferences, and resulted in underage alcohol use for some. The research showed that participants were ignorant of how peers affected their social media use and behaviour. Although not widely publicised, the researcher found occasions where participants were able to reflect on their social media experiences during adolescence, exhibiting insight into their behaviour.

Likes and followers affected participants' self-esteem, created competition, and desire for popularity. Participants were able to determine when their peers were not authentic on social media, contradicting their own behaviour of changing their self-representation online to achieve acceptance. Participants also indicated that they valued authenticity above appearing to be different or joyful.

The research revealed that most participants experienced **threats to their physical and emotional safety** during adolescence as a result of social media use. Participants perpetrated and suffered intrusions. They **risked their privacy** and safety by posting personal contact

information on social media, opening web and social media links from strangers, and exposing their real-time location. The researcher also found **cyberbullying** to have been prominent and harmful. Bullies typically concealed themselves behind social media, making online bullying easy. One participant was bullied on social media, but others were able to report what they saw about peers at school and celebrities that they followed. All participants experimented with **chatting to strangers** on social media, but none were badly influenced by the strangers or the people who contacted them. Participants accepted friend invitations from strangers to expand their social circles.

Parental involvement regarding social media use was high during early adolescence. Most participants had to wait until high school to use social media, other than instant messaging. Except for participants with mental health issues, parental involvement with social media use decreased with age. Several participants decided to hide their social media activity from their parents, knowing they were engaging in harmful activities. The findings also revealed that participants believed that their parents' social media guidance and restrictions during adolescence were beneficial to their well-being rather than unjust or restrictive.

On reflection, participants considered social media use unsafe for early adolescent consumption and activity, with most believing 16 to be a safer age to allow adolescents access to the broad spectrum of social media, resulting in the suggestion that the **age limit** for social media should be adjusted.

In conclusion, findings revealed participants to value inputs by **professionals and parents** on the use and pitfalls of social media. The findings furthermore revealed that **education** regarding both the benefits and harmful use of social media should be included in school programmes and school subjects such as Life Orientation.

4.4 CONCLUSIONS

In order to draw conclusions, the researcher utilised both the literature review and the data obtained from the empirical study. The literature review validated some research findings; the researcher ensured that additional literature was found to validate the findings that were not already presented in the literature review.

4.4.1 Literature review

The researcher was able to draw the following conclusions from the literature review:

- Social media is any technology programme or application accessed by means of a smartphone, tablet, desktop, or other internet-connected device. Social media enables internet users to collaborate, express themselves, and socialise on a virtual platform.

- Individuals can use social media to selectively self-present and communicate online with vast and niche audiences who appreciate user-generated content and human engagement.
- Social media platforms include social networking (Facebook), blogs (World Press), microblogs (Twitter), rich site summary (RSS) feeds, bookmarking sites (Pinterest), audio podcasting (Audacity), video podcasting (YouTube), instant messaging (WhatsApp), widgets/applications, linking, posting, and content rating. Social media networks therefore vary in purpose.
- Internet access and ICTs have become more accessible and affordable, also in underdeveloped countries. Forty percent of the world's population uses the internet.
- The South African youth population expanded significantly from 20,2 million to 20,6 million between 2014 and 2021, representing 34.3 percent of the population.
- South Africa had 30 million social media users in 2019; it is estimated that there will be 40.77 million by 2026.
- The majority of social media research is conducted in wealthier nations such as Europe and the United States. There has been little research undertaken in rising economies, particularly Africa. Consequently, worldwide research on social media use is required, particularly due to cultural disparities in user views.
- Smartphones, tablets, and other ICT have revolutionised individuals' habits and daily lives. Most adolescents with internet access use social media and the internet to access schoolwork, for socialising, and for expressing themselves through photography, online journaling, blogging, and art.
- Social media can provide social support and learning possibilities; however, a growing body of evidence links it to poor mental health in younger generations; social media can thus both help and hurt an individual's functioning and development.
- The concept of "the home" as a multimedia environment demonstrates that media consumption plays a larger role in family interaction and that improvements in the media exosystem and parental mediation in screening children's media access demand more attention.
- The ecological techno-subsystem adds another dimension to the microsystem, allowing children to interact with both living and non-living components of communication, information, and recreation technologies in their immediate or indirect ecological contexts.
- Many professionals who interact with adolescents were not exposed to social media as adolescents, whereas young clients cannot envision living without it. Thus, professionals may struggle to understand how social media affects adolescent clients.
- Due to its accessibility, professionals must be aware of the effects and risks of all digital technology. The internet and digital multimedia technology provide adolescents with many

educational and developmental benefits, however not all adolescent social media use is positive. Although social media improves learning through communication and socialisation, its use is also associated with cyberbullying, harassment, sexual exploitation, depression, and information access. Thus, the type and quality of information users encounter determine the effects of social media use.

- Parents urge children to study digital technology to excel in online programmes and prepare for the digital workplace. However, parents are concerned that their children are more connected to their cell phones and computers than to the "real world," that their academic performance and sleep suffer, and that they do not play outside, practise sports, or spend time with family and friends.
- Literature strongly urges parents and caregivers to set social media restrictions and monitor adolescents' online activities.
- Adolescence is a vulnerable time when adolescents are experiencing puberty, increasing social and educational demands, and are experimenting more with freedom and choice than any other developmental stage.
- Adolescents and children go through different life and cognitive stages daily, annually, and from generation to generation. Some adolescents grow, improve, and progress easily, while others change drastically and lose stability.
- The internet improves life, yet its presence has made many individuals overly dependent on social media.
- Several research studies indicate that youth internet use is a major concern, and literature emphasises the need for effective preventive and treatment efforts.
- Early detection and intervention are more successful than trying to change an established habit in a child or adolescent who has suffered physical, psychological, or developmental harm. Thus, prevention or early intervention can reduce the onset of symptoms and improve prognosis, which is important as problematic internet users have low compliance and treatment motivation.

4.4.2 Empirical findings

The researcher was able to draw the following conclusions from the empirical findings:

- Participants started using social media between 12 and 14 years of age, mostly when they entered adolescence and started high school.
- Internet use by participants typically increased during the early stages of adolescence, and as they developed, so did their daily and repeated use. The participants' complete immersion in social media can thus be considered as a distinctive characteristic of modern adolescents.
- The extensive use of social media by participants exposed them to all the levels in their

ecosystems, namely the microsystem, mesosystem, exosystem and the macrosystem. Reciprocal interactions between these levels shaped their development.

- Social media use directly affected the functioning of individuals in the various systems within the ecosystem.
- Ecological techno-subsystems that form a separate microsystem enriched the microsystems of all the participants. It constantly linked them to their peers and followers.
- Social media allowed participants to express themselves in written, visual, audio, and audio-visual formats.
- Social media can be used as a tool for emotional regulation. It was used by participants to boost happy emotions and lower negative ones.
- Social media use and emotional investment are linked to anxiety, depression, low self-esteem, and sleep deprivation.
- Participants used social media to identify and manage anxiety, not necessarily to avoid peers.
- Participants shared that comparing their accomplishments with those of their online peers, affected their self-esteem in a positive manner. A similar effect was experienced by the reactions they received from posting their selfies on social media.
- In accordance with the research findings the need to belong was identified as a moderating factor in the relationship between self-esteem and social media use.
- Social media use allowed participants access to almost any content outside of the classroom and their social lives. Participants were able to share information on homework, assignments, and projects. This was especially beneficial during the COVID-19 pandemic.
- Phubbing, the act of looking at one's phone while around others, was identified as a frequent practise among young individuals, acting as a ‘social buffer’ in uncertain situations.
- Social media use separated participants and parents. Thus, social media enabled communication while reducing interaction with loved ones.
- Participants felt pressured to try out numerous social media platforms, even going against parental restrictions and creating profiles before the age of 13. This was done in order to fit in and be able to say that they had profiles on the same platforms as their peers.
- Watching negative content caused feelings of guilt as following certain celebrities was not allowed due to possible exposure to profanity, alcohol, and drugs at a young age. This was linked to the moral values that were taught to participants from a young age.
- Most participants believed that social media use helped them to establish their identities. The study revealed that macrosystem factors such as religion and sexuality can modify a developing person's interests, which may lead to different search keywords online and distinct social media profiles.

- Adolescent identity development affected media choices. Adolescents actively selected the media they received and responded to it in different ways, depending on their perception and relevance.
- The use of likes on social media caused participants to become more competitive and envious of one another. This affected how they depicted themselves online, which was either truthful or inaccurate.
- An admission of being naïve may explain why some adolescents endanger their privacy by posting too much personal information online, which is also symptomatic of the adolescent developmental stage.
- The findings suggest that the difference in the protective actions taken by the participants were indicative of the ecological systems within which they were reared, indicating that all the levels of the ecosystem of an individual can shape their behaviour as they develop.
- Fortunately, according to participants, talking to strangers on social media is a choice. However, it seemed that mitigating factors, including an individual's age and ecological background can also play a role in choosing to speak with strangers, since adolescents are direct products of their settings and will copy behaviours that are approved and imitated. This study's ecological systems theory supports this notion.
- According to participants, children and adolescents already bypass age restrictions that are set for social media platforms, and unfortunately, the macrosystem in which the broader companies that own the social media platforms exist, do not form part of the systems in which individuals operate. Thus, only parents and carers who are knowledgeable and educated about their children's social media use can restrict social media age limitations.

Based on the conclusions and key findings discussed above, the researcher was able to construct various recommendations for professionals working with adolescents, albeit social workers, psychologists, mental health care professionals and educators, as well as recommendations for future research that could assist with the continuation of the collection of knowledge within a South African context.

4.5 RECOMMENDATIONS

Based on the research findings and conclusions of the study, recommendations for practitioners and for future research follow in this section of the research report.

4.5.1 Recommendations for practitioners

The researcher believes professional intervention guidelines should follow a set of criteria that cover several significant elements. According to the theoretical framework of the study, all adolescents are self-regulating and growth-oriented and can only be understood in their

individual contexts. Before intervening with social media-exposed service users at risk for mental health issues, professionals should consider individual, familial, and environmental factors. There should therefore be understanding, advocating and assistance on all systemic levels in order to help children and adolescents use social media.

Secondly, professionals should analyse each adolescent's subjective judgements of their social media use to contextualise the experience from the individual's perspective. Social media use affects everyone differently. Social workers must understand each adolescent's perspective to support mental health and resiliency.

The study proposes initial intervention for primary through high school-aged children as they are the most vulnerable, owing to their emotional and cognitive development. This impairs judgement regarding right and wrong, and most crucially, safety. Thus, children should be raised to be emotionally strong and resilient. Since older adolescents' social media use was not properly monitored by their parents, the researcher argues that investing in children's socio-emotional development and teaching them problem-solving from a young age can achieve this.

After considering the above, the following recommendations are made:

- The development of primary preventions (such as increasing child and adolescent self-esteem, resilience, and emotional intelligence) is crucial, as these measures have the potential to prevent exposure to the harmful effects of using social media.
- Both the empirical findings and the literature reaffirmed the importance of strong and balanced support systems for developing individuals who are growing up in an environment saturated with social media exposure. Young individuals are constantly exposed to unpleasant content (i.e., national and world news, bullying, and content that can feed negative emotional insecurities).
- The necessary support systems should exist within the individual's microsystem and mesosystem (e.g., programmes aimed at educating parents on improved parenting styles and practises, preventative and early education and intervention within schools). These programmes should be established. This should occur within the exosystem, which is a larger social network (e.g., preventative and early education on social media platforms itself, social media developers censoring more of the harmful content that can be accessed by developing individuals).
- It is important to remind practitioners that concerns affecting the community play a significant role in the safeguarding of adolescents. Consequently, advocacy campaigns that are geared toward making adolescents safer are required to meet this demand. The

researcher suggests the establishment of national safety networks as well as national safety policies in order to guarantee the well-being of children and adolescents. It was found that the National Department of Education in the Western Cape Province published guidelines on its website, partially driving such an attempt. These recommendations can promote social media and ICT policies in public schools on creating social media and ICT policies. This guideline is available to everyone and can influence non-school organisations.

- It became evident from the research findings that adolescents would be more receptive to receiving information from individuals and advocates who are closer to their own age. It is therefore suggested that programmes that include adolescents and young activists as the "voice" of the campaigns, presenting recent and relevant information on what they have experienced because of their exposure to social media from a young age, be established. It is recommended that such programmes be developed and presented on social media itself. This is due to the fact that the greater majority of children and adolescents already have access to social media from a young age.

4.5.2 Recommendations for future research

The following recommendations are made for future research:

- The City of Tshwane in South Africa served as the location for the carrying out of this research. The neighbourhoods of Wonderboom South, Rietfontein, Villieria, Queenswood, Kilner Park, East Lynne, Meyerspark, and Eersterust were the specific neighbourhoods in which the research was conducted. The participants who were included in the sample group came from a variety of racial and cultural backgrounds, however, the researcher discovered that most of the individuals who participated in the research were raised in middle-class households in terms of their families' socio-economic standing. As individuals are the direct products of the communities, cultures, religions, and socio-economic backgrounds in which they are raised, it is recommended that additional research be carried out across various socio-economic communities in South Africa. This research should include the variables that were discussed in the previous paragraphs. This would be helpful in determining whether the perceptions of the young adults who were part of the research are accurate outside the bounds of the participant sample group of this study.
- The findings of this study indicated that there is a lack of research on young adults' reflections of social media use and exposure throughout adolescence, as well as on the experiences of children and adolescents who are still in the developmental age group that this study focused on. Most participants were adolescents more than five years ago, indicating that ICTs and social media are developing rapidly, as in this study, TikTok did not exist when the majority of participants were younger.

- A limited number of participants formed the sample for the study. The researcher therefore suggests that additional research be carried out on the experiences that children and adolescents have while using social media. Future research studies should include larger samples to extrapolate the findings to larger populations and to make these findings more relevant to the current situation facing children in South Africa. For this type of research, a quantitative research strategy will be required rather than a qualitative research approach.
- The researcher is of the view that studies in South Africa that look at how parents and educators manage and experience how adolescents and children use social media, as well as their thoughts on the effects they have seen on the development of adolescents, could help develop programme guidelines that were suggested for professionals who work with children and adolescents.

4.6 CONCLUDING REMARKS

Following the successful attainment of the research goal, the researcher concludes that the reflections of young adults' social media use during adolescence indicated that it affected growth and development within all the ecological systems of the participants. It can also be concluded that participants were also affected in terms of their biological development (i.e., physical, cognitive, emotional, social) as per developmental theory, and that it had an effect on their identity development and moral development throughout adolescence.

It can furthermore be concluded that there are numerous safety concerns and risks that exist for young individuals who are growing up in an era where social media and ICTs cannot be avoided; this forms part of their daily lives, leading to the recommendations that were made for professionals that work with the development and treatment of this vulnerable population group.

The researcher is of the opinion that the recommendations that were suggested for professionals, relevant organisations, families and communities to adopt and follow can make a difference to safeguard children and adolescents from the harmful effects that social media use can hold for all consumers, and assist them to reap the abundant benefits that such platforms can provide individuals with.

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APPENDIX A: INTERVIEW SCHEDULE

INTERVIEW SCHEDULE

The goal of this study is to get an understanding of adolescents' experiences of the use of social media, for example Facebook, Twitter. In this interview, I would like to get information on how you experienced social media use when you were a teenager, between the ages of 11 and 18 years old.

Name: ……..
Age: ……..
Gender: ……..

How old were you when you first started using social media?

For what purpose did you use social media when you were a teenager?

What social platforms did you use during your teenage years and for what reasons?

How much time did you spend on social platforms per day or per week?

How did social media use influence your life and well-being during your teenage years, for example, the following aspects:

- personal relationships with parents, family and friends
- school work
- health
- emotions
- ideas about yourself
- activities?

Can you give me your opinion about the following?

- the use of 'likes' on the social media
- that people use social media as a 'mask' and do not present themselves as they are in real life
- the occurrence of bullying on social platforms
- if social media is a safe platform for adolescents
- talking to others whom you do not know in person.

In general, what do you think are advantages or positive influence of social media use that you experienced as a teenager?

What do you think are generally disadvantages or harm that can be caused by social media use?

Did your parents/caregivers know about your social media use during your teenage years? Please explain.

In your opinion, how can teenagers (adolescents) be helped to get the benefits of the use of social media?

What suggestions can you make to teenagers and to social workers/teachers/parents to prevent harmful effects of social media use on teenagers?

APPENDIX B: ETHICAL CLEARANCE

Faculty of Humanities
Fakulteit Geesteswetenskappe
Lefapha la Bomotho

12 November 2020

Dear Mrs EC Fourie

Project Title:	Young adults' reflections on their experiences of social media use during adolescence
Researcher:	Mrs EC Fourie
Supervisor(s):	Dr H Hall
Department:	Social Work and Criminology
Reference number:	13097904 (HUM015/1020)
Degree:	Masters

I have pleasure in informing you that the above application was **approved** by the Research Ethics Committee on 29 October 2020. Data collection may therefore commence.

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 Innocent Pikirayi
Deputy Dean: Postgraduate Studies and Research Ethics
Faculty of Humanities
UNIVERSITY OF PRETORIA
e-mail: PGHumanities@up.ac.za

Fakulteit Geesteswetenskappe
Lefapha la Bomotho

Research Ethics Committee Members: Prof I Pikirayi (Deputy Dean); Prof KL Harris; Mr A Bizos; Dr A-M de Beer; Dr A dos Santos; Ms KT Govinder Andrew; Dr P Gutura; Dr E Johnson; Prof D Maree; Mr A Mohamed; Dr I Noomè; Dr C Puttergill; Prof D Reyburn; Prof M Soer; Prof E Taljard; Prof V Thebe; Ms B Tsebe; Ms D Mokalapa

APPENDIX C: INFORMED CONSENT

Researcher: **Evadnè Celesti Fourie (student number: 13097904)**
Degree: **MSW Play-based Intervention**
Contact details: **071 339 5525**
INFORMED CONSENT BY PARTICIPANT

Name of participant: _____

1. Title of the study

Young adults' reflections on their experiences of social media use during adolescence.

2. Purpose of the study

The purpose of this study is to explore and describe young adults' reflections on their experiences of social media use during adolescence. The focus of the research is to obtain a better understanding of how adolescents experience social media use, as more adolescents have access to and use social media.

3. Procedures

I will be requested to take part in a personal interview with the researcher. The researcher is interested in my experiences of the use of social media when I was an adolescent. The interview is expected to last about one hour and an audio-recording of the interview will be made. All information will be handled confidentially and only the researcher and her supervisor at the University of Pretoria will have knowledge of what I share in the interview.

4. Possible risks

The interview will focus on my experience of social media use as an adolescent. As my social media use as an adolescent happened a few years ago, it is expected that there will be less

of a chance that I will feel distressed as a result of the interview. However, if I experience any emotional distress because of the interview, the researcher will assist me to obtain counselling, either telephonic or in person, free of charge.

5. Benefits of participation

I will not receive any payment or gifts for taking part in the study. However, the information that I give can help social workers to become aware of how teenagers may experience the use of social media.

6. Rights as a participant

I am aware that my participation is voluntary. I have the right to withdraw from the research at any time, without having to explain why. There will be no negative consequences for me if I decide to withdraw from the study.

7. Confidentiality

The recording of the interview will be typed out word for word. Both the recording and the typed document will be handled with strict confidentiality and will be safely stored by the researcher. Only the researcher and her supervisor at the university will have access to this information. If I should withdraw from the study, my information will be destroyed. After completion of the research all the documents will be safely stored according to the guidelines of the Faculty of Humanities, University of Pretoria.

The researcher will write a report on the study. My name or personal details will not appear in the report. I will be able to request the researcher to read the typed document on the information that I provided during the interview, if I wish to do so.

8. Contact details

If I need more information about this research, I can contact the researcher at her e-mail evadnecvandenberg@gmail.com or on her cell number as provided above.

9. Data storage

I am aware that the research information will be stored for 15 years in the Department of Social Work and Criminology, University of Pretoria, as stipulated in their policy.

10. Data usage

The findings of this research will be used for a research report and possibly for professional publications and conference papers. The findings may also be used for further research. If

used for further research, the information will still be regarded as confidential, as described above. I provide permission that the research findings may also be used for future research.

10. Permission for participation in the research study

I, the undersigned, understand the information provided above. I had the opportunity to ask questions about the study and all my questions have been answered satisfactorily. I understand what the research is about and why it is being done.

I understand my rights as a participant and give my permission to voluntarily participate in the research study.

I have received a copy of this letter.

Participant: _____ Date: _____

Researcher: _____ Date: _____