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Kalonji, Nelly Bidingisha. (2025). Social media and digital flourishing in South Africa. [Master's dissertation, University of the Witwatersrand, Johannesburg]. WIReDSpace. <https://hdl.handle.net/10539/47986>

MASTER OF ARTS IN THE FIELD OF SOCIAL AND PSYCHOLOGICAL RESEARCH,



UNIVERSITY OF THE
WITWATERSRAND,
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UNIVERSITY OF THE WITWATERSRAND

Humanities, School of Human and Community Development

Social media and digital flourishing in South Africa

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A research report submitted in partial fulfilment of the requirements for the Degree of Master of Arts in the field of Social and Psychological Research in the Department of Psychology, School of Human and Community Development, Faculty of Humanities, at the University of the Witwatersrand, Johannesburg, 28 March 2025

Plagiarism Declaration

I, Nelly Bidingisha Kalonji, declare that this research project (Ethics clearance number: MASPR-24-03) is my own, unaided work. It has not been submitted before for this or any other degree or for examination at this or any other university.

A handwritten signature in black ink, appearing to read 'Kalonji', followed by a long horizontal line extending to the right.

Signed:

Date: 28 March 2025

Acknowledgements

First and foremost, I have to give thanks to my Lord and Saviour Jesus Christ, whom without any of this would have been possible. He alone provided me with the intelligence, diligence, determination and resources I needed to complete this project.

To my mother, Annie Nyongoni, and Father, Karro Kalonji, who prayed for and encouraged me as well my brothers Yves, Bo and Flori, who inspired me without fail, I love you all very much and dedicate this thesis to you.

To all my friends, extended family and MASPR classmates, who besides being my second support system helped advertise my survey, I am eternally grateful to you all. To Banzi Diko, Amilton Casamene and Nqobile Mbongwa who encouraged me and advertised my survey with the veracity of a presidential campaign committee, thank you a thousand times. To Dr Khondlo Mtshali, who was always at the other end of my long-winded research brainstorming sessions, you will always have my heart.

To my supervisor, Dr Nicky Israel, who exceeded every expectation I had, words cannot describe the depth of gratitude I have for you throughout this project. You were always available, providing detailed and constructive feedback followed by a kind word of encouragement. You made this process a joy and deepened the passion I have for research psychology. This project is as much of my hard work as it is yours, thank you.

To Dr Mpho Mathebula, the Psychology Department and the University of the Witwatersrand at large, thank you for taking a chance on me and providing the resources I needed to succeed.

To everyone that I have not mentioned explicitly but helped make this thesis a reality by sparing me a thought, prayer or word of encouragement, I am grateful to you all as well.

Lastly, I would like to thank myself, for all the sleepless nights and illnesses I had to push through to produce what is my best work so far, I am so proud of you! The best is yet to come!

Abstract

The global shift towards digitalisation has seen the prominence of social media increase throughout the twenty-first century, while the rising prevalence of reported mental illness in the face of this has promoted research into the association between social media use and people's psychological well-being (Chekole & Abate, 2021; Richter et al., 2019; Sherif, 2024; Wongkoblaph et al., 2017). Research on this topic has predominantly focused on the negative effects social media has on users' psychological well-being, however it is imperative that the positive effects of social media use, in addition to the aspects or features of this use that lead to these effects, be investigated in order to provide a comprehensive account of this phenomenon. Therefore, the current study explored the associative and predictive relationships between digital flourishing, a novel conception of online psychological well-being, and different aspects of social media use (types of social media use, perceived social media literacy, and motives for social media use) in a sample of 207 South African young adults.

To investigate these relationships, a quantitative, non-experimental, correlational, and cross-sectional research design was employed with data collected using an online survey. The survey consisted of questionnaires that assessed participants' demographic characteristics, general social media use, passive and active use of social media, rational and emotional use of social media, perceived social media literacy, and motives for using social media. The sample was obtained using convenience and snowball sampling and the participants were mostly female (75.8%), mostly full-time students (73.4%), and mostly aged 18 to 25 (65.2%). On average, participants belonged to 5.34 social media sites, and a majority (69.1%) spent between two and six hours on social media per day. The data was analysed using descriptive statistics, bivariate correlations, and multiple regressions.

The sample reported moderate levels of digital flourishing and perceived social media literacy with their social media use being more passive and rational/routine in nature. They predominantly used social media for information seeking and connectedness, academic, and entertainment purposes. For the associative relationships, this study found that within this sample the different types of social media use (i.e. active, passive, rational and emotional use) were either weakly or moderately positively associated with all the dimensions of digital flourishing outside of self-control. Perceived social media literacy and its competencies were either weakly or moderately positively associated with all five dimensions of digital flourishing. All nine of the motives for social media use were weakly or moderately

associated with digital flourishing, while only the escapism and the following and monitoring others motives were negatively associated with digital flourishing. For the predictive relationships, this study found that the different dimensions of digital flourishing were predicted by all the aspects of social media except one form of active social media use (posting) and two motives for social media use (academic purposes and dating and friendship). Furthermore, the escapism, following and monitoring others, and entertainment motives were the only aspects of social media use in this study that negatively predicted different dimensions of digital flourishing. This study was the first to investigate digital flourishing in a South African context, expanding current knowledge on the novel conception and theoretical framework of digital flourishing. Furthermore, in identifying the aspects of social media use that were positively associated with and predicted digital flourishing, the study ultimately contributes to the limited literature on the positive effects of social media on psychological well-being.

Keywords: Social media use, digital flourishing, psychological well-being, motives for social media use, perceived social media literacy, types of social media use

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Chapter 1: Introduction

This chapter outlines and discusses the background and context of this study, the problem it tackles, its potential significance to the discipline, and its overall aims. It also outlines the structure of this research report and provides a brief description of all six chapters in the report.

Background and context

The integration of social media into people's daily lives both in South Africa and across the globe has increased exponentially over the last decade (Sherif, 2024). This can largely be attributed to the global shift towards digitalization and social media evolving beyond its original social purposes towards professional, academic, and religious functions (Sherif, 2024; Spath et al., 2022). When the world was forced to shut down during the emergence of the Covid-19 pandemic, most of the world's work, educational, financial, and social operations were moved to digital platforms (Ghanayem et al., 2024). This expedited what was the already fast increasing integration of social media into the populace's daily lives (Chai et al., 2024; Ghanayem et al., 2024; Winkler et al., 2020).

Since this integration over the past decade has also coincided with a global rise in the prevalence of mental illnesses, it has led to questions about whether social media use is a potential cause of or contributing factor to those illnesses (Chekole & Abate, 2021; Richter et al., 2019; Wongkoblap et al., 2017). This has prompted more research into the relationship between social media use and mental health (Lukose et al., 2023; Meier & Reinecke, 2021). The majority of this research has established that there is a link between the two whilst other studies have gone further and established that social media usage can predict users' mental health (Keles et al., 2020; Lee et al., 2022; Meier & Reinecke, 2021).

Social media use has been found to negatively predict mental health in some studies whilst in others it has been found to be a positive predictor (Marciano et al., 2024; Yang et al., 2022). There has, however, been a much larger focus on the possible negative implications of social media use for mental health compared to the potential positive implications in empirical investigations of the topic (Meier & Reinecke, 2021)). Given the increased integration of social media into daily life across the global population, it is imperative that psychology as a discipline develops a comprehensive and holistic understanding of the different connections social media use has with users' mental health and its possible effects. This knowledge could be used as a base for combating the increased prevalence of mental illness across the globe through the development of theory and practical interventions.

Problem statement and rationale

Most of the research on social media use and mental health has focused on its potential negative effects, in other words, which psychological issues are triggered or facilitated by social media. Examples of this include research focused on social media addiction, anxiety, cyberbullying, and depression (Huang, 2022; Marciano et al., 2022; Shannon et al., 2022). This has resulted in relatively little being known about the potential positive effects that social media use may have on users' mental health (Godard & Holtzman, 2024). Underpinning most of the research on social media use is the assumption that mental health is simply the absence of psychological illness, resulting in these studies being predominantly preoccupied with developing interventions that remedy or manage the resulting effects i.e. psychopathologies (Büchi, 2024; Gudka et al., 2023; Orben et al., 2024).

However, many scholars assert that moving towards preventing such pathologies from emerging in the first place is more effective and where our focus should lie (Godard & Holtzman, 2024; Gudka et al., 2023; Janicke-Bowles, 2023; Schønning et al., 2020). They argue that mental health must be understood as more than the absence of illness but as having certain capacities or capabilities such as psychological well-being; and that it is only once we identify which aspects of social media predict these capabilities that we can move towards preventing the psychopathologies associated with usage.

However, the current literature lacks the necessary components to accomplish this. The problem here is twofold, with the first issue concerning the absence of a comprehensive conception, theoretical framework, and means to measure psychological well-being in digital spaces whilst the second issue concerns little in addition to inconclusive knowledge on what specific aspects of social media usage predict psychological well-being (Bekalu et al., 2023; Chancellor & De Choudhury, 2020; Meier & Reinecke, 2021).

The first issue refers to how the two predominant conceptions in this field, digital well-being (i.e. users thriving in their affect, domains, and life satisfaction in digital environments) and flourishing (i.e. life satisfaction that requires one to have positive feelings and function effectively) fail to provide a comprehensive conception and framework to measure psychological well-being online. Amongst other things, this may be a result of psychological instruments designed to assess these constructs not capturing them fully. For example, the Flourishing Scale does not equally measure the eudaimonic and hedonic components of psychological well-being and the Digital Well-Being Scale fails to assess other important components of online social interactions such as social connectivity,

autonomy, and the impact that these have on users' well-being within those spaces (Mathew et al., 2023; Pankow et al., 2024; Smits et al., 2022). Gudka et al.'s (2023) systematic review of 118 studies on flourishing and social media found that amongst other things, positive social media experiences and social media inspirations were related to flourishing. However, it mentions nothing about, *inter alia*, the types of social media interactions, uses, or engagements that foster well-being. As is illustrated in Gudka et al. (2023), a consequence of the aforementioned two conceptions and their frameworks is that the research they produce does not inform us about which specific aspects of social media use encourage psychological well-being within digital platforms.

It is this study's argument that digital flourishing and its corresponding scale are comprehensive in ways that the two aforementioned conceptions fail to be and thus may resolve some of the issues that they present and that characterize limitations related to the topic more broadly. Digital flourishing refers to a holistic state of well-being in digital environments, characterized by meaningful engagement, connectedness, authentic self-disclosure, positive social comparison, and self-controlled technology use. It provides a comprehensive framework with which to measure the positive effects of social media on people's psychological well-being. It is a novel conception and framework so this study has the added significance of being one of the first to empirically test this in South Africa and Africa at large.

The second issue refers to how little is known both locally and internationally about which specific aspects of social media predict psychological well-being. Time spent on social media, the active or passive use of social media, motives for social media use, social media literacy, and users' communication patterns are a few aspects of social media use that have been identified as predicting well-being (Marciano et al., 2024; Yang et al., 2021). However, the majority of studies on these aspects have emerged less than a decade ago and most of the research is inconclusive. For example, in some studies more time spent on social media negatively predicts psychological well-being whilst in other studies it positively predicts it (Marciano et al., 2024; Yang et al., 2021).

Motives for social media use is another example, where entertainment as the most prominent motive stated in the literature has been found to positively predict psychological well-being in some studies whilst negatively predicting it in others (Marciano et al., 2024; Van Wyk, 2022; Yang et al., 2021). This is partially a result of the conceptions of well-being that these aspects are being measured against not being comprehensive enough. So, the focus of this study is to clearly identify which aspects of social media predict a comprehensive

account and framework of psychological well-being in the form of digital flourishing as well as the ways in which they do this. This study will be one of the first to shed light on this relationship, both in relation to digital flourishing and in a South African context.

Additionally, it will contribute to the literature on the positive effects of social media usage on users' mental health. Without comprehensive knowledge on the potential positive effects, psychology as a discipline cannot assert to have multifaceted insight into social media use and may miss potentially effective interventions to deal with related psychopathologies and social media as a part of daily life.

Aims

This study had three main aims. The first was to determine the internal structure and consistency of the scales that would be used to measure digital flourishing, social media use, perceived social media literacy, and motives for social media use in a sample of young adults in South Africa. The second was to explore the levels of and relationships between digital flourishing, social media use, perceived social media literacy, and motives for social media use in a sample of young adults in South Africa. The third was to determine to what extent social media use, perceived social media literacy, and different motives for using social media predicted digital flourishing in the sample.

Report structure

Chapter 1 details the background, purpose, and significance of this study, elaborating on how the increasing integration of social media use and the rise in mental illnesses across the globe make it imperative for psychology as a discipline to have a comprehensive understanding of social media and its associations with users' mental health. This includes more research investigating the positive effects of social media, which this study sets out to do with digital flourishing as a novel conception of psychological well-being in the digital environment. Chapter 1 closes off by clearly outlining the aims of the study and the structure of the research report. Chapter 2 will present the literature review, which provides definitions of and previous research on the aspects of social media use under investigation (i.e. types of social media interaction, perceived social media literacy, and motives for social media use) as well as the chosen conception of psychological well-being (digital flourishing).

It also details gaps in the literature, previous empirical work, and the necessity of this study. Chapter 3 outlines the methodology of this study, detailing the methods used as well as the steps taken to administer the study in addition to the techniques used to analyse the collected data. Chapter 4 reports the results of the analyses that were undertaken (i.e.

principal component analysis, reliability analysis, descriptive statistics, bivariate correlations, and multiple regressions) while Chapter 5 discusses these results, providing interpretations and locating the results within the current literature. Chapter 6 provides a brief overview of the conclusions, limitations, and recommendations of this study as well as future directions for research.

Chapter 2: Literature Review

Introduction

Chapter 2 outlines and discusses the existing local and international literature on digital flourishing and its relationship to social media use. It begins by defining psychological well-being and the concept of mental health. It then defines social media as well as types of social media use and discusses its capacity to influence a person's psychological well-being. It also defines and discusses research on motives for social media use, perceived social media literacy, and digital flourishing. The gaps and inconsistencies in the literature concerning the relationships between digital flourishing and the aspects of social media use under investigation will then be discussed, which ultimately highlights the importance of this study. The chapter will close with a summary of the current study and the research questions for the study.

Psychological well-being and mental health

Psychological well-being is currently understood in terms of positive mental health (Janicke-Bowles et al., 2023; Marciano & Viswanath, 2023; Taibi et al., 2023). Here, mental health is conceptualised as something beyond the absence of mental illness; it is rather about displaying or possessing certain traits, behaviours, and/or capabilities that allow one to maintain a healthy mind-body relationship, engage with and relate to others, function within society, and cope with challenges (Galderisi et al., 2015; Murphy et al., 2020). Psychological well-being is argued to be one of the capabilities that defines mental health (Wren-Lewis & Alexandrova, 2021). Huppert (2009) argues that psychological well-being is "...a combination of feeling good and functioning effectively" (p.137), as well as an absence of extreme negative emotions and the capacity to thrive. Ryff and Singer (2008) posit that one has psychological well-being when they are self-accepting, autonomous, have experienced personal growth, have a purpose in life as well as meaningful relationships with others, and have the ability to effectively control their surroundings to achieve their goals.

As a component of mental health, psychological wellbeing plays a major role in human overall well-being (i.e. physical health, productivity, and life satisfaction). Improved physical health outcomes have been associated with psychological well-being, as seen in Kubzansky et al.'s (2018) comprehensive review where it was found that higher levels of psychological well-being were tied to reduced incidences of cardiovascular disease. Research has also found that psychological well-being is associated with lowered risk of mental illnesses as well as improvement in overall life satisfaction (Black et al., 2019; Diener et al.,

2018). In this way psychological well-being has foundational significance to human functioning and development.

It is worth noting that when I speak of psychological well-being in this report, I am referring to users' perceptions of their psychological well-being (i.e. perceived well-being), not their actual well-being. I recognise that there is an empirical and theoretical difference in the literature between these two concepts in that there can be discrepancies between people's actual psychological well-being and their perceptions about their psychological well-being (Heidrich, & Powwattana, 2004; Ryff, 2013). Due to there being no point in this study where an instrument measuring users' actual psychological well-being was administered, I will not be referring to users' actual well-being at any point in the report.

Perceived psychological well-being and social media use

There are many factors associated with perceived psychological well-being and mental health, but one of the most common and relevant in the current digital age is social media (Godard & Holtzman, 2024; Kross et al., 2021). Social media refers to digital platforms which allow people to, amongst other things, communicate, form networks of online relationships, create and share content, as well as access information and media in online/digital spaces (Schønning et al., 2020; Taibi et al., 2023; Tandoc et al., 2021). Examples of social media sites include but are not limited to: TikTok, WhatsApp, X (formerly Twitter), Instagram, Facebook, and LinkedIn. It is estimated that 5.22 billion people use at least one social media platform, with the most used platforms being WhatsApp (1 billion users), Facebook (840 million users), and Instagram (680 million users) (Ceci, 2024; Petrosyan, 2024). In South Africa there are an estimated 26 million active social media users with Facebook (over 32 million users), Messenger (over 28.1 million users), and LinkedIn (15.3 million) being the most used platforms (Cowling, 2024). It can therefore be argued that social media, especially post the Covid-19 pandemic, has become the main mechanism by which adults and adolescents facilitate interpersonal communication (Liu et al., 2020). It enables people to develop as well as maintain relationships and social communities online (Keum, 2024).

Social media, in its various manifestations, is understood as a form of computer-mediated communication (Meier & Reinecke, 2021). In the literature, computer-mediated communication is conceptualised as "...an inclusive umbrella term for multimodal human-to-human social interaction mediated by information and communication technologies (ICT's)" (Meier & Reinecke, 2021, pp. 1183– 1184). In other words, it refers to all the modes of

human communication and interactions that occur through the plethora of communication technology currently available (e.g. phones, computers, tablets etc.) (Choi & Choung, 2021; Fuss et al., 2019; Godard & Holtzman, 2024; Janicke-Bowles et al., 2023; Meier & Reinecke, 2021; Rosič et al., 2022). This computer-mediated communication, especially as it appears in social media, can be either interpersonal or mass-personal (Meier & Reinecke, 2021).

Interpersonal communication refers to information that is directly exchanged between two or more individuals, for example, sending an email, text, or direct message on WhatsApp (Choi, & Choung, 2021; High et al, 2023; Meier & Reinecke, 2021). Mass-personal communication, on the other hand, is when information is publicly shared with the general public through a personalised message, for example, a status update on WhatsApp (Choi, & Choung, 2021; High et al, 2023; Meier & Reinecke, 2021).

There is consensus in the literature that psychological well-being as it relates to social media use consists, minimally, in hedonic and eudaimonic experiences (High et al, 2023; Meier & Reinecke, 2021; Rosič et al., 2022). The latter refers to experiences where users feel that social media adds meaning to their lives, whilst the former refers to instances where users gain pleasure from using social media (High et al, 2023; Meier & Reinecke, 2021). However informative this definition is, it does not sufficiently capture the kind of well-being a user could experience in digital spaces. This is where the conceptions of well-being as digital well-being and flourishing were introduced (Meier & Reinecke, 2021; Vanden Abeele, 2021). The latter is generally understood to be people's life satisfaction characterised by positive feelings and effective functioning (Guo et al., 2024; Liu et al., 2020). For a social media user to feel as if they are thriving or prospering offline and perhaps even online would be for them to flourish. Digital well-being refers to the effect digital media use has on its users' well-being in terms of their affect, domain (school, work, online community, etc), and life satisfaction in a digital social environment with various use options (Büchi, 2024; Vanden Abeele, 2021).

These two conceptions of well-being provide a comprehensive theoretical framework through which to understand the relationship between social media use and users' well-being. Most of the literature that focuses on social media use and its relationship to positive mental health is done on the basis of these two conceptions (Büchi, 2024; Gudka et al., 2023; Marciano & Viswanath, 2023; Rosič et al, 2022; Tkáčová et al., 2021). Both, however, fall short of comprehensively representing online psychological well-being. For example, the Flourishing Scale (which measures flourishing) neglects to consider the unique dynamics of interactions within digital spaces/platforms as it is solely concerned with assessing general

life satisfaction (Mathew et al., 2023; Pankow et al., 2024; Smits et al., 2022). The Digital Well-Being Scale, on the other hand, has an overly narrow focus that prevents it from accounting for users' levels of social media literacy, social relationships, and self-management capabilities that all influence their psychological well-being (Mathew et al., 2023; Pankow et al., 2024; Smits et al., 2022).

It is worth noting that although I acknowledge that there is a conceptual difference between psychological well-being, flourishing, digital well-being, and mental health, I will use these terms somewhat interchangeably throughout the report when referring to users' well-being to avoid repetition.

Types of social media use and psychological well-being

In this study, social media use is understood as people's use of social media in varied ways. The type of interaction users have on these sites, either active or passive, is the most prominent social media use discussed and/or researched in the literature (Kross et al., 2021; Meier & Reinecke, 2021). Active use refers to one's active engagement with others on social media, for example, liking and commenting on others' posts or chatting with others online (Godard & Holtzman, 2024; Janicke-Bowles et al., 2023; Meier & Reinecke, 2021). Both interpersonal and mass-personal communication constitute active use of computer-mediated communications like social media (Janicke-Bowles et al., 2023; Meier & Reinecke, 2021). A significant portion of the research produced on this topic has found that active use has been positively correlated with users' subjective well-being, in that actively engaging with social media seems to increase users' feelings of connectedness and social support and improve their overall well-being (Godard & Holtzman, 2024; Keum, 2024; Keum et al., 2022; Liu et al., 2020; Meier & Reinecke, 2021; Winstone et al., 2023).

In contrast, passive use has been found to be negatively associated with users' subjective well-being, meaning that passive engagement seems to increase feelings of envy, loneliness, anxiety, and depression (Godard & Holtzman, 2024; Keum, 2024; Keum et al., 2022; Liu et al., 2020; Meier & Reinecke, 2021; Winstone et al., 2023). Here, passive use is understood as users engaging with social media without directly interacting with others, for example, sharing and scrolling through posts without liking or commenting on them (Godard & Holtzman, 2024; Janicke-Bowles et al., 2023; Meier & Reinecke, 2021). Ultimately, it has been found that most social media use is passive (Roberts & David, 2023).

Recent studies have found that there is no significant association between active use of social media, passive use of social media, and users' subjective well-being (Masciantonio

et al., 2023; Roberts & David, 2023; Valkenburg et al., 2022). These contradictory findings can perhaps be reconciled by evidence such as that found in Liu and Xiao's (2024) study, which suggests that the impact the type of social media interaction has on users' well-being may depend on the type of social comparison being made by them during said interactions. Social comparison involves users' comparing themselves to others online either upwardly i.e. comparing themselves to those who they deem better than them, or downwardly i.e. comparing themselves to people they think they are better than, and can be either positive or negative (Guo et al., 2024). In the study, it was found that passive use was positively correlated with upward social comparison, which negatively affected users' subjective well-being (Liu & Xiao, 2024). In this way, the current evidence suggests the association between the type of interaction on social media and user's well-being may be best explained when the relationship is looked at through the lens of social comparison (Liu & Xiao, 2024).

Two other types of social media use are routine use and emotional connection. The former refers to whether people use social media routinely as a part of their daily habits, for example, to check work, academic, or world event updates, whilst the latter refers to the extent of users' emotional ties or investment in social media (Bekalu et al., 2019). Emotional ties or investments can be conceived of as a spectrum with the lower end representing users having little to no investment in social media, so if they were to be in an online altercation it would have little effect on them (Bekalu et al., 2019). The higher end would represent users who are highly invested in social media, such that an online altercation may have a profound impact on their mood or psychological well-being at the time (Bekalu et al., 2019). International as well as local research has found that excessive use and high levels of emotional investment in social media are negatively associated with users' mental health (Bekalu et al., 2019; Lukose et al., 2023). A South African study by Maziriri (2020) also found that habitual/routine use of social media was positively associated with psychological well-being in a sample of young adults.

Routine use and emotional connection have also been explored in relation to time spent on social media. For example, Godleski et al. (2023) found that increased time spent on social media paired with an emotional connection was negatively associated with users' perceived well-being whilst decreased time spent on social media and routine use was positively associated with users' perceived well-being. In this way, the amount of time spent on social media may also be an important indicator of social media use that is linked to psychological well-being. It is estimated that people worldwide spend an average time of two hours and thirty-five minutes on social media daily. In South Africa, Lukose et al.'s (2023)

study on a sample of young adults found that they spent an average of six hours on social media every day. A plethora of studies over the last fifteen years have examined the effect that time spent on social media has on users' mental health. Some have found that more time spent on social media is negatively associated with users' mental health and perceived well-being, while others have found that there were no significant relationships between these and time spent on social media (Coyne et al., 2020; Ewing et al., 2023; Huang, 2017; Lukose et al., 2023; Meier & Reinecke, 2021). These conflicting findings reveal an emerging position in the literature which proposes that there may not be a linear or direct relationship between psychological well-being and amount of time spent on social media and exploring this requires a nuanced view. For example, it may be the case that only when time in conjunction with how that time is spent on social media (i.e. actively, passively, routinely, or emotionally connected) are investigated concurrently that we can determine the relationship it has with users' well-being. This was the case in Coyne and Woodruff (2024), Law et al. (2020), Marciano et al. (2024), and Roberts and David (2023), all of whom found that when increased social media use (i.e. more time spent on social media) was paired with passive use, it had a negative impact on aspects of users' well-being; however, when paired with active use, it had a positive impact.

It is worth mentioning that there is a difference in the literature between actual time spent on social media and self-reported time spent on social media. The former refers to participants' time spent on social media as monitored and reported on by researchers (e.g. by accessing their smartphone's screen time or app use time tracker), while the latter refers to when participants report time spent based on their own estimation. This study will refer to time spent on social media in the latter sense and not the former.

As demonstrated above, previous research strongly suggests that the ways in which people use social media have the potential to relate to their perceived well-being and mental health in significant ways. It importantly reinforces the need to investigate the various types and aspects of social media use concurrently in order to determine their effect on users' perceived psychological well-being. In this way, the literature on the relationships social media use can have on users' mental health points to the possibility of people's motives for using social media and their perceived social media literacy also being associated with their perceived well-being (Budree, 2019; Pertegal et al., 2019; Tandoc et al., 2021; Wendt et al., 2023).

Motives for social media use and psychological well-being

Motives for using social media refer to the reasons people have for using and remaining on social media platforms. The most common reasons are: entertainment, maintenance of social relationships, and search for information (Choi & Choung, 2021, Ewing et al., 2023; High et al., 2023; Karimi et al., 2014; Kircaburun et al., 2020; Meng et al., 2020; Perugini & Solano, 2021). Other common motives for social media use include: creating social relationships, work-related communication, connecting with others, self-expression, recognition, passing time, and escapism (Pertegal et al., 2019; Smock et al., 2011). Fear of missing out (FOMO) has also quite recently emerged as a common reason for South African young adults in particular to use social media (Lukose et al., 2023). In their study, Pertegal et al. (2019) identified a framework of nine common motives for using social media in samples of young adults aged between thirteen and twenty-five; these motives were dating, making new friends, feeling socially connected, seeking social recognition, having opportunities for self-expression, being able to follow and monitor others, for entertainment, seeking information, and for academic purposes.

Smock et al. (2011) explored reasons for using Facebook in a sample of university students and found that common motives included for professional advancement, companionship, social interaction, relaxation, and entertainment, as well as to express oneself and share information, to follow the trend, to pass the time, and to escape from daily life. Other studies that have explored motivations for social media use have identified very similar sets of motivations in samples of young adults and university students (Arness & Ollis, 2023; O'Donnell et al., 2023; Sullivan & George, 2023).

There is a plethora of literature on the relationship between motives for social media use and mental health (Budree, 2019; Pertegal et al., 2019). Most of this is dedicated to the negative effects that using social media for certain motives can have on one's psychological well-being (see Ewing et al., 2023; Kircaburun et al., 2020; Sullivan & George, 2023). One such study is Sever and Özdemir's (2022) study which found that entertainment as a motive for social media use among 370 Turkish university students was positively associated with problematic smartphone use (i.e. social media or smartphone addiction which has the potential to trigger issues such as anxiety, depression, stress, and loneliness). Another one is Gingras et al.'s (2024) longitudinal study, which looked at whether motives for social media use could predict internalising symptoms (i.e. emotional distress, anxiety, social withdrawal, etc.) amongst 197 adolescents. Their study found that using social media for social reasons

(i.e. meeting new people), out of boredom, or to avoid or escape reality predicted internalising symptoms in participants with low extraversion. Additionally, Facebook users who used the site to form new relationships were found to have higher levels of anxiety, depression, and other mental health issues in comparison to those who used the platform to maintain their social relationships (Rae & Lonborg, 2015). Arness and Ollis' (2023) mixed methods study found a similar result, with young adults who used social media for social connection purposes in their sample having higher scores on the Bergen Social Media Addiction Scale indicating problematic social media use.

As has been the trend more broadly re the positive effects of using social media, the literature on the benefits that some motives for social media use may have on users' mental health is lacking. Of the few studies that have been done, it has been found that using computer-mediated communications like social media for entertainment purposes, self-expression, social purposes, or maintenance of relationships tends to be positively associated with components of well-being (Choi & Choung, 2021; High et al., 2023; Perugini & Solano, 2021). For Choi and Choung (2021), using social media for interpersonal reasons was linked to decreased loneliness and as a by-product led to higher levels of life satisfaction. High et al. (2023) found that people who reported entertainment as a motive for social media use and gaming had higher levels of life satisfaction. In a sample of 420 adults, Perugini and Solano (2021) found that the motives 'maintenance of social relationships' and 'searching for information' were positively associated with all components of well-being. The evidence therefore seems to suggest that using social media for the motives of entertainment, to express one's self, to nurture one's existing relationships, or to find news can have a positive impact on users' mental health.

Perceived social media literacy and psychological well-being

Developing online friendships and communities requires users to have the skills and the language necessary to interact with others in online spaces, and media literacy equips them with these skills (Keum, 2024). Different scholars have different conceptions of social media literacy; however, it is generally understood as an amalgamation of literacy skills as well as levels of media and digital literacy (Festl, 2021; Stamps, 2024; Taibi et al., 2023; Tandoc et al., 2021; Wendt et al., 2023). It firstly involves literacy in that users must have the ability to read and replicate communication (Tandoc et al., 2021). Secondly, media literacy requires users to comprehend, evaluate, organise, and sometimes replicate messages through the various forms of media available (Festl, 2021; Taibi et al., 2023; Tandoc et al., 2021;

Wendt et al., 2023). Thirdly, digital literacy requires users to be able to effectively and efficiently navigate digital spaces like websites or online media applications, in a way that maximises the outcomes and benefits of that space (Stamps, 2024; Tandoc et al., 2021). This involves being well acquainted with the various features, functions, and settings of the website or apps (Stamps, 2024; Tandoc et al., 2021). In this way, social media literacy consists of a variety of media and literacy skills. It is worth noting that there is a difference between users' social media literacy and their perceived social media literacy, in that the former refers to users' actual media literacy whilst the latter refers to individuals' perceptions of their literacy skills and abilities in relation to social media (Polanco-Levicán & Salvo-Garrido, 2022; Tandoc et al., 2021). This report is concerned with the latter.

Tandoc et al. (2021) provide a comprehensive definition of perceived social media literacy. According to their definition, perceived social media literacy consists of four competencies or dimensions: technical competencies, social relationships, informational awareness, and privacy and algorithmic awareness (Tandoc et al., 2021). Technical competencies involve users' perceived ability to navigate social media, for example, being able to post, add friends, as well as create, edit, and delete social media accounts or profiles (Tandoc et al., 2021). Social relationships consist of users' perceived ability to manage and comprehend social interactions that they have on the relevant digital platforms (Tandoc et al., 2021). This could involve censoring or hiding one's posts from certain sets of friends (Tandoc et al., 2021). Informational awareness refers to users' perceived ability to verify the truth and motives of the information they assess on social media (Tandoc et al., 2021). Privacy and algorithmic awareness involves users' perceived ability to be critically aware of how information produced by them and others on social media platforms is created and shared (Tandoc et al., 2021). This conceptualisation of perceived social media literacy goes beyond the ability to manage and navigate social media, as it moves towards a critical awareness of information as well as interactions that are being produced and shared in online spaces (Tandoc et al., 2021). Furthermore, it shares similarity with and expands on previous definitions in this realm (see Festl, 2021; Vanwynsberghe et al., 2014; Wendt et al., 2023). In this way, Tandoc et al.'s (2021) conception is nuanced and may allow us to more accurately capture the relationships or associations between perceived social media literacy and aspects of psychological well-being.

Although there is research on media/digital literacy broadly and on social media literacy specifically, there is limited research on their effect on psychological well-being (Polanco-Levicán & Salvo-Garrido, 2022; Tinmaz et al., 2022). Of the few studies that are

available on the topic, most have found that digital/media literacy is positively associated with users' psychological well-being whilst others have found no such association (Vissenberg et al., 2022; Zaidi & Mahudin, 2024). Keum (2024) is one of the few studies that has investigated the relationship between social media literacy, social media use, and psychological well-being. In this study, when users had higher levels of social media literacy, they experienced more social support which in turn led to more flourishing and less struggles with mental health. Similarly, other studies have suggested that increased social media literacy has the potential to increase psychological well-being and to decrease the negative influence of social media on users (Stamps, 2024; Taibi et al., 2023).

The literature investigating perceived social media literacy is also limited as it is a novel concept. Those studies that do exist focus heavily on its relationship to fake news on the internet, more specifically its ability to mitigate the effects of fake news on users' social media experience (Len-Ríos et al., 2016; Su et al., 2022). The argument could be made that if fake news has adverse effects on users' psychological well-being, then perceived social media literacy may have an indirect positive impact on users' psychological wellbeing by mitigating the effects of fake news. However, there does not appear to be any local literature on this phenomenon. In order to better understand the relationship between perceived social media literacy and psychological well-being, especially in a South African context, more research needs to be done investigating this.

Gaps in the literature

Social media and its many features have been found, over the last two decades, to impact aspects of users' mental health, psychological well-being, and their perceptions of these (Meier & Reinecke, 2021). Although the research on this, especially from the last few years, is extensive, it has largely focused on users' negative perceptions of social media and its potential negative effects on their mental health and well-being (Meier & Reinecke, 2021; Sadagheyani & Tatari, 2020; Schønning et al., 2020). Most of the research on this topic, both locally and internationally, has focused on users' perceived and actual psychopathologies that were triggered by or associated with social media use, for example, social media addiction, anxiety, depression, self-harm, cyber-bullying, etc... (Gudka et al., 2023; Karim et al., 2020; Lukose et al., 2023; Meier & Reinecke, 2021; Nsizwana et al., 2017; Roffarello et al., 2023; Sadagheyani & Tatari, 2020; Schønning et al., 2020). In this way, literature that investigates the positive effects of social media use on mental health and psychological well-being, both locally and internationally, is lacking.

The literature on the effects of social media use on users' perceived and actual psychological well-being is also inconclusive. This is because the studies done over the last two decades have given conflicting results. For example, some studies have found that when social media use interacts with upward social comparison (i.e. when users compare themselves to people they deem as 'better off' than them) it negatively impacts their mental health (Meier & Reinecke, 2021). However, other studies have found that upward comparison on social media positively impacts users' psychological well-being, whereas a recent study has found no association between social comparison and well-being (Guo et al., 2024; Meier & Reinecke, 2021). There is thus an urgent need for further research that explores the associations between social media use, mental health, and perceived psychological well-being, particularly the ways in which social media use may relate to these positively. There is also a need for clearer conceptualisations of positive psychological well-being in the digital realm.

Digital flourishing

A recent novel approach to the conceptualisation of positive mental health and psychological well-being in relation to social media use is digital flourishing. It can be argued that digital flourishing represents one of the most comprehensive conceptualisations and theoretical frameworks for well-being in digital spaces. Digital flourishing is defined by Janicke-Bowles (2023) as "an individual's positive perceptions of experiences and behaviors [sic] in mediated social interactions" (p.2). It can therefore be understood as all the benefits which people perceive stem from computer-mediated communications like social media, while flourishing consists of all the long and short experiences of doing and feeling well that typically constitute a person's well-being (Janicke-Bowles et al., 2023; Rosič et al., 2022).

There are five dimensions of digital flourishing, all of which emerge from the three psychological needs posited by self-determination theory (Janicke-Bowles, 2023; Janicke-Bowles et al., 2023; Rosič et al., 2022). According to this theory, human beings are motivated to act in order to satisfy their psychological needs which will ultimately help them achieve well-being (Deci & Ryan, 2000; 2008). These psychological needs are argued to be sought out by all humans regardless of culture and environment and include competence, relatedness, and autonomy (Deci & Ryan, 2000; 2008).

The competence need involves people seeing themselves as able to affect their environment in ways which produce outcomes that benefit them (Deci & Ryan, 2000; 2008). They are confident that their actions bring about real/actual change around them (Deci &

Ryan, 2000; 2008). There are three dimensions of digital flourishing that emerge from the competence need: authentic self-representation/disclosure, social comparison, and civil discourse (Janicke-Bowles, 2023; Janicke-Bowles et al., 2023; Rosič et al., 2022).

Authentic self-representation involves users' commitment to consistently presenting themselves and the information they share in online spaces without pretence or embellishment (Janicke-Bowles, 2023; Janicke-Bowles et al., 2023; Rosič et al., 2022). This requires honest self-disclosure in that users must be able to exchange personal information with each other on these social media platforms (Janicke-Bowles, 2023; Janicke-Bowles et al., 2023; Rosič et al., 2022). Research has found that authentic self-representation and honest self-disclosure positively impact users' flourishing and being cognisant of what to honestly share with others online, as well as how much of it to share, enhances users' perception of their competence in digital spaces (Janicke-Bowles, 2023; Janicke-Bowles et al., 2023; Rosič et al., 2022). Social comparison, originating from social comparison theory, involves users comparing themselves to others in online spaces (Janicke-Bowles, 2023; Janicke-Bowles et al., 2023; Rosič et al., 2022). It can either be upward i.e. people comparing themselves to those who they deem better than them or downward i.e. comparing themselves to people they think they are better than, and either positive or negative. Research has found that positive upward social comparison, where users aspire to be like those who they deem as 'better off' than them, positively impacts their perceived well-being (Meier & Reinecke, 2021). This kind of comparison also instils in users a sense of competence in these digital spaces (Janicke-Bowles, 2023; Janicke-Bowles et al., 2023; Rosič et al., 2022). The third dimension of digital flourishing that falls under the competence need is civil discourse and this involves civil participation as well as self-regulation. The former refers to users' ability to engage in discussions with people from varying backgrounds or affiliations in a critical yet dignified and responsible manner. The latter refers to users' ability to refrain from using language that could insult, harm, or ostracize other users online (Janicke-Bowles, 2023; Janicke-Bowles et al., 2023; Rosič et al., 2022). Users will feel an increased sense of competence when they are able to productively engage in discussions online without antagonising other users (Janicke-Bowles, 2023; Janicke-Bowles et al., 2023; Rosič et al., 2022).

Relatedness is the second psychological need under self-determination theory and it involves people perceiving themselves as being connected to others (Deci & Ryan, 2000; 2008). Here, people desire to feel nurtured as well as accepted by others (Deci & Ryan, 2000; 2008). The digital flourishing dimension of connectedness emerges out of this need and involves two things, social connectedness, and support (Janicke-Bowles, 2023; Janicke-

Bowles et al., 2023; Rosič et al., 2022). The former refers to people feeling a sense of belonging and gaining meaning from the social interactions they have with others. Research has found that social connectedness experienced online positively impacts well-being, while negatively impacting depression, loneliness, and anxiety (Janicke-Bowles, 2023; Janicke-Bowles et al., 2023; Rosič et al., 2022). Increasing social connectedness by participating and maintaining social interactions as well as relationships with others online leads to a sense of relatedness (Janicke-Bowles, 2023; Janicke-Bowles et al., 2023; Rosič et al., 2022). Social support refers to being a part of networks or groups of people (friends, family, colleagues, etc...) who would assist them if requested. There are social as well as emotional benefits that people gain from being a part of these networks, for example, sharing workload with those around them (Janicke-Bowles, 2023; Janicke-Bowles et al., 2023; Rosič et al., 2022). Research has shown that social support has a positive impact on users' perceived well-being and can instil a sense of relatedness therefore believing one has a network of people online to rely on when they need it should instil a sense of relatedness in users (High et al., 2023; Janicke-Bowles, 2023; Janicke-Bowles et al., 2023; Keum, 2024; Meier & Reinecke, 2021; Rosič et al., 2022; Tkáčová et al., 2021).

Autonomy is the psychological need that involves perceiving one's actions as stemming from one's own free will or volition (Deci & Ryan, 2000; 2008). This means that even when one's actions are inspired by others, the ultimate decision to act is made by that individual (Deci & Ryan, 2008). One's perceived self-control is the digital flourishing dimension that emerges from this need and it involves one's ability to regulate their use of social media, the kind of interactions they engage in, and the content they consume (Janicke-Bowles, 2023; Janicke-Bowles et al., 2023; Rosič et al., 2022). High to moderate levels of self-control, as it relates to social media use and the use of digital devices (for example, smartphones and tablets) have been found to positively impact users' perceived well-being (Janicke-Bowles, 2023; Janicke-Bowles et al., 2023; Rosič et al., 2022). In this way, being mindful of the content one consumes or engages with as well as using social media in a self-controlled manner should foster a sense of autonomy in users (Janicke-Bowles, 2023; Janicke-Bowles et al., 2023; Rosič et al., 2022).

Satisfaction of the competence, autonomy, and relatedness needs lead to the hedonic and eudaimonic experiences that constitute well-being (Deci & Ryan, 2008; High et al., 2023; Janicke-Bowles et al., 2023; Meier & Reinecke, 2021; Rosič et al., 2022; Vanden Abeele, 2021). As a result of encapsulating these three needs, digital flourishing is therefore able to comprehensively capture as well as measure well-being in relation to social media use

(Janicke-Bowles, 2023; Janicke-Bowles et al., 2023; Rosič et al., 2022). Recent research has found that in addition to digital flourishing weakening smartphone stress, and decreasing self-control failure in adolescents, it protects against or prevents the co-occurrence of adolescent smartphone addiction and academic burnout (Yao et al., 2024). This further establishes the comprehensive nature of digital flourishing.

What separates as well as necessitates the use of digital flourishing in investigating the positive relationship between social media use and perceived well-being is that it can, firstly, help account for the conflicting research findings that currently exist in the literature, for example it may account for the conflicting results on social comparison and social media use (Janicke-Bowles, 2023; Janicke-Bowles et al., 2023; Rosič et al., 2022). Secondly, digital flourishing is concerned with interactions occurring in digital spaces, so it is not limited like previous scales and studies to investigating one digital application, device, or feature (Janicke-Bowles, 2023; Janicke-Bowles et al., 2023; Rosič et al., 2022). Thirdly, it is more comprehensive than the other available measures and scales as it can provide us with data on which features of social media have a positive impact on perceived well-being and for which groups of people this is the case (Janicke-Bowles, 2023; Janicke-Bowles et al., 2023; Rosič et al., 2022). Fourth, where previous research has looked at types of social media use in terms of their positive or negative effects, digital flourishing allows us to investigate a more nuanced view of these types of interactions as it enables us to see in what ways different types of use positively impact perceived well-being (Janicke-Bowles, 2023; Janicke-Bowles et al., 2023; Rosič et al., 2022).

The current study

The concept of digital flourishing represents an important advancement in considering the positive implications of social media use. However, it is an extremely new concept and as yet there is almost no empirical research available that explores the extent to which different aspects of social media use predict digital flourishing or which aspects of digital flourishing are associated with specific aspects and types of social media use. Therefore, the current study aimed to explore whether and to what extent different types of social media use, motives for social media use, and perceived social media literacy predict digital flourishing in a South African sample. In this way, the limited focus, both locally and internationally, on the possible positive relationships between social media use and psychological well-being necessitates the current study. There has been little focus on the benefits of social media usage on young adults' perceived well-being and there is almost no data on this group's

usage of social media in relation to digital flourishing, especially in a South African context, therefore the sample chosen for the study was young adults aged 18 to 35.

Research Questions

This study has three research questions:

- 1) What is the internal structure and consistency of the Active and Passive Social Media Use scale, Social Media Use Integration scale, Digital Flourishing scale, Perceived Social Media Literacy scale, and Motives for Social Media Use scale in a sample of South African young adults?
- 2) What are levels of social media use, perceived social media literacy, motives for using social media, and digital flourishing in a sample of South African young adults?
- 3) What are the relationships between social media use, perceived social media literacy, motives for using social media, and digital flourishing in a sample of South African young adults?
- 4) To what extent do social media use, perceived social media literacy, and motives for using social media predict digital flourishing in a sample of South African young adults?

Conclusion

This chapter has outlined existing theory and research on social media use, psychological well-being, and digital flourishing. It has detailed the positive conception of mental health and how psychological well-being can, at its most basic level, refer to feeling good and functioning optimally, however, a more comprehensive definition of online psychological well-being is needed. Digital flourishing has been presented as a necessary construct representing a comprehensive definition of and framework for online psychological well-being. This chapter also discussed social media use and different types of social media use (including active and passive use, emotional use, and routine use) as well as evidence regarding their relationships with psychological well-being. Social media use, perceived social media literacy, and digital flourishing were also discussed, with gaps as well as inconsistencies in the existing literature showing why an investigation into the relationships between these variables is necessary. The argument for the current study was also presented along with the study's research questions. The next chapter, Chapter 3, will elaborate on the

methodology of this study, detailing the research design, sample and sampling, instruments, procedure, ethical considerations, and data analysis employed.

Chapter 3: Methodology

Introduction

This chapter outlines the methodology of this study. It expands on the quantitative, non-experimental, cross-sectional, and correlational nature of the study as well as the epistemic and ontological commitments observed which locate it within the post-positivist paradigm. It will then detail the characteristics of the chosen sample as well as the sampling technique that was utilised. The content and psychometric properties of the instruments used in the online survey will then be discussed. It will also outline the procedure and the ethical considerations that were observed in this study. Chapter 3 will then finally elaborate on the data cleaning as well as statistical techniques and software that were utilised to analyse the collected data.

Research design

This study had a quantitative, non-experimental, cross-sectional, and correlational research design (Muijs, 2011b). Since young adults' perceptions are observable and quantifiable phenomena, they were measured strictly using quantitative instruments and techniques. This rendered the study quantitative in nature. In addition to the absence of participants being randomly assigned to groups, their perceptions were not manipulated at any time in the study, resulting in no control group; the study was thus non-experimental (Muijs, 2011a). Furthermore, this study was cross-sectional in nature as the survey was administered only once to each participant and was correlational as I only sought to measure the variables and identify the associations between them and not to manipulate or change them (Muijs, 2011a).

The study was located in the post-positivist paradigm based on the assumption that young adults' perceptions can be observed and quantified (as an objective reality independent of human perception exists) to allow for comparison and prediction (Muijs, 2011b). Additionally, although complete objectivity in this study and within this paradigm is assumed to not be possible, steps were undertaken for the project to remain as objective as possible and to establish rigour in the study. This included establishing the internal consistency, reliability and structure of the scales in the sample, cleaning and checking the quality of the data, and checking the underlying statistical assumptions for the different analyses that were carried out. Furthermore, under this paradigm the findings of this study are assumed to not be absolute as they are subject to revision upon the emergence of new evidence (Ryan, 2006).

In the study, I wanted to predict trends in social media use and digital flourishing in South Africa and the design above enabled me to do this. The major disadvantage of using this design was that it drastically reduced the extent to which I could make causal inferences from my findings (Muijs, 2011a). However, this design ensured the replicability of the study, so that future studies will be able to determine trends in digital flourishing and social media use using a similar approach, especially in South Africa. When this was paired with the fact that the design was cost effective, practical, and matched closely with the purpose of the study, the advantages of this design outweighed its disadvantages and it was thus appropriate for the topic under investigation (Muijs, 2011a).

This study also followed a survey-based design as participation required completion of an online survey consisting of several questionnaires (Wright, 2005). Typically the major disadvantages of using an online survey are limited internet access, which affects a significant number of South Africans, and sampling bias, which limits participants to those who are tech savvy (Wright, 2005). However, these disadvantages were less of a concern for this study as the very nature of this research was to engage social media users, so they would have had to have internet access and basic competencies in navigating technology or the internet due to their social media usage. The two major advantages to using an online survey are that it is cost effective as well as time efficient (Wright, 2005). The scales used in this study were not copyrighted and were free to use, and the survey host platform, Google Forms, was free to use as well. Furthermore, Google Forms captured the data in an MS Excel spreadsheet format, which significantly reduced the time that had to be spent on capturing the data. In this way, the survey approach was the best way to collect data for this study despite its disadvantages. Despite this there were still limitations to this design that remained a concern in this study which included missing information, participants choosing not to answer certain questions, and response bias (Wright, 2005).

Sample and Sampling

Young adults living in South Africa between the ages of 18 to 35 were the chosen target population for this study. This was because there has been little focus on the benefits of social media use for young adults' perceived well-being and there is almost no data on this group's use of social media in relation to digital flourishing, especially in a South African context. All participants in the study required Internet access and a suitable device in order to complete the online survey. Additionally, they needed to be fluent in English in order to

answer the survey. Participants also needed to be willing to volunteer to complete the online survey.

Non-probability convenience and snowball sampling was therefore used to obtain the sample (Emerson, 2015). Potential participants were sent an online invitation with a link (see Appendix B) and a participant information sheet (see Appendix A). I obtained permission from the Human Research Ethics Committee (non-medical) of the University of the Witwatersrand as well as the Registrar's Office of the University of the Witwatersrand to send the online invitation via email to all registered students at the University of the Witwatersrand. Students who received the invitation were also asked to pass on the invitation to anyone else they knew who met the criteria for participation and who might be interested in participating. I also circulated the invitation online on my personal social media networks, and requested that my friends, family, and social media mutual pass on the invitation to anyone else they knew who met the criteria and who might be interested in participating. This approach was time and cost-efficient, which made it advantageous to use in a South African context (Muijs, 2011a). The main limitation of this approach was that the sample was not representative of the population, which limits the generalizability of my findings (Muijs, 2011a).

A total of 218 responses were received, of which 207 were valid for analysis. This was due to those who left out too many questions or who were above the chosen age limit (i.e. older than 35) being excluded from the sample. In instances where participants had answered more than ninety percent of the questions in a scale but had missing data for a particular item or small set of items, the value was extrapolated based on the most frequent or mode value (Honaker & King, 2010).

As seen in Table A and Appendix L, the majority of the sample was Black/African (64.3%), female (75.8%), English speaking (65.2%), bilingual (44.4%), and between the ages of 18 and 25 (65.2%). Most of the participants (43.5%) had a bachelor's degree as their highest qualification with a large portion of them identifying as full-time students (73.4%) and indicating that they were not employed (58.9%). Of those who were students, a majority (29%) were in their first year of study within the Faculty of the Humanities (40.1%). A significant portion of those who were employed (30.1%) worked in academia as tutors, lectures, educators, and teaching assistants.

Table A*Participant Demographics (N = 207)*

Category	Subcategory	%
Language	English	65.2%
	isiZulu	9.2%
	isiXhosa	1.9%
	Sesotho	3.9%
	Setswana	4.0%
	Afrikaans	2.4%
	Sepedi	6.8%
	Xitsonga	2.4%
	Tshivenda	1.5%
	Other	0.5%
Number of Languages Spoken	One	25.2%
	Two	44.4%
	Three	17.9%
	Four	9.7%
	Five or more	2.5%
Race	Black African	64.3%
	White	19.8%
	Coloured	6.8%
	Asian	0.5%
	Mixed Race	1.4%
	Indian	19.8%
	Prefer not to say	1.0%
Age	18–24 years	65.2%
	25–35 years	33.8%
Gender	Female	75.8%
	Male	22.7%
	Genderqueer/Other	0.5%
Employment Status	Employed (full-time)	21.3%
	Employed (part-time)	14.0%
	Self-employed (full-time)	0.5%
	Self-employed (part-time)	2.9%
	Not employed	58.9%
Student Status	Full-time student	73.4%
	Part-time student	19.3%
	Not currently a student	6.8%
Level of Study	Some high school	0.5%
	Technical/vocational training	0.5%
	Matric/ National Senior Certificate	16.4%
	Bachelor degree	43.5%
	Honour's degree	18.8%
	Master's degree	16.4%
	Doctorate	3.8%

Instruments

I collected data in the study using a self-report online survey that incorporated various questionnaires and scales to measure the relationships between social media use, perceived social media literacy, motives for social media use, and digital flourishing. The survey was loaded onto a suitable online survey platform, Google Forms, and took approximately 15 to 25 minutes to complete. The questionnaires and scales that formed the online survey are described in detail below.

Demographic Questionnaire (see Appendix D)

For demographic information to describe the sample, a questionnaire of ten items adapted slightly from Sarrimanolis (2023) was used. This questionnaire asks about participants' age, gender, race, spoken languages, level of education, employment and study status, occupation and field of work (if employed), and field and year of study (if studying).

Social Media Use Questionnaire (see Appendix E)

A combination of instruments was used to measure participants' social media use. This included four questions adapted from Sarrimanolis (2023) about the number and types of social media sites that participants belonged to and the amount of time they spent on these sites. The fifth question measured passive and active use of social media using a 15-item, 5-point Likert-type response scale that ranged from 'Never' to 'Always'. Most of the items in this scale were adapted from the Passive and Active Facebook Use Measure (Gerson et al., 2017) and two additional items were added from a self-report scale for active and passive social media use that was used in a study by Lewin et al. (2023). The psychometric properties of this adapted scale were unknown prior to its use but they were investigated in the study. The sixth question measured routine use of social media (4 items) and emotional investment in social media (6 items) using the Social Media Use Integration Scale (Bekalu et al, 2019). This scale consists of 10 items and uses a 5-point Likert-type scale that ranges from 'Strongly Disagree' to 'Strongly Agree' (Bekalu et al, 2019). In their study with a sample of 1027 American adults, Bekalu et al. (2019) confirmed the structure of the scale using factor analysis and found internal consistency reliabilities of 0.9 (routine use) and 0.91 (emotional investment) for the two subscales. The convergent and discriminant validity of this scale have also been established. In the case of the former, the scale positively correlated with the Facebook Intensity Scale whilst for the latter, the scale did not significantly correlate with the Big Five Inventory (Matsuzaka et al., 2023).

Digital Flourishing Scale (see Appendix F)

To measure digital flourishing, the Digital Flourishing Scale was used (Janicke-Bowles et al., 2023). This is a 25-item, self-report scale that employs a 5-point Likert-type scale that ranges from ‘Strongly Disagree’ to ‘Strongly Agree’ for each item (Janicke-Bowles et al., 2023). It has five subscales with five items each that measure authentic self-representation/disclosure, social comparison, civil discourse, connectedness, and self-control (Janicke-Bowles et al., 2023). Janicke-Bowles et al. (2023) confirmed the structure and construct validity of the scale and found moderate to high internal consistency reliabilities for the subscales. They found that connectedness had a Cronbach’s Alpha coefficient of 0.95, self-control had a Cronbach’s Alpha coefficient of 0.88, civil participation had a Cronbach’s Alpha coefficient of 0.81, positive social comparison had a Cronbach’s Alpha coefficient of 0.78, and authentic self-disclosure had a Cronbach’s Alpha coefficient of 0.73 (Janicke-Bowles et al., 2023). The convergent and discriminant validity for this scale were established by Janicke-Bowles et al. (2023) and confirmed by Janicke-Bowles (2024). The latter was established through four of the five subscales correlating negatively with the four items on the Internet Aggression scale, while the former was established by the loadings of the Digital Flourishing Scale’s subscales being higher than those on the three application subscales of the unrelated Mobile Communication Competence (Janicke-Bowles et al., 2023; Janicke-Bowles, 2024).

Perceived Social Media Literacy Scale (see Appendix G)

Perceived social media literacy was measured using an adapted version of the Perceived Social Media Literacy Scale developed by Tandoc et al. (2021). The original scale consists of 14 items that assess technical competency (5 items), social relationships (3 items), informational awareness (3 items), and privacy and algorithmic awareness (3 items). An additional 3 items from the Skills and Literacy subscale of the Internet Experience Questionnaire (Feuls et al., 2016) were added to create a measure of 17 items answered on a five-point Likert-type scale ranging from ‘Strongly Disagree’ to ‘Strongly Agree’. The psychometric properties of this adapted scale were unknown prior to its use but they were investigated in the study.

Motives for Social Media Use Scale (see Appendix H)

Motives for social media use were measured using an adapted version of the Scale of Motives for Using Social Networking Sites (Pertegal et al., 2019). The original scale measures nine common motives for using social networking sites with three items to assess

each motive: dating, new friendships, academic purposes, social connectedness, following and monitoring of others, entertainment, social recognition, self-expression, and information (Pertegal et al., 2019). The three items for the academic purposes subscale were adapted slightly to reference work purposes as well as academic purposes in the study (for respondents who were not studying). In addition, nine items from The Motives for Facebook Use Measure (Smock et al., 2011) were added to capture motives for escapism, companionship, and professional advancement (with three items used to assess each motive). The adapted scale consisted of 36 items assessing twelve motives for social media use. It employed a 7-point Likert-type scale response format that ranged from ‘Completely Untrue’ to ‘Completely True’. The psychometric properties of this adapted scale were unknown prior to its use but they were investigated in the study.

Open-ended questions (see Appendix I)

Six open-ended questions were included at the end of the questionnaire. This was to gauge participants’ perceptions of their experiences with social media use in a way that was less limited than the closed-ended questions and that could add more nuance and depth to the data. To maintain a suitable size and scope and focus on the research questions, the data obtained from the open-ended questions was not analysed for the current study but it will be explored in future work examining the dataset at a later point.

Procedure

I began by obtaining clearance to conduct the study from the University of the Witwatersrand Human Research Ethics Committee (non-medical). Once this was granted (see Appendix J; protocol number: MASPR-24-03), I approached the University of the Witwatersrand’s Registrar’s Office for permission to invite all registered students to participate in the study and for assistance in circulating the invitation by email (see Appendix C). When permission was granted, an email that included an online invitation (see Appendix B), a link to the online survey, and a copy of the participant information sheet (see Appendix A) was sent to all students with a request for this to be passed on to anyone else who met the criteria for participating and who might be interested in participating. The same invitation, link, and copy of the participant information sheet was also circulated on my personal social networks (WhatsApp, Facebook, Instagram, and X), with the same request for anyone receiving the invitation to pass this on to anyone else who might be interested in participating in the study.

Potential participants were told that participation was completely voluntary and that this would require completing the survey and submitting it online. The online survey was loaded onto a suitable online platform, Google Forms, and took about 15 to 25 minutes to complete. The survey was live from the middle of August of 2024 to early November of that same year. Two difficulties that were experienced during collection of the data were spam emails and technical issues. The former referred to the possibility of invitation emails being categorised as spam mail in potential participants' emails. This was an issue in the study as several participants informed me as the researcher that the invitation was sent to their spam mail and that had they not seen posts on social media as well as posters around campus about this study they would not have participated. Technical issues such as broken links, software crashes, and incompatible devices were also possible reasons for those receiving the invitation choosing not to participate in the study. Once responses were submitted, I downloaded the spreadsheet with the data, cleaned the data, and then completed a statistical analysis of the quantitative data collected. The spreadsheet does not contain any possible identifying information (for example, IP addresses), and continues to be stored on password-protected computers with limited access.

Ethical considerations

To ensure informed consent (Brody et al., 1997) in the study, I provided participants with a detailed participant information sheet (see Appendix A) that explained what the study was about, who I am and my affiliation, the requirements for participating in the study, the voluntary nature of participation and the right to withdraw up to the point of submitting the survey, how confidentiality and anonymity would be ensured, how the data would be stored and used in the future, how feedback could be obtained, and the process for any questions. Participants were asked to tick a box at the end of the participant information sheet to indicate that they agreed to participate in the study based on these conditions. When participants ticked this box and submitted the completed survey, I regarded this as informed consent to participate in the study.

There were no direct benefits for participating in the study, and the only foreseeable risk was that some of the questions in the survey could have been a little sensitive or caused slight discomfort. To manage this, participants were told that they could leave out any questions that they preferred not to answer, and I included a front-end referral in the participant information sheet to the South African Depression and Anxiety Group. I was also granted ethical clearance from the University of the Witwatersrand Human Research Ethics

Committee (non-medical) (see Appendix J; protocol number: MASPR-24-03) and was given permission to invite registered students to participate in the study from the University of the Witwatersrand's Registrar's Office.

To ensure confidentiality and anonymity (Wiles et al., 2008), I did not ask participants for any information that could identify them personally in the survey and any information that could possibly have been used to identify them (for example, IP addresses) were either not collected on Google Forms or were removed from the dataset. The data was stored on a password-protected computer with limited access during the study and will continue to be stored in anonymous form on password-protected computers with limited access after the study. I asked participants for permission to permanently store the data in the form of an anonymous spreadsheet and to possibly use this data for future research and teaching purposes. I also gave participants my contact details and my supervisor's contact details for any questions and to request a summary of the results of the study for feedback if they would like this. I also provided contact details for the University of the Witwatersrand Human Research Ethics Committee (non-medical) for any ethical questions.

Data analysis

Once the data was downloaded from Google Forms as an MS Excel spreadsheet, it had to be cleaned. This involved the removal of two kinds of participants from the final dataset. The first were those who fell outside the mandated age range (i.e. between 18 and 35 years of age) which resulted in the removal of six participants. The second were those who exited the survey early having answered only certain questionnaires in the survey, leaving some of the scales that were the focus of this study completely unanswered. This resulted in five more participants being removed. This resulted in a final dataset of 207 participants. Additionally, the spreadsheet contained participants who had missing data for a single item or for a small number of items on a particular scale but who had answered ninety percent or more of the scale. For these participants, missing values were extrapolated based on the most frequent or mode value (Honaker & King, 2010).

Once cleaned, the data was analysed using IBM SPSS Statistics[®] version 29.0 (IBM Corp, 2023). Since all the scales used in this study consisted of sets of items that were already established as assessing the underlying constructs of interest (i.e. active and passive social media use, rational and emotional use of social media, perceived social media literacy, motives for social media use, and digital flourishing) but that were either new scales or adapted scales, principal component analyses were run (Field, 2013). These analyses were

carried out on the items for each of the five scales to identify smaller sets of components that could adequately represent the data while maintaining as much variance as possible (Field, 2013). Assumptions concerning scale of measure, linearity, sampling adequacy, sphericity, and outliers had to be met before running these analyses (Field, 2013).

The first assumption requires that the data have multiple variables which are additionally ordinal or continuous (Field, 2013). This assumption was assumed to be met as all of the scales used in this study consisted of multiple items answered using a Likert-type scale response format (Field, 2013). The second assumption requires that the relationship between the variables or items on the scales be linear (Field, 2013). Correlation matrices were produced as part of the principal component analyses, with Pearson's correlation coefficients below 0.3 indicating concerns about non-linearity. The sampling adequacy assumption requires that the data have a large enough sample size in order to produce reliable results (Field, 2013). A minimum sample of 150 participants is recommended; in this study, the sample size was 207. In addition, Kaiser-Mayer-Olkin (KMO) measures of sampling adequacy were also used to test this in the principal component analyses. The KMO index had to exceed a value of 0.6 for each analysis for the sample to be adequate (Kaiser, 1970). Under the sphericity assumption, the data also had to be suitable for reduction with sufficient correlations between the variables. This was tested using Bartlett's Test of Sphericity in the principal component analyses. The outcomes produced for these tests must be statistically significant (i.e. the p-value must be smaller than 0.05) in order to meet the assumption (Bartlett, 1954). The last assumption that had to be met was the absence of significant outliers (Field, 2013). Although there were some outliers in the data, they were not sufficiently significant to skew the results, so they were not removed from the dataset.

Once all the assumptions were met, the principal component analyses were performed with a varimax rotation (orthogonal rotation). This was due to seeking pools of items that were closely related to one another, all of which had been established as measuring essentially the same constructs previously (Field, 2013). For the results, the number of components identified as present in the scales was determined by how many of them had Eigenvalues greater than one in addition to the number displayed before the drop in the corresponding scree plot (Field, 2013). Furthermore, the amount of variance explained by each component was considered (Field, 2013). The rotated component matrices indicated which items loaded onto which components with a loading greater than 0.4.

Once the principal component analyses were complete, Cronbach's Alpha coefficients were then calculated for each of the identified components (i.e. subscales) for all of the scales

as well as the total scores for perceived social media literacy and digital flourishing. This was done to confirm the internal consistency reliability of these scales in the sample. Cronbach's Alpha coefficients over 0.9 were seen as indicating extremely high internal consistency reliability, those between 0.8 and 0.9 were interpreted as high reliability, those between 0.75 and 0.8 were interpreted as moderate to high reliability, those between 0.7 and 0.75 were interpreted as moderate reliability, and those between 0.65 to 0.7 were interpreted as having low to moderate reliability (Davidshofer & Murphy, 2005). 0.5 to 0.6 indicated extremely poor reliability whilst anything below 0.5 was understood as the observed scores being largely determined by errors in measurement rather than the true scores (Davidshofer & Murphy, 2005). There were only two subscales for perceived social media literacy that had less than acceptable internal consistency reliability – these were the privacy algorithm awareness and control subscales, which were then not looked at further in the study.

Descriptive statistics in the form of frequencies and percentages for the categorical variables and means, standard deviations, and ranges for the continuous variables were then calculated for all of the variables in the study (Field, 2013). This was done to describe the characteristics of the sample and the data collected. Additionally, these statistics were used to provide an answer to this study's first research question concerning levels of social media use, perceived social media literacy, motives for social media use, and digital flourishing within the sample. Normality is an assumption for Pearson's bivariate correlations as well as multiple regression. This was checked using the sample size ($N = 207$), histograms, skewness coefficients, and kurtosis estimates (Field, 2013). For the skewness coefficients, the data was considered sufficiently normally distributed if the coefficient fell between $+1.0$ and -1.0 (Field, 2013). For the kurtosis estimates, the data was considered sufficiently normally distributed if the coefficient fell between $+3.0$ and -3.0 (Field, 2013). The histograms indicated normality when they more or less approximated a bell curve, with the middle section peaking higher than the tail ends of the graph (Field, 2013). In instances where the data was not considered sufficiently normal, both square root and square transformations were attempted. Two variables, the entertainment and information and connectedness motives, were successfully transformed using a square transformation, while one variable, the technical competency subscale for perceived social media literacy, was not able to be transformed successfully and was treated as skewed (Field, 2013).

To determine the relationships between digital flourishing and social media usage, perceived social media literacy, and motives for social media use, Pearson's bivariate correlation coefficients were calculated. These coefficients were used to identify the strength,

direction, and significance of the associations between these variables in the study (Field, 2013). The scale of measure, normality, linearity, and outlier assumptions had to be met before the correlation coefficients could be utilised (Field, 2013). For the technical competency subscale for perceived social media literacy, which did not meet the assumption for normality, Spearman's rank-order correlation coefficients were used instead. Spearman's rank-order correlation coefficients are a non-parametric alternative to Pearson's bivariate correlation coefficients, and also assess the strength, direction, and significance of the association between two variables (Field, 2013).

The level of significance for the correlations were 0.05, in that any result below 0.05 was considered statistically significant (Field, 2013). Correlation coefficients between 0 and +1 indicated a positive relationship between the variables whilst coefficients between 0 and -1 suggested a negative relationship (Field, 2013). Additionally, the closer to +1 the correlation coefficient was, the stronger the positive relationship between the variables, and the closer the coefficient was to -1, the stronger the negative relationship (Field, 2013).

To establish which of the various variables predicted digital flourishing, two sets of multiple regression models were created. The assumptions concerning normality and scale of measure were previously discussed as having been met, so only the ones concerning sample size, number of independent variables, independence of observations, residual normality, linearity, homoscedasticity, multicollinearity, and outliers remained (Field, 2013). According to the literature, multiple regression analysis requires that the sample size be larger than $50 + 8 \times m$ (m being the number of independent variables in the regression) (Field, 2013). For all of the regression models the sample size was 207, which exceeded the calculated answer for the formula and therefore this assumption was met. Multiple regression requires that there be two or more independent variables (predictor variables) within each model – this was met as the first set of models included six predictor variables (posting, communication, passive use, rational use and access, emotional use, and the total perceived social media literacy score) and the second set of models included nine predictor models (the different motives for using social media) (Field, 2013). The next assumption required that the observations in the sample be independent from each other; this was established using the Durbin-Watson statistic that was produced when the regressions were run (Field, 2013). It is suggested that the Durbin-Watson statistic should lie close to 2 (with an acceptable range between 1.5 and 2.5), which indicates independence of the observations (Turner, 2020).

Another assumption was that the residuals of the regression models be normally distributed, this was met as is evident in the histograms and p-plots in Appendix N (Field,

2013). The linearity and homoscedasticity assumptions (i.e. the consistency of the residuals' variance across all levels of the independent variables) were met as seen in the scatterplots in Appendix N (see Figures 17, 20, 23, 26, 29, 32, 35, 38, 41, 44, 47, and 50) (Field, 2013). The next assumption required that the data have no highly correlated variables (i.e. multicollinearity); this was checked using VIF and tolerance statistics as well as the condition index in each model that was created. There was no indication of multicollinearity in any of the models as the VIF statistics were less than 10, the tolerance values were greater than 0.2, and the condition index was less than 30 (Belsley et al., 1980; Field, 2013). The last assumption was that there should be no significant outliers in the data. There were one or two outliers present in cases where the data fell outside of the suggested +3 and -3 residual range (see Appendix N) (Garson, 2012). However, these did not heavily affect nor skew the data particularly when looking at the normality of the data (see Appendix N). In this way, even though a small number of outliers were present they did not compromise the confidence and strength of the regression models.

Once all of the assumptions were met, the regression models were created and interpreted. The regressions were considered significant when the model summary was significant compared to a significance level of 0.05, with the corresponding coefficients of determination indicating the amount of variance in digital flourishing explained by the model. The regression model coefficients whose corresponding significance levels were below 0.05 indicated which variables in the model were significant predictors of digital flourishing (Field, 2013).

Conclusion

This chapter delineated the methodology of this study. A cross-sectional, correlational, non-experimental, quantitative design was adopted to examine the relationships between digital flourishing and types of social media use, motives for social media use, and perceived social media literacy in the sample. The sample consisted of 207 participants between the ages of 18 and 35 who were selected through non-probability, convenience, and snowball sampling. Data was collected using an online survey consisting of a self-developed demographic questionnaire, a self-developed and/or adapted Social Media Use Questionnaire, an adapted Perceived Social Media Literacy Scale, an adapted Motives for Social Media Use Scale, and the Digital Flourishing Scale. Participants provided informed consent prior to completing the survey and the ethical principles of confidentiality, anonymity, and voluntary

participation were observed in the study. Ethical clearance was granted by the University of the Witwatersrand Human Research Ethics Committee (non-medical). The structure and internal consistency internal consistency reliability of the scales used in the study was checked using principal component analysis and Cronbach's Alpha coefficients. Descriptive statistics, correlations, and multiple regressions were used to describe the sample and the data and answer the research questions. The next chapter, Chapter 4, will detail the results of the data analysis.

Chapter 4: Results

Introduction

This chapter presents this study's findings on the relationships between digital flourishing and types of social media use, motives for social media use, and perceived social media literacy among South African young adults. It details the results of the psychometric analysis (i.e. principal component analyses and reliability tests) run on all the scales I utilised in order to establish the internal structure and consistency of those scales. A detailed description of the sample and the data's characteristics is provided. This is then followed by the findings of the bivariate correlations as well as two sets of multiple regressions run between digital flourishing and all the other variables under study.

Psychometric Analysis

To address this study's first question two sets of psychometric analyses were run. In that the internal structure and subscales for each scale used in this study were determined using principal components analysis (PCA) with a varimax (orthogonal) rotation, and the internal consistency reliability estimates for each scale and subscale used in this study were determined using Cronbach's Alpha coefficients (Field, 2013).

Principal Components Analyses

Active and Passive Social Media Use

This principal component analysis was conducted to assess how many distinct components (factors) were present in the adapted active and passive use scale (Gerson et al., 2017; Lewin et al., 2023) in the Social Media Use Questionnaire in the sample. For this analysis, the most important consideration informing the number of principal components for extraction was that the scale was almost entirely adapted from the Passive and Active Facebook Use Measure by Gerson et al. (2017). This scale had three subscales (active social, active non-social, and passive), therefore a forced three-component model was run on the adapted items that also included two additional items from Lewin et al. (2023).

All correlations between the items for the scale were above 0.3 and below 0.9 except for items 4, 9, and 14. None of the regressions in the *R*-matrix reported a *p*-value of 0, so multicollinearity was unlikely (Field, 2013). For sampling adequacy, the Kaiser-Mayer-Olkin (KMO) index was 0.76, exceeding the recommended value of 0.6 (Field, 2013). Additionally, for data reduction the Bartlett's Test of Sphericity reached statistical significance ($\chi^2 = 953.32, p < .001$) (Field, 2013). All of these indicate that my data was suitable for principal

components analysis. As shown in Table 47 in Appendix K.1, all items except 4, 9, and 14 reported commonalities above 0.40, so I was sceptical that those items would load onto any components.

As evident in Table 1, the Eigenvalues for the first three components extracted were all greater than one as per the Eigenvalues-greater-than-one rule (Field, 2013). Together, these components accounted for 50.59% of the total variance explained as seen in Table 1, with 27.5% explained by the first component, 13.38% explained by the second component, and 9.71% explained by the third component. The scree plot (Appendix K.1) displayed a drop in the plot after approximately three to four points. Ultimately, in accordance with the Eigenvalues, the scree plot, and the proportion of variance explained, the extraction of three components was supported.

Table 2 displays the rotated component pattern for the three different components that were extracted using varimax rotation (Kaiser, 1958). Based on the 0.40 cut-off, it is evident that Items 10, 11, 12, 13, and 14 loaded onto the first component. These concerned the passive nature of participants' online activity as the items centred on whether participants read posts and articles and viewed videos and photos. Thus, I categorised this component as passive use.

Table 1

Eigenvalues and total variance explained for the adapted Active and Passive Use Scale

Components	Initial Eigenvalues	
	Total	% of Variance
1	4.124	27.495
2	2.008	13.383
3	1.456	9.709
4	1.217	8.113
5	1.019	6.794

Table 2

Rotated component matrix for the adapted Active and Passive Use Scale

	Comp. 1	Comp. 2	Comp. 3
Item 12	0.902	0.090	0.109
Item 11	0.887	0.109	-0.033
Item 10	0.824	0.108	0.108
Item 13	0.559	0.226	0.224
Item 14	0.405	0.054	0.222
Item 9	0.273	0.188	-0.176
Item 7	-0.105	0.718	0.067
Item 6	0.243	0.653	-0.037
Item 5	0.132	0.609	0.249
Item 15	0.104	0.598	0.440
Item 8	0.307	0.550	-0.118
Item 4	0.163	0.373	0.316
Item 1	0.036	0.002	0.809
Item 2	0.064	0.182	0.800
Item 3	0.149	0.065	0.643

Items 5, 6, 7, 8, and 15 loaded onto the second component; these concerned how people communicate or engage with others online as the questions centred on whether the participants shared links, chatted online, and created or replied to events. I therefore categorised this component as communication, with the subscale speaking to active use as the items involve people actively engaging with others online.

Items 1, 2, and 3 loaded onto the third component. These items focus on the types of things people post online, for example, videos, photos, or status updates, and the component was therefore categorised as posting. This subscale also reflects active use as the items involve people actively posting things on social media. Item 15 loaded onto the third component as well as the second component, but loaded more strongly on component two and therefore formed part of the items for the subscale representing the second component. This may have occurred because tagging people in photos or videos can be categorised as a kind of posting, however, since tagging involves communicating to others who was where or doing what, it may be better understood as a form of online communication.

Lastly, Items 4 and 9 shown in Table 2 did not load onto any of the components and were thus removed from the analysis of the data. Ultimately, the structure obtained through the principal components analysis was applied in the analysis of the data in this study.

Rational and Emotional Social Media Use

This principal component analysis was conducted to assess how many distinct components were present in the Social Media Use Integration Scale (Bekalu et al., 2019) that was part of the Social Media Use Questionnaire in the sample. The most important consideration informing the number of components for extraction was the scale's original theoretical framework which is composed of users' routine and emotional use of social media. The former refers to everyday or routine use of social media whilst the latter refers to the emotional connection participants have with social media (Bekalu et al., 2019). I therefore expected that at least two components would be extracted from this analysis.

All correlation coefficients between the items on the Social Media Use Integration Scale were above 0.3 and below 0.9. Multicollinearity was unlikely as none of the regressions in the *R*-matrix reported a *p*-value of 0 (Field, 2013). For sampling adequacy, the Kaiser-Mayer-Olkin (KMO) index was 0.84, exceeding the recommended value of 0.6 (Kaiser, 1970). Additionally, for data reduction the Bartlett's Test of Sphericity reached statistical significance ($\chi^2 = 635.74, p < .001$) (Bartlett, 1954). All this indicates that my data was suitable for principal component analysis. As is evident in Appendix K.2 all items except Item 2 demonstrated communalities above 0.40, so I was confident that they would all load on the different components except for Item 2.

As per the Eigenvalues greater-than-one rule, two components were initially indicated as evident in Table 3. Together, these components accounted for 52.03% of the total variance explained as seen in Table 3, with 41.69% explained by the first component and 10.34% explained by the second component. The Eigenvalues and variance explained, as well as the scree plot falling after two points (see Appendix K.2) supported the extraction of two components. Table 4 displays the rotated component pattern for the two different components that were extracted using varimax rotation (Kaiser, 1958) Based on the 0.40 cut-off, it is evident that Items 1, 2, 3, 6, 7, and 8 loaded onto the first component. Those items concerned the rational use of social media and accessibility to social media as the items centred on whether participants enjoyed using social media, whether they used it to respond to others

and as part of their daily routine, and whether they felt upset if they could not log on (Bekalu et al., 2019).

Table 3

*Eigenvalues and total variance explained for
Social Media Use Integration Scale*

Components	Initial Eigenvalues	
	Total	% of Variance
1	4.169	41.687
2	1.034	10.341

Rational use here refers to people's use of social media being purposeful (i.e. for enjoyment) and goal-driven (i.e. doing or engaging with particular things online) when used routinely. I therefore categorised this subscale as rational use and access. Item 2 had a low communality and did not fit conceptually with the rest of the subscale, this item was removed from the final analysis. As shown in Table 4 items 4, 5, 9, and 10 loaded onto the second component and concerned users' level of emotional investment in the social media sites they used as the items centred on whether participants felt disappointed if they could not use social media, whether they wanted others to use social media, whether they maintained important relationships through social media, and their disappointment if they did not get to use social media (Bekalu et al., 2019). I therefore categorised this subscale as emotional use

It is worth noting that although Item 5 (*'disappointed if they are unable to use SM'*) did load onto the first component as well, the loading was slightly higher for the second component and, conceptually, disappointment speaks to a higher level of emotional investment in social media than rational use. Item 5 was therefore retained as part of the second component. Despite being different from the structure obtained by Bekalu et al. (2019) in their study, the structure obtained through the principal components analysis was applied in the analysis of the data in this study.

Table 4
*Rotated component matrix for
 Social Media Use Integration Scale*

	Comp. 1	Comp. 2
Item 6	0.829	0.066
Item 8	0.708	0.094
Item 1	0.674	0.255
Item 7	0.600	0.334
Item 3	0.570	0.346
Item 2	0.469	0.231
Item 9	0.108	0.779
Item 4	0.159	0.778
Item 10	0.385	0.567
Item 5	0.533	0.540

Perceived Social Media Literacy

This principal component analysis was conducted to assess how many distinct components were present in the adapted Perceived Social Media Literacy Scale (Feuls et al., 2016; Tandoc et al., 2021) in the sample.

The most important consideration informing the number of factors for extraction was that the scale was adapted from Tandoc et al.'s (2021) Perceived Social Media Literacy Scale in addition to Feuls et al.'s (2016) Internet Experience Questionnaire (IEQ). The Perceived Social Media Literacy Scale (Tandoc et al., 2021) has four subscales: technical competency, social relationships, informational awareness, and privacy and algorithmic awareness (Tandoc et al., 2021).

Items from the Skills and Literacy subscale of the Internet Experience Questionnaire (Feuls et al., 2016) were also included in the scale, so I expected that between four and five distinct components would be extracted from this analysis.

All correlations between the items were above 0.3 and below 0.9 except for Items 12 and 17. None of the regressions in the *R*-matrix reported a *p*-value of 0, so multicollinearity was unlikely (Field, 2013). For sampling adequacy, the Kaiser-Mayer-Olkin (KMO) index was 0.80, exceeding the recommended value of 0.6 (Kaiser, 1970). Additionally, for data reduction the Bartlett's Test of Sphericity reached statistical significance ($\chi^2 = 1421.98$, $p < .001$) (Bartlett, 1954). All this indicates that my data was suitable for principal component

analysis. As is evident in Appendix K.3, all items had commonalities above 0.40, so I was confident they would all load onto the different components.

As per the Eigenvalues greater-than-one rule, five components were initially indicated as evident in Table 5. However, the scree plot presented a dip after three points and a peak at five points, so it was not entirely clear from this that five components should be extracted. The total variance explained by the first five components was 66.8%, while the total variance explained by the first three components was only 52.33%.

Table 5

Eigenvalues and total variance explained for the adapted Perceived Social Media literacy scale

Components	Initial Eigenvalues	
	Total	% of Variance
1	5.126	30.156
2	2.057	12.097
3	1.713	10.076
4	1.268	7.457
5	1.191	7.008

The first component accounted for 30.16% of the variation explained, followed by the second component with 12.1%, the third component with 10.07%, the fourth component with 7.46%, and the fifth component with 7.01%. Ultimately, in accordance with the Eigenvalues, the scree plot, and the proportion of variance explained, five factors were extracted.

Table 6 presents the rotated component pattern for the five components that were identified. Based on the 0.40 cut-off, it is evident that Items 1, 2, 3, 4, and 5 loaded onto the first component. They concerned the users' technical competency as questions centred on their ability to navigate social media sites (for example, to create as well as delete accounts and post online). Thus, I categorised this subscale as technical competency.

Items 6, 7, and 8 loaded onto the second component; they concern how users understand social media sites and how this affects their relationships with others online. Here, questions centred on whether users understood copyright law, social media policy, and had the ability to handle conflict. I therefore categorised this subscale as social relationships. Items 9, 10, and 11 loaded onto the third component. These items focus on users' perceived

ability to verify the truth and motives of the information they engage with on social media and I therefore categorised this subscale as informational awareness.

Table 6

Rotated component matrix the adapted Perceived Social Media literacy scale

	Comp. 1	Comp. 2	Comp. 3	Comp. 4	Comp. 5
Item 1	0.860	-0.047	0.110	0.061	0.119
Item 2	0.850	0.109	0.171	0.127	-0.049
Item 3	0.822	0.098	0.128	0.170	-0.085
Item 4	0.779	0.052	0.110	0.146	0.122
Item 5	0.640	0.354	0.073	0.124	0.095
Item 6	0.100	0.878	0.100	0.029	-0.050
Item 7	0.150	0.817	0.112	0.147	-0.045
Item 8	0.045	0.708	0.213	0.158	0.171
Item 9	0.183	0.130	0.851	0.114	0.042
Item 11	0.171	0.216	0.831	0.012	0.062
Item 10	0.135	0.091	0.786	0.249	0.238
Item 16	0.237	-0.001	0.079	0.794	-0.133
Item 15	0.108	0.148	0.199	0.650	0.172
Item 17	0.177	0.278	0.058	0.583	0.194
Item 14	-0.014	0.012	0.108	0.131	0.766
Item 13	0.037	-0.112	0.083	0.227	0.688
Item 12	0.113	0.184	0.069	-0.217	0.640

Key: *Comp* = component

The next cluster of items, Items 15, 16, and 17, loaded onto the fourth component and I categorised them as the control subscale since they focused on users' ability to regulate their social media posts and experiences (Tandoc et al., 2021). Items 12, 13, and 14 loaded onto the fifth component. These items concern users' perceived ability to think critically about how information is shared and created on social media. Questions centred on users' perceived ability to identify target adverts and control what they see online. As a result, I categorised this subscale (Items 12, 13, and 14) as privacy and algorithmic awareness.

No cross loading occurred for any of the items. The structure obtained in the sample matched closely with the subscale structures identified by Feuls et al. (2016) and Tandoc et al. (2021) for their scales. For this reason, the structure obtained through the principal components analysis was applied in the analysis of the data in this study.

Motives for Social Media Use

This principal component analysis was conducted to assess how many distinct components were present in the adapted Motives for Social Media Use (Pertegal et al., 2019; Smock et al., 2011) in the sample. The most important consideration informing the number of components for extraction here is that the scale was adapted from Pertegal et al.'s (2019) Scale of Motives for Using Social Networking Sites in addition to Smock et al.'s (2011) Motives for Facebook Use Measure. Pertegal et al.'s (2019) scale has nine motives for using social media: dating, new friendships, academic purposes, social connectedness, following and monitoring of others, entertainment, social recognition, self-expression, and information. Items measuring escapism, companionship, and professional advancement motives from Smock et al.'s (2011) scale were included in the adapted scale. So, I expected twelve distinct components representing different motives would be extracted from this analysis.

All correlations between the items were above 0.3 and below 0.9. Multicollinearity was unlikely as none of the regressions in the *R*-matrix reported a *p*-value of 0 (Field, 2013). For sampling adequacy, the Kaiser-Mayer-Olkin (KMO) index was 0.86, exceeding the recommended value of 0.6 (Kaiser, 1970). Additionally, for data reduction the Bartlett's Test of Sphericity reached statistical significance ($\chi^2 = 6399.21, p < .001$) (Bartlett, 1954). All this indicates that my data was suitable for principal component analysis. As is evident in Appendix K.4, all items had communalities above 0.40, so I was confident that they would all load onto the different components. As per the Eigenvalues greater-than-one rule, nine components were initially indicated as evident in Table 7. The total variance explained by the nine components was 77.4%.

The first component explained 30.5% of the variance, the second component explained 11.58% of the variance, the third component explained 9.64% of the variance, the fourth component explained 5.69% of the variance, the fifth component explained 5.27% of the variance, the sixth component explained 4.43% of the variance, the seventh component explained 3.85% of the variance, the eighth component explained 3.59% of the variance, and the ninth component explained 2.86% of the variance. The Eigenvalues, total variance

explained, and the scree plot that dropped after seven to nine points (see Appendix K.4) supported the extraction of nine components.

Table 7

Eigenvalues and total variance explained for the adapted Motives for Social Media Use Scale

Components	Initial Eigenvalues	
	Total	% of Variance
1	10.982	30.504
2	4.170	11.582
3	3.471	9.642
4	2.047	5.687
5	1.896	5.266
6	1.594	4.427
7	1.384	3.846
8	1.294	3.594
9	1.028	2.856

Table 8 presents the rotated component pattern for the nine components that were identified from the analysis. Based on the 0.40 cut-off, it is evident that Items 1, 2, 3, 4, 5, and 6 loaded on the first component. These items concerned whether users' social relationships were a motive for social media use as the questions centred on using social media to make friends or meet romantic partners. Thus, I categorised this subscale as dating and new friendships. Items 10, 25, 26, and 27 loaded onto the second component; they concern using social media to stay engaged and informed on various topics. I therefore categorised this subscale as information and connectedness. Items 11, 12, 31, 32, and 33 loaded onto the third component. These items focus on users' seeking out connection and companionship with others on social media. As a result, this scale was categorised as companionship and social connectedness. It is worth noting that Item 11 (feeling connected) loaded on both component two and component three, but it loaded slightly more highly on component three and related more closely to connection and companionship than

connectedness and information, therefore it was included as part of the subscale for the third component.

Table 8

Rotated component matrix for the adapted Motives for Social Media Use Scale

	Comp. 1	Comp. 2	Comp. 3	Comp. 4	Comp. 5	Comp. 6	Comp. 7	Comp. 8	Comp. 9
Item 4	0.862	0.136	0.173	0.149	-0.068	0.126	0.121	0.037	0.131
Item 6	0.846	0.156	0.118	0.179	-0.072	0.095	0.101	0.065	0.127
Item 3	0.844	-0.054	0.143	0.176	0.111	0.114	-0.007	0.121	-0.042
Item 2	0.837	-0.021	0.172	0.219	0.125	0.089	0.037	0.131	-0.109
Item 1	0.823	-0.085	0.171	0.202	0.058	0.047	0.045	0.118	-0.146
Item 5	0.810	0.177	0.095	0.176	-0.016	0.131	0.124	0.071	0.100
Item 25	-0.039	0.778	-0.040	0.221	0.219	0.125	0.184	0.139	0.116
Item 26	0.075	0.771	0.002	0.092	0.124	0.092	0.233	0.225	0.014
Item 27	-0.003	0.750	-0.051	0.110	0.223	0.127	0.182	0.198	0.134
Item 10	0.210	0.508	0.456	-0.020	0.172	0.356	0.001	0.113	-0.088
Item 31	0.168	-0.036	0.804	0.172	0.127	0.166	-0.012	0.030	0.273
Item 33	0.224	-0.058	0.782	0.227	0.093	0.133	0.100	0.096	0.245
Item 32	0.281	0.013	0.769	0.252	0.049	0.176	0.159	0.027	0.134
Item 12	0.349	0.496	0.539	0.039	0.175	0.386	0.012	0.019	-0.111
Item 11	0.349	0.504	0.521	0.038	0.104	0.315	0.045	-0.083	-0.107
Item 20	0.250	-0.042	0.203	0.725	0.147	0.350	-0.072	0.083	-0.135
Item 22	0.261	0.206	0.175	0.724	0.019	0.126	0.010	0.099	0.107
Item 23	0.340	0.358	0.116	0.705	-0.045	-0.058	0.019	0.022	0.115
Item 21	0.206	-0.113	0.129	0.667	0.229	0.446	-0.073	0.039	-0.098
Item 24	0.380	0.379	0.061	0.640	-0.107	-0.130	0.153	0.025	0.098
Item 19	0.266	-0.024	0.273	0.445	0.138	0.198	-0.126	0.275	-0.078
Item 17	-0.018	0.159	0.089	-0.013	0.862	0.135	0.028	0.033	0.242
Item 16	0.065	0.095	0.108	0.055	0.851	0.164	0.065	0.037	0.252
Item 18	0.059	0.247	0.066	0.124	0.814	0.032	0.055	0.044	0.053
Item 14	0.052	0.149	0.202	0.099	0.074	0.821	0.122	-0.007	0.161
Item 13	0.165	0.234	0.209	0.152	0.066	0.743	0.002	0.005	0.056
Item 15	0.232	0.098	0.119	0.180	0.216	0.655	0.015	0.070	0.187
Item 8	0.134	0.159	0.055	0.004	0.033	0.035	0.916	0.087	-0.033
Item 9	0.007	0.129	0.090	-0.028	0.079	0.046	0.908	0.122	-0.045
Item 7	0.163	0.171	0.020	-0.011	0.015	0.020	0.858	0.121	0.003
Item 35	0.175	0.079	-0.001	0.057	0.014	0.042	0.038	0.868	0.114
Item 34	0.041	0.184	0.049	0.006	0.108	0.004	0.206	0.804	0.047
Item 36	0.165	0.194	0.068	0.163	-0.038	-0.004	0.116	0.792	-0.094
Item 29	0.049	0.075	0.250	0.015	0.236	0.003	-0.108	0.129	0.743
Item 30	0.003	-0.002	0.111	-0.003	0.337	0.349	0.021	-0.058	0.709
Item 28	-0.051	0.161	0.176	0.023	0.504	0.137	-0.004	-0.014	0.575

Items 19, 20, 21, 22, 23, and 24 loaded on the fourth component and concern using social media to express oneself and receive validation or recognition from others online. I therefore categorised this subscale as social recognition and self-expression. Items 16, 17, and 18, which load on the fifth component, were categorised as the entertainment subscale since they focused on using social media for entertainment purposes. Items 13, 14, and 15, which loaded on the sixth component, were categorised as the following and monitoring subscale as they focus on using social media to monitor others' lives. It is worth noting that Item 21 (*checking whether others like my posts*) loaded on both component four and component six, but it loaded slightly more highly on component six and related more closely to receiving validation from others online so formed part of the social recognition and self-expression subscale.

Items 7, 8, and 9 loaded on the seventh component. These items were categorised as the academic purposes subscale as they focus on using social media for academic purposes. Items 34, 35, and 36 loaded on the eighth component. These items were categorised as the professional advancement subscale as they concern using social media to maximise professional development. The last three items, Items 28, 29, and 30, loaded on the ninth component. These items are concerned with using social media to escape from problems or reality; therefore I categorised this subscale as escapism. Ultimately, the structure obtained through the principal component analysis was applied in the analysis of the data in this study, as this differed slightly from the subscales representing different motives in the original scales.

Digital Flourishing

This principal component analysis was conducted to assess how many distinct components were present in the Digital Flourishing Scale (Janicke-Bowles et al., 2023) in the sample. The most important consideration informing the number of components for extraction was that the scale was adapted from Janicke-Bowles et al.'s (2023) Digital Flourishing Scale which has five subscales: authentic self-representation/disclosure, social comparison, civil discourse, connectedness, and self-control. So, I expected that five distinct components would be extracted from this analysis.

All correlations between the items were above 0.3 and below 0.9. Multicollinearity was unlikely as none of the regressions in the *R*-matrix reported a *p*-value of 0 (Fields, 2013). For sampling adequacy, the Kaiser-Mayer-Olkin (KMO) index was 0.84, exceeding the recommended value of 0.6 (Kaiser, 1970). Additionally, for data reduction the Bartlett's Test

of Sphericity reached statistical significance ($\chi^2 = 2263.95, p < .001$) (Bartlett, 1954). All this indicates that my data was suitable for principal component analysis. As is evident in Appendix K.5, all items reported commonalities above 0.40 except for Item 21, so I was confident that they would all load onto the components except Item 21.

As per the Eigenvalues greater-than-one rule, five components were initially indicated as evident in Table 9. Together these accounted for 60.73% of the total variance, where the first component accounted for 25.72% of the variance, the second component accounted for 12.75% of the variance, the third component accounted for 10.59% of the variance, the fourth component accounted for 6.74% of the variance, and the fifth component accounted for 4.93% of the variance. The Eigenvalues, total variance explained, and the scree plot falling after five points (see Appendix K.5) support the extraction of five factors.

Table 9

*Eigenvalues and total variance explained for
Digital Flourishing Scale*

Components	Initial Eigenvalues	
	Total	% of Variance
1	6.430	25.720
2	3.187	12.748
3	2.648	10.593
4	1.685	6.739
5	1.233	4.932

Table 10 presents the rotated component pattern for the five components that were identified from the analysis. Based on the 0.40 cut-off, it is evident that Items 4, 9, 14, 19, and 24 loaded onto the first component. These items concerned users' ability to be their authentic or true self in online spaces; thus I categorised this subscale as authentic self-disclosure. Items 3, 8, 13, 18, and 23 loaded onto the second component. These items focus on users' ability to compare themselves in a positive light to those they deem better than themselves online, hence this scale was categorised as positive social comparison.

Items 5, 10, 15, 20, and 25, which loaded onto the third component, were categorised as the self-control subscale because they are centred on users' ability to control their use of social media, for example, stopping and starting when they desire to do so.

Table 10*Rotated component matrix for Digital Flourishing Scale*

	Comp. 1	Comp. 2	Comp. 3	Comp. 4	Comp. 5
Item 19	0.878	0.007	0.125	0.052	0.121
Item 9	0.805	0.002	0.122	0.083	0.195
Item 14	0.781	0.151	0.042	-0.005	-0.001
Item 24	0.749	0.073	0.055	0.281	0.144
Item 4	0.670	-0.040	-0.074	0.031	0.338
Item 18	0.093	0.829	0.002	0.062	0.100
Item 8	0.114	0.796	-0.036	0.011	0.047
Item 13	0.061	0.761	-0.006	0.030	0.222
Item 23	0.005	0.692	0.110	0.264	0.258
Item 3	-0.094	0.641	-0.035	0.085	0.230
Item 25	0.104	0.030	0.804	0.023	0.143
Item 10	-0.037	-0.131	0.791	0.129	0.204
Item 5	0.061	-0.109	0.746	0.226	0.138
Item 20	0.148	0.096	0.696	0.136	-0.196
Item 15	-0.002	0.125	0.593	0.217	-0.246
Item 17	0.107	0.063	0.165	0.737	-0.035
Item 2	0.039	0.000	-0.017	0.685	0.190
Item 7	0.158	0.067	0.226	0.667	0.233
Item 12	-0.070	0.061	0.282	0.664	0.206
Item 22	0.093	0.147	0.124	0.597	0.046
Item 1	0.137	0.223	-0.114	0.244	0.741
Item 6	0.247	0.250	-0.019	0.200	0.736
Item 16	0.231	0.228	0.099	0.128	0.663
Item 11	0.179	0.339	0.216	0.110	0.640
Item 21	0.220	0.251	0.015	0.371	0.379

Items 2, 7, 12, 17, and 22, which loaded onto the fourth component, were categorised as the civil participation subscale as the items concern users' ability to engage with others online in a civil manner. As seen in Table 10 items 1, 6, 11, and 16 loaded onto the fifth component. These items concern user's ability to connect and feel connected to others on social media thus they were categorised as the connectedness subscale

It is worth noting that Item 21, which concerned users' ability to use social media as a platform to garner advice, did not load onto any of the components so it was removed from the connectedness subscale in this analysis. In this way, the structure obtained in the sample matched closely with the original structure established by Janicke-Bowles et al. (2023), except for Item 21. Ultimately, the structure obtained through the principal component analysis was applied in the analysis of the data in this study.

Internal Consistency Reliability

As is evident in Table 11, the Digital Flourishing Scale total score and all of the subscales had high internal consistency reliability except for the civil participation subscale, which had moderate to high internal consistency reliability (Murphy & Davidshofer, 2005). Two of the three subscales of the adapted active and passive use scale, passive use and posting, shown in Table 7 had moderate internal consistency reliability, while the third subscale, communication, had low to moderate internal consistency reliability (Murphy & Davidshofer, 2005).

The rational use and access subscale as illustrated in Table 12 had moderate to high internal consistency reliability and the emotional use subscale had moderate reliability, with Cronbach's Alpha coefficients above 0.7 for both subscales (Murphy & Davidshofer, 2005).

As shown in Table 13 the Perceived Social Media Literacy total score and two subscales, technical competency and informational awareness, also had high internal consistency reliability and a third subscale, social relationships, had moderate to high internal consistency reliability (Murphy & Davidshofer, 2005). However, the privacy algorithm awareness and control subscales had very low internal consistency reliability with Cronbach's Alpha coefficients below 0.6 (Murphy & Davidshofer, 2005). These scales were inconsistent in their measurement and so they were not looked at further in this study.

Table 11

Reliability for the Digital Flourishing Scale and subscales

Scale	Cronbach's α	No. of items
Connectedness	0.834	4
Civil participation	0.756	5
Positive social comparison	0.838	5
Authentic self-disclosure	0.864	5
Self-control	0.805	5
Digital flourishing total score	0.871	25

Table 12*Reliability for the Social Media Use subscales*

Scale	Cronbach's α	No. of items
Posting (active use)	0.719	3
Communication (active use)	0.679	5
Passive use	0.780	5
Rational use and access	0.777	5
Emotional use	0.725	4

Table 13*Reliability for the Perceived Social Media Literacy Scale and subscales*

Scale	Cronbach's α	No. of items
Technical competency	0.866	5
Social relationships	0.793	3
Informational awareness	0.838	3
Privacy algorithm awareness	0.529	3
Control	0.597	3
Perceived social media literacy total	0.820	17

All nine subscales of the Motives for Social Media Use Scale as shown in Table 14 had high to very high internal consistency reliability with Cronbach's Alpha coefficients above 0.8 (Murphy & Davidshofer, 2005).

Table 14*Reliability for the social media use motives subscales*

Scale	Cronbach's α	No. of items
Escapism	0.802	3
Professional advancement	0.838	3
Information and connectedness	0.814	4
Companionship and social connectedness	0.886	5
Dating and new friendships	0.945	6
Academic purposes	0.921	3
Following and monitoring others	0.820	3
Entertainment	0.902	3
Social recognition and self-expression	0.863	6

Descriptive Statistics

Social Media Use

As is evident in Figure 8 in Appendix L, participants indicated that they belonged to between 1 and 14 social media sites. On average, participants belonged to 5.34 sites with a standard deviation of 2.02. Five participants (2.4%) indicated that they belonged to one social media site, 9 participants (4.3%) belonged to two social media sites, 22 participants (10.6%) belonged to three social media sites, 29 participants (14.0%) belonged to four social media sites, 52 participants (25.1%) belonged to five social media sites, 40 participants (19.3%) belonged to six social media sites, 23 participants (11.1%) belonged to seven social media sites, 14 participants (6.8%) belonged to eight social media sites, 6 participants (2.9%) belonged to nine social media sites, 6 participants (2.9%) belonged to ten social media sites, and 1 participant (0.5%) belonged to fourteen social media sites. Overall, there were 142 participants (68.6%) who belonged to five or more social media sites in the sample. 38 participants (18.4%) had never permanently deleted a social media site while 169 participants (81.6%) had permanently deleted or blocked at least one social media site at some point in time.

Seven participants (3.4%) indicated that they spent less than one hour per day on social media, 25 participants (12.1%) spent one to two hours, 43 participants (20.8%) spent two to three hours, 46 participants (22.2%) spent three to four hours, 32 participants (15.5%) spent four to five hours, 22 participants (10.6%) spent five to six hours, 11 participants (5.3%) spent six to seven hours, 11 participants (5.3%) spent seven to eight hours, 1 participant (0.5%) spent eight to nine hours, 5 participants (2.4%) spent nine to ten hours, 1 participant (0.5%) spent ten to eleven hours, 2 participants (1.0%) spent more than eleven hours, and 1 participant (0.5%) did not give the number of hours they spent on social media per day. Overall, as is evident in Figure 9 in Appendix L, 153 participants (73.9%) of the sample spent less than five hours per day on social media, while 53 participants (25.6%) spent more than five hours per day on social media.

WhatsApp, YouTube, and Instagram were reported as the most used social media sites in the sample see Table 15 with entertainment (41%) as well as information and connectedness (42.2%) being two of the most prevalent motives for social media use in the sample. A full breakdown of the social media sites participants reported using and how many participants belonged to each site is given in Table 15.

Table 15*Social media sites that participants belonged to*

Site	Freq.	%	Site	Freq.	%
WhatsApp	206	99.5%	Snapchat	28	13.5%
YouTube	184	88.9%	Tumblr	28	13.5%
Instagram	156	75.4%	Signal	21	10.1%
Pinterest	131	63.3%	Reddit	3	1.4%
TikTok	122	58.9%	BeReal	3	1.4%
Facebook	115	55.6%	Threads	2	1.0%
X (Twitter)	77	37.2%	WeChat	1	0.5%
Telegram	53	25.6%	Viber	1	0.5%
LinkedIn	50	24.2%			

Description of the data

As shown in Table 16 participants reported a mean of 15.55 (SD = 5.56) for the connectedness dimension of digital flourishing, 25.16 (SD = 5.74) for civil participation and 20.48 (SD = 7.10) for positive social comparison. They additionally reported a mean of 19.19 (SD = 7.58) for authentic self-disclosure, 24.54 (SD = 6.60) for self-control and 108.63 (SD = 21.85) for the digital flourishing total score. As seen in Table 16, the reported skewness coefficients for all of these variables fell between -1 and 1 whilst all of their kurtosis estimates fell between -3 and 3. The histograms (see Appendix M) suggested that the data followed a relatively normal distribution, and the sample size ($n = 207$) supported an assumption of normality using Central Limit Theorem (sample size greater than 30), therefore the variables could be treated as normally distributed in the sample.

Table 16 indicates that this sample had the highest average score for civil participation and the lowest average score for connectedness. The average total digital flourishing score was very close to the median, strongly supporting the interpretation that digital flourishing was normally distributed in the sample.

Table 16*Descriptive statistics for digital flourishing*

Variable	N	Miss.	Mean	Median	Std. Dev.	Skewness	Kurtosis	Min.	Max.
Connectedness	207	0	15.55	16.00	5.563	-0.029	-0.731	4	28
Civil participation	207	0	25.16	25.00	5.735	-0.781	0.789	5	35
Positive social comparison	207	0	20.48	21.00	7.104	-0.372	-0.492	5	35
Authentic self-disclosure	207	0	19.19	19.00	7.579	0.046	-0.957	5	35
Self-control	207	0	24.54	25.00	6.597	-0.573	-0.094	5	35
DF total	207	0	104.92	106.00	20.813	-0.511	0.780	27	155

Key: n = number of participants; Miss. = missing responses; Std. Dev. = standard deviation; Min. = minimum; Max. = maximum; DF = digital flourishing

A mean of 3.88 (SD = 2.49) was reported for posting, 9.14 (SD = 3.85) for online communication, 14.34 (SD = 3.68) for passive use, 16.67 (SD = 4.02) for rational use and access, and 12.16 (SD = 3.51) for emotional use (see Table 17). The skewness coefficients for all of these variables fell between -1 and 1 whilst all of their kurtosis estimates fell between -3 and 3. The histograms (see Appendix M) suggested that the data followed a relatively normal distribution, and the sample size (n = 207) supported an assumption of normality using Central Limit Theorem (sample size greater than 30), therefore the variables could be treated as normally distributed in the sample.

As seen in Table 17, this sample had a relatively high average score for passive use and relatively lower average scores for communication and posting (active use of social media). The average score for rational use and access was also relatively higher than the average score for emotional use.

Table 17*Descriptive statistics for passive, active, rational, and emotional social media use*

Variable	N	Miss.	Mean	Median	Std. Dev.	Skewness	Kurtosis	Min.	Max.
Posting	207	0	3.88	4.00	2.480	0.645	0.598	0	12
Communication	207	0	9.14	9.00	3.848	0.133	-0.361	0	19
Passive use	207	0	14.34	15.00	3.677	-0.852	0.796	1	20
Rational use and access	207	0	16.67	17.00	4.019	-0.581	0.350	5	25
Emotional use	207	0	12.16	12.00	3.510	-0.315	-0.367	4	20

Key: n = number of participants; Miss. = missing responses; Std. Dev. = standard deviation; Min. = minimum; Max. = maximum

The sample reported a mean for technical competency of 22.78 (SD = 2.84), 10.14 (SD = 2.95) for social relationships, 11.40 (SD = 2.65) for informational awareness, and 67.06 (SD = 8.48) for the perceived social media literacy total score. Table 18 illustrates that all these variables except for technical competency reported skewness coefficients which fell between -1 and 1 whilst all of their kurtosis estimates fell between -3 and 3. The histograms (see Appendix M) suggested that the data followed a relatively normal distribution, and the sample size ($n = 207$) supported an assumption of normality using Central Limit Theorem (sample size greater than 30), therefore these three variables could be treated as normally distributed in the sample. The skewness coefficient for technical competency was greater than -1 and the kurtosis estimate was greater than 3, thus this variable was skewed in nature (confirmed by the histogram in Appendix M). Attempts to transform the variable to normalise the distribution were not successful, thus this variable was treated as not suitable for parametric analysis.

Table 18 indicates that this sample had a relatively high average score for technical competency and relatively lower average scores for social relationships and informational awareness. This sample's mean for the total score indicates that they had a moderate levels of perceived social media literacy. A mean of 12.88 (SD = 5.39) for the escapism motive was reported, 13.06 (SD = 5.35) for professional advancement, 21.53 (SD = 5.29) for information and connectedness (original), and 490.11 (SD = 200.8) for information and connectedness (transformed). A mean of 19.37 (SD = 8.44) was reported for companionship and social connectedness, 18.29 (SD = 10.98) for dating and new friendships, 14.93 (SD = 5.20) for academic purposes, 11.79 (SD = 5.23) for following and monitoring others, and 18.07 (SD = 8.67) for social recognition and self-expression.

Table 18

Descriptive statistics for perceived social media literacy

Variable	N	Miss.	Mean	Median	Std. Dev.	Skewness	Kurtosis	Min.	Max.
Technical competency	207	0	22.78	24.00	2.839	-1.821	6.477	5	25
Social relationships	207	0	10.14	10.00	2.949	-0.019	-0.573	3	15
Informational awareness	207	0	11.40	12.00	2.653	-0.561	0.062	3	15
PSL total	207	0	67.06	67.00	8.484	-0.315	-0.242	43	85

Key: n = number of participants; Miss. = missing responses; Std. Dev. = standard deviation; Min. = minimum; Max. = maximum; PSL = perceived social media literacy

Entertainment (original) had a reported mean of 16.75 (SD = 4.40), while the mean for entertainment (transformed) was 299.87 (SD = 129.99). Table 19 illustrates that all motives except for two had skewness coefficients which fell between -1 and 1 whilst all of their kurtosis estimates fell between -3 and 3. The histograms (see Appendix M) suggested that the data followed a relatively normal distribution, and the sample size ($n = 207$) supported an assumption of normality using Central Limit Theorem (sample size greater than 30), therefore all of the variables except for the two could be treated as normally distributed in the sample.

The skewness coefficients for information and connectedness as well as entertainment were greater than -1 and their kurtosis estimates were greater than 3, thus these variables were skewed in nature (confirmed by the histograms in Appendix M). Both variables were successfully transformed using a square transformation that normalised the distribution sufficiently for them to be used in parametric analyses (see histograms in Appendix M).

Table 19 indicates that the sample had relatively high average scores for information and connectedness, entertainment, and academic purposes and relatively low average scores for companionship and social connectedness, dating and new friendships, social recognition and self-expression, and following and monitoring others.

Table 19*Descriptive statistics for motives for using social media*

Variable	N	Miss.	Mean	Median	Std. Dev.	Skewness	Kurtosis	Min.	Max.
Escapism	207	0	12.88	13.00	5.387	-0.228	-0.995	3	21
Professional advancement	207	0	13.06	14.00	5.351	-0.180	-1.049	3	21
Information and connectedness (original)	207	0	21.50	22.00	5.301	-1.113	1.278	4	28
Information and connectedness (transformed)	207	0	490.11	484.00	200.89	-0.371	-0.587	16	784
Companionship and social connectedness	207	0	19.38	19.00	8.421	0.029	-0.942	5	35
Dating and new friendships	207	0	18.29	15.00	10.975	0.612	-0.810	6	42
Academic purposes	207	0	14.93	15.00	5.203	-0.610	-0.546	3	21
Following and monitoring others	206	1	11.79	12.00	5.227	-0.060	-0.997	3	21
Entertainment (original)	206	1	16.75	18.00	4.395	-1.007	0.424	3	21
Entertainment (transformed)	206	1	299.87	324.00	129.99	-0.474	-0.982	9	441
Social recognition and self-expression	207	0	18.07	16.00	8.651	0.563	-0.525	6	42

Key: n = number of participants; Miss. = missing responses; Std. Dev. = standard deviation; Min. = minimum; Max. = maximum

Correlations

To answer the second research question regarding the nature of the relationships between digital flourishing and types of social media use, perceived social media literacy, and motives for using social media, a series of Pearson's bivariate correlation coefficients were run (Field, 2013).

Digital flourishing and Social Media Use

Table 20 shows the relationships between the dimensions of digital flourishing and the different subscales for passive and active use of social media as well as rational and emotional use of social media.

Table 20*Correlations between digital flourishing and types of social media use (N = 207)*

		Conn.	Civ. Part.	Pos. Soc. Comp.	Auth. SD	SC	DF total
Posting	r	.359**	.075	.172*	.197**	.009	.250**
	p-val.	<.001	.285	.013	.004	.902	<.001
Communication	r	.337**	.142*	.102	.296**	-.071	.249**
	p-val.	<.001	.041	.145	<.001	.309	<.001
Passive use	r	.308**	.044	.261**	.113	-.067	.203**
	p-val.	<.001	.533	<.001	.105	.338	.003
Rational use and access	r	.551**	.270**	.377**	.196**	-.099	.390**
	p-val.	<.001	<.001	<.001	.005	.155	<.001
Emotional use	r	.572**	.155*	.382**	.198**	-.042	.385**
	p-val.	<.001	.025	<.001	.004	.550	<.001

Key: * = $p < .05$; ** = $p < .01$; Conn. = connectedness; Civ. Part. = civil participation; Pos. Soc. Comp. = positive social comparison; Auth. SD = authentic self-disclosure; SC = self-control; DF total = digital flourishing total score; p-val. = p-value

Posting online had a significant, moderate, positive correlation with connectedness ($r_{(205)} = .36, p < .001$) and significant, weak, positive correlations with positive social comparison ($r_{(205)} = .17, p = .013$), authentic self-disclosure ($r_{(205)} = .20, p = .004$), and the total digital flourishing score ($r_{(205)} = .25, p < .001$). Online communication had a significant, moderate, positive correlation with connectedness ($r_{(205)} = .34, p < .001$) and significant, weak, positive relationships with civil participation ($r_{(205)} = .14, p = .041$), authentic self-disclosure ($r_{(205)} = .30, p < .001$), and the total digital flourishing score ($r_{(205)} = .25, p < .001$).

Passive use had a significant, moderate, positive correlation with connectedness ($r_{(205)} = .31, p < .001$), and significant, weak, positive correlations with positive social comparison ($r_{(205)} = .26, p < .001$) and the total digital flourishing score ($r_{(205)} = .20, p < .001$).

Rational use and access had significant, moderate, positive correlations with connectedness ($r_{(205)} = .55, p < .001$), positive social comparison ($r_{(205)} = .27, p < .001$), and the total digital flourishing score ($r_{(205)} = .39, p < .001$) and significant, weak, positive correlations with civil participation ($r_{(205)} = .27, p < .001$) and authentic self-disclosure ($r_{(205)} = .20, p = .005$). Significant, moderate, positive correlations were found between emotional use and connectedness ($r_{(205)} = .57, p < .001$), positive social comparison ($r_{(205)} = .38, p < .001$) and the total digital flourishing score ($r_{(205)} = .39, p < .001$). Significant, weak, positive relationships

were found between emotional use and civil participation ($r_{(205)} = .16, p = .025$) as well as authentic self-disclosure ($r_{(205)} = .20, p = .004$).

Perceived Social Media Literacy

Table 21 shows the relationships between the dimensions of digital flourishing and the different subscales and total score for perceived social media literacy. The technical competency subscale for perceived social media literacy was skewed in the sample so Spearman's rank-order correlation coefficients were calculated for all the correlations that included this variable. The remaining correlations were calculated using Pearson's bivariate correlation coefficients.

Technical competency had significant, weak, positive correlations with three dimensions of digital flourishing, connectedness ($r_{(205)} = .18, p = .008$), civil participation ($r_{(205)} = .28, p < .001$), and self-control ($r_{(205)} = .17, p = .016$), as well as the total digital flourishing score ($r_{(205)} = .28, p < .001$). Social relationships had a significant, weak, positive correlation with connectedness ($r_{(205)} = .26, p < .001$), as well as significant, moderate, positive correlations with civil participation ($r_{(205)} = .48, p < .001$), self-control ($r_{(205)} = .33, p < .001$), and the total digital flourishing score ($r_{(205)} = .39, p < .001$). Informational awareness had significant, weak, positive correlations with connectedness ($r_{(205)} = .20, p = .004$), civil participation ($r_{(205)} = .26, p < .001$), self-control ($r_{(205)} = .25, p < .001$), and the total digital flourishing score ($r_{(205)} = .21, p = .002$).

Table 21

Correlations between digital flourishing and perceived social media literacy (N = 207)

		Conn.	Civ. Part.	Pos. Soc. Comp.	Auth. SD	SC	DF total
Technical competency[^]	r	.183**	.283**	.110	.136	.167*	.281**
	p-val.	.008	<.001	.113	.050	.016	<.001
Social relationships	r	.260**	.457**	.126	.119	.330**	.386**
	p-val.	<.001	<.001	.071	.088	<.001	<.001
Informational awareness	r	.202**	.260**	-.042	.063	.245**	.212**
	p-val.	.004	<.001	.544	.365	<.001	.002
PSL total	r	.284**	.398**	.064	.149*	.269**	.347**
	p-val.	<.001	<.001	.361	.032	<.001	<.001

Key: * = $p < .05$; ** = $p < .01$; [^] = Spearman's rank-order correlation coefficients

Conn. = connectedness; Civ. Part. = civil participation; Pos. Soc. Comp. = positive social comparison; Auth. SD = authentic self-disclosure; SC = self-control; DF total = digital flourishing total score; PSL = perceived social media literacy; p-val. = p-value

The total perceived social media literacy score had significant, weak, positive correlations with connectedness ($r_{(205)} = .28, p < .001$), authentic self-disclosure ($r_{(205)} = .15, p = .032$), and self-control ($r_{(205)} = .27, p < .001$); it was also significantly, moderately, positively correlated with civil participation ($r_{(205)} = .40, p < .001$) and the total digital flourishing score ($r_{(205)} = .35, p < .001$).

Motives for Social Media Use

Table 22 shows the relationships between the dimensions of digital flourishing and the different motives for social media use. For the entertainment and information and connectedness motives, the transformed variables were used in the Pearson's bivariate correlation coefficients.

Dating and new friendships had significant, moderate, positive correlations with connectedness ($r_{(205)} = .41, p < .001$), positive social comparison ($r_{(205)} = .30, p < .001$), and the total digital flourishing score ($r_{(205)} = .34, p < .001$), in addition to a significant, weak, positive correlation with civil participation ($r_{(205)} = .20, p = .003$). Academic purposes had significant, weak, positive correlations with connectedness ($r_{(205)} = .19, p = .006$), civil participation ($r_{(205)} = .20, p = .004$), and the total digital flourishing score ($r_{(205)} = .20, p = .003$). Following and monitoring others had significant, moderate, positive correlations with connectedness ($r_{(205)} = .38, p < .001$) and positive social comparison ($r_{(205)} = .32, p < .001$); a significant, weak, positive correlation with the total digital flourishing score ($r_{(205)} = .21, p = .003$); and a significant, weak, negative correlation with self-control ($r_{(205)} = -.17, p = .015$).

Civil participation ($r_{(205)} = .22, p < .001$) and authentic self-disclosure ($r_{(205)} = .26, p < .001$) had significant, weak, positive correlations with social recognition and self-expression; while positive social comparison ($r_{(205)} = .31, p < .001$), connectedness ($r_{(205)} = .51, p < .001$), and the total digital flourishing score ($r_{(205)} = .41, p < .001$) had significant, moderate, positive correlations with social recognition and self-expression.

Professional advancement had significant, weak, positive correlations with connectedness ($r_{(205)} = .20, p = .004$), civil participation ($r_{(205)} = .16, p = .018$), positive social comparison ($r_{(205)} = .28, p < .001$), as well as total digital flourishing score ($r_{(205)} = .28, p < .001$). Companionship and social connectedness had significant, weak, positive correlations with civil participation ($r_{(205)} = .16, p = .019$) and authentic self-disclosure ($r_{(205)} = .20, p = .005$), in addition to significant, moderate, positive correlations with connectedness ($r_{(205)} = .50, p < .001$), positive social comparison ($r_{(205)} = .40, p < .001$), and the total digital flourishing score ($r_{(205)} = .37, p < .001$).

Table 22

Correlations between digital flourishing and motives for social media use (N = 207)

		Conn.	Civ. Part.	Pos. Soc. Comp.	Auth. SD	SC	DF total
Escapism	r	.089	-.093	.196**	-.055	-.248**	-.034
	p-val.	.201	.181	.005	.431	<.001	.631
Professional advancement	r	.199**	.164*	.277**	.129	.117	.277**
	p-val.	.004	.018	<.001	.064	.094	<.001
Information/connectedness	r	.427**	.211**	.308**	.198**	.150*	.397**
	p-val.	<.001	.002	<.001	.004	.030	<.001
Companion-ship/social connectedness	r	.501**	.163*	.400**	.196**	-.058	.368**
	p-val.	<.001	.019	<.001	.005	.407	<.001
Dating/new friendships	r	.408**	.203**	.303**	.115	.102	.343**
	p-val.	<.001	.003	<.001	.099	.142	<.001
Academic purposes	r	.192**	.201**	.081	.090	.114	.203**
	p-val.	.006	.004	.245	.197	.101	.003
Following/monitoring others	r	.377**	.035	.318**	.108	-.170*	.205**
	p-val.	<.001	.618	<.001	.122	.015	.003
Entertainment	r	.126	.020	.286**	-.092	-.047	.089
	p-val.	.071	.772	<.001	.188	.505	.203
Social recognition/self-expression	r	.506**	.224**	.314**	.256**	.040	.410**
	p-val.	<.001	.001	<.001	<.001	.586	<.001

Key: * = $p < .05$; ** = $p < .01$

Conn. = connectedness; Civ. Part. = civil participation; Pos. Soc. Comp. = positive social comparison; Auth. SD = authentic self-disclosure; SC = self-control; DF total = digital flourishing total score; p-val. = p-value

Entertainment had a significant, weak, positive correlation with positive social comparison ($r_{(205)} = .29, p < .001$). Information and connectedness had significant, moderate, positive correlations with connectedness ($r_{(205)} = .43, p < .001$), positive social comparison ($r_{(205)} = .31, p < .001$), and the total digital flourishing score ($r_{(205)} = .40, p < .001$), in addition

to significant, weak, positive correlations with civil participation ($r_{(205)} = .21, p = .002$), authentic self-disclosure ($r_{(205)} = .20, p = .004$), and self-control ($r_{(205)} = .15, p = .030$).

Multiple Regressions

To answer the third research question re whether types of social media use, perceived social media literacy, and motives for social media use predicted digital flourishing in the sample, two sets of multiple regression models were calculated (Field, 2013).

The first set of multiple regression models examined whether posting (active use), communication (active use), passive use, rational use and access, emotional use, and overall perceived social media literacy predicted digital flourishing, while the second set of multiple regression models examined which of the different motives for social media use predicted digital flourishing.

Types of Social Media Use and Perceived Social Media Literacy as Predictors of Digital Flourishing

Digital flourishing: Connectedness

The first multiple regression model was calculated to identify whether perceived social media literacy, posting (active use), communication (active use), passive use, rational use and access, and emotional use predicted connectedness in the sample. The results are presented in Table 23 and Table 24. It is worth noting that the perceived social media literacy subscales could not be included in the regression models as issues of multicollinearity arose when they were added to the model, so only the total score for perceived social media literacy was used.

The regression model shown in Table 23 was significant ($F = 25.96; p < .001$). The coefficient of determination ($r^2 = 0.44$) indicated that approximately 44% of the variation in connectedness was explained by the variation in the predictor variables. The Durbin-Watson statistic displayed in Table 23 fell within the acceptable range of 1.5 and 2.5, indicating that there was a lack of auto-correlation and independence (Turner, 2020).

Table 23

Regression model summary

	N	R	R ²	Adjusted R ²	Std. Error	F	Sig.	DW
Model	207	.662	.438	.421	4.233	25.958	<.001	1.762

Key: Std. = standard; Sig. = p-value; DW = Durbin-Watson

The sample size, scale of measure, normality, linearity, homoscedasticity, and outlier assumptions were met, as discussed in Chapter 3. As shown in Table 24, the assumption re no multicollinearity was met as the condition index was below 30, the VIF values were below 10, and the tolerance values were greater than 0.2 (Belsley et al., 1980; Field, 2013). For the model, only rational use and access ($b = 0.27$; $p = .017$), emotional use ($b = 0.59$; $p < .001$) and the total perceived social media literacy score ($b = 0.10$; $p = .005$) were significant predictors of connectedness, as shown in Table 24.

Table 24

Regression model coefficients and collinearity diagnostics

	B	Std. Error	Beta	t	Sig.	LCI	UCI	Tol.	VIF	CI
Constant	-5.300	2.522		-2.101	.037	-10.273	-0.327			1.000
Posting	0.255	0.132	0.114	1.932	.055	-0.005	0.516	0.811	1.233	5.419
Communication	0.134	0.088	0.092	1.517	.131	-0.040	0.307	0.757	1.322	7.915
Passive use	-0.004	0.099	-0.003	-0.044	.965	-0.200	0.191	0.657	1.523	11.086
Rational use and access	0.274	0.114	0.198	2.412	.017	0.050	0.498	0.418	2.395	12.829
Emotional use	0.590	0.110	0.372	5.379	<.001	0.373	0.806	0.587	1.702	19.425
PSL total	0.104	0.037	0.158	2.820	.005	0.031	0.176	0.893	1.119	29.545

Key: Std. = standard; Sig. = p-value; LCI = lower confidence interval; UCI = upper confidence interval; Tol. = tolerance; VIF = variance inflation factor; CI = confidence interval; PSL = perceived social media literacy

Digital Flourishing: Civil Participation

The second multiple regression model was calculated to identify whether perceived social media literacy, posting (active use), communication (active use), passive use, rational use and access, and emotional use predicted civil participation in the sample. The results are presented in Table 25 and Table 26. The scales of measure, normality, linearity, homoscedasticity, and outlier assumptions were met, as discussed in Chapter 3.

Table 25

Regression model summary

	N	R	R²	Adjusted R²	Std. Error	F	Sig.	DW
Model	207	.465	.217	.193	5.151	9.213	<.001	1.931

Key: Std. = standard; Sig. = p-value; DW = Durbin-Watson

The regression model in Table 25 was significant ($F = 9.21$, $p < .001$) and the coefficient of determination ($r^2 = 0.22$) indicated that approximately 22% of the variation in civil participation was explained by the variation in the predictor variables. The Durbin-Watson statistic displayed in Table 25 fell within the acceptable range of 1.5 and 2.5, indicating that there was a lack of auto-correlation and independence (Turner, 2020). As shown in Table 26, the assumption re no multicollinearity was met as the condition index was below 30, the VIF values were below 10, and the tolerance values were greater than 0.2 (Belsley et al., 1980; Field, 2013).

Passive use ($b = -0.32$; $p = 0.009$), rational use and access ($b = 0.42$; $p = .003$), and the total perceived social media literacy score ($b = 0.25$; $p < .001$) were the only significant predictors of civil participation in this model, as shown in Table 26.

Table 26

Regression model coefficients and collinearity diagnostics

	B	Std. Error	Beta	t	Sig.	LCI	UCI	Tol.	VIF	CI
Constant	6.161	3.069		2.008	.046	0.110	12.213			1.000
Posting	-0.077	0.161	-0.033	-0.480	.632	-0.394	0.240	0.811	1.233	5.419
Communication	0.025	0.107	0.017	0.233	.816	-0.186	0.236	0.757	1.322	7.915
Passive use	-0.318	0.120	-0.204	-2.640	.009	-0.556	-0.081	0.657	1.523	11.086
Rational use and access	0.417	0.138	0.292	3.017	.003	0.144	0.689	0.418	2.395	12.829
Emotional use	-0.002	0.133	-0.001	-0.014	.989	-0.265	0.261	0.587	1.702	19.425
PSL total	0.249	0.045	0.369	5.567	<.001	0.161	0.337	0.893	1.119	29.545

Key: Std. = standard; Sig. = p-value; LCI = lower confidence interval; UCI = upper confidence interval; Tol. = tolerance; VIF = variance inflation factor; CI = confidence interval; PSL = perceived social media literacy

Digital flourishing: Positive Social Comparison

The third multiple regression model was calculated to identify whether perceived social media literacy, posting (active use), communication (active use), passive use, rational use and access, and emotional use predicted positive social comparison in the sample. The results are presented in Table 27 and Table 28

Table 27*Regression model summary*

	N	R	R ²	Adjusted R ²	Std. Error	F	Sig.	DW
Model	207	.436	.190	.166	6.489	7.816	<.001	2.076

Key: Std. = standard; Sig. = p-value; DW = Durbin-Watson

Table 28*Regression model coefficients and collinearity diagnostics*

	B	Std. Error	Beta	t	Sig.	LCI	UCI	Tol.	VIF	CI
Constant	7.903	3.866		2.044	.042	0.280	15.525			1.000
Posting	0.054	0.202	0.019	0.266	.790	-0.345	0.453	0.811	1.233	5.419
Communication	-0.146	0.135	-0.079	-1.082	.281	-0.412	0.120	0.757	1.322	7.915
Passive use	0.229	0.152	0.119	1.511	.132	-0.070	0.529	0.657	1.523	11.086
Rational use and access	0.331	0.174	0.187	1.902	.059	-0.012	0.674	0.418	2.395	12.829
Emotional use	0.500	0.168	0.247	2.977	.003	0.169	0.832	0.587	1.702	19.425
PSL total	-0.018	0.056	-0.021	-0.316	.753	-0.129	0.093	0.893	1.119	29.545

Key: Std. = standard; Sig. = p-value; LCI = lower confidence interval; UCI = upper confidence interval; Tol. = tolerance; VIF = variance inflation factor; CI = confidence interval; PSL = perceived social media literacy

The regression model in Table 27 was significant ($F = 7.82$; $p < .001$) and the coefficient of determination ($r^2 = 0.19$) indicated that approximately 19% of the variation in positive social comparison was explained by the variation in the predictor variables. The Durbin-Watson statistic displayed in Table 27 fell within the acceptable range of 1.5 and 2.5, indicating that there was a lack of auto-correlation and independence (Turner, 2020).

The sample size, scale of measure, normality, linearity, homoscedasticity, and outlier assumptions were met, as discussed in Chapter 3. As shown in Table 28, the assumption re no multicollinearity was met as the condition index was below 30, the VIF values were below 10, and the tolerance values were greater than 0.2 (Belsley et al., 1980; Field, 2013). The model in Table 28 indicates that emotional use was the only variable that significantly predicted positive social comparison ($b = 0.50$; $p = .003$).

Digital flourishing: Authentic self-disclosure

The fourth multiple regression model was calculated to identify whether perceived social media literacy, posting (active use), communication (active use), passive use, rational use and access, and emotional use predicted authentic self-disclosure in the sample. The results are presented in Table 29 and Table 30.

The regression model in Table 29 was significant ($F = 4.42$; $p < .001$) and the coefficient of determination ($r^2 = 0.12$) indicated that approximately 12% of the variation in authentic self-disclosure was explained by the variation in the predictor variables. The Durbin-Watson statistic displayed in Table 29 fell within the acceptable range of 1.5 and 2.5, indicating that there was a lack of auto-correlation and independence (Turner, 2020). The sample size, scale of measure, normality, linearity, homoscedasticity, and outlier assumptions were met, as discussed in Chapter 3. As shown in 30 the assumption re no multicollinearity was met as the condition index was below 30, the VIF values were below 10, and the tolerance values were greater than 0.2 (Belsley et al., 1980; Field, 2013).

Table 29

Regression model summary

	N	R	R ²	Adjusted R ²	Std. Error	F	Sig.	DW
Model	207	.342	.117	.091	7.227	4.419	<.001	2.045

Key: Std. = standard; Sig. = p-value; DW = Durbin-Watson

Table 30

Regression model coefficients and collinearity diagnostics

	B	Std. Error	Beta	t	Sig.	LCI	UCI	Tol.	VIF	CI
Constant	7.508	4.305		1.744	.083	-0.982	15.998			1.000
Posting	0.263	0.225	0.086	1.166	.245	-0.182	0.708	0.811	1.233	5.419
Communication	0.470	0.150	0.239	3.126	.002	0.174	0.767	0.757	1.322	7.915
Passive use	-0.095	0.169	-0.046	-0.561	.575	-0.428	0.238	0.657	1.523	11.086
Rational use and access	-0.002	0.194	-0.001	-0.012	.990	-0.385	0.380	0.418	2.395	12.829
Emotional use	0.253	0.187	0.117	1.351	.178	-0.116	0.622	0.587	1.702	19.425
PSL total	0.070	0.063	0.078	1.112	.267	-0.054	0.194	0.893	1.119	29.545

Key: Std. = standard; Sig. = p-value; LCI = lower confidence interval; UCI = upper confidence interval; Tol. = tolerance; VIF = variance inflation factor; CI = confidence interval; PSL = perceived social media literacy

As shown in Table 30, in the model communication was the only variable that significantly predicted authentic self-disclosure ($b = 0.47$; $p = .002$).

Digital flourishing: Self-control

The fifth multiple regression model was calculated to identify whether perceived social media literacy, posting (active use), communication (active use), passive use, rational use and access, and emotional use predicted self-control in the sample. The results are presented in Table 31 and Table 32

The regression model in Table 31 was significant ($F = 4.43$; $p < .001$) and the coefficient of determination ($r^2 = 0.12$) indicated that approximately 12% of the variation in self-control was explained by the variation in the predictor variables. The Durbin-Watson statistic displayed in Table 31 fell within the acceptable range of 1.5 and 2.5, indicating that there was a lack of auto-correlation and independence (Turner, 2020).

The sample size, scale of measure, normality, linearity, homoscedasticity, and outlier assumptions were met, as discussed in Chapter 3.

Table 31

Regression model summary

	N	R	R ²	Adjusted R ²	Std. Error	F	Sig.	DW
Model	207	.343	.117	.091	6.290	4.432	<.001	1.928

Key: Std. = standard; Sig. = p-value; DW = Durbin-Watson

Table 32

Regression model coefficients and collinearity diagnostics

	B	Std. Error	Beta	t	Sig.	LCI	UCI	Tol.	VIF	CI
Constant	12.568	3.747		3.354	<.001	5.179	19.957			1.000
Posting	0.170	0.196	0.064	0.865	.388	-0.217	0.557	0.811	1.233	5.419
Communication	-0.174	0.131	-0.101	-1.328	.186	-0.432	0.084	0.757	1.322	7.915
Passive use	-0.065	0.147	-0.036	-0.443	.658	-0.355	0.225	0.657	1.523	11.086
Rational use and access	-0.300	0.169	-0.183	-1.777	.077	-0.633	0.033	0.418	2.395	12.829
Emotional use	0.094	0.163	0.050	0.577	.564	-0.227	0.415	0.587	1.702	19.425
PSL total	0.264	0.055	0.339	4.828	<.001	0.156	0.372	0.893	1.119	29.545

Key: Std. = standard; Sig. = p-value; LCI = lower confidence interval; UCI = upper confidence interval; Tol. = tolerance; VIF = variance inflation factor; CI = confidence interval; PSL = perceived social media literacy

As shown in Table 32, the assumption re no multicollinearity was met as the condition index was below 30, the VIF values were below 10, and the tolerance values were greater than 0.2 (Belsley et al., 1980; Field, 2013). As shown in Table 32, in the model the total perceived social media literacy score was the only variable that significantly predicted self-control ($b = 0.26$; $p < .001$).

Digital flourishing: Total score

The sixth multiple regression model was calculated to identify whether perceived social media literacy, posting (active use), communication (active use), passive use, rational use and access, and emotional use predicted the total digital flourishing score in the sample. The results are presented in Table 33 and Table 34. The regression model in Table 33 was significant ($F = 12.14$; $p < .001$) and the coefficient of determination ($r^2 = 0.27$) indicated that approximately 27% of the variation in the total digital flourishing score was explained by the variation in the predictor variables.

The Durbin-Watson statistic displayed in Table 33 fell within the acceptable range of 1.5 and 2.5, indicating that there was a lack of auto-correlation and independence (Turner, 2020). The sample size, scale of measure, normality, linearity, homoscedasticity, and outlier assumptions were met, as discussed in Chapter 3. As shown in Table 34, the assumption re no multicollinearity was met as the condition index was below 30, the VIF values were below 10, and the tolerance values were greater than 0.2 (Belsley et al., 1980; Field, 2013). Emotional use ($b = 1.44$; $p = 0.002$) and the total perceived social media literacy score ($b = 0.67$; $p < .001$) were the only significant predictors of the total digital flourishing score in this model, as shown in Table 34

Table 33

Regression model summary

	N	R	R ²	Adjusted R ²	Std. Error	F	Sig.	DW
Model	207	.517	.267	.245	18.085	12.138	<.001	2.083

Key: Std. = standard; Sig. = p-value; DW = Durbin-Watson

Table 34*Regression model coefficients and collinearity diagnostics*

	B	Std. Error	Beta	t	Sig.	LCI	UCI	Tol.	VIF	CI
Constant	28.840	10.774		2.677	.008	7.596	50.085			1.000
Posting	0.665	0.564	0.079	1.178	.240	-0.448	1.777	0.811	1.233	5.419
Communication	0.309	0.376	0.057	0.821	.413	-0.433	1.051	0.757	1.322	7.915
Passive use	-0.253	0.423	-0.045	-0.598	.550	-1.087	0.581	0.657	1.523	11.086
Rational use and access	0.720	0.485	0.139	1.483	.140	-0.237	1.676	0.418	2.395	12.829
Emotional use	1.435	0.468	0.242	3.064	.002	0.511	2.358	0.587	1.702	19.425
PSL total	0.669	0.157	0.273	4.256	<.001	0.359	0.979	0.893	1.119	29.545

Key: Std. = standard; Sig. = p-value; LCI = lower confidence interval; UCI = upper confidence interval; Tol. = tolerance; VIF = variance inflation factor; CI = confidence interval; PSL = perceived social media literacy

Motives for social media use as predictors of digital flourishing

Digital flourishing: Connectedness

The first multiple regression model was calculated to identify which motives for social media use predicted connectedness in the sample. The results are presented in Table 35 and Table 36. It is worth mentioning that the motives for social media use had to be placed in a separate regression model as including them in a regression model with the other variables in the study greatly violated the multicollinearity assumption.

Additionally, the squared versions of the entertainment and information and connectedness variables were used in all the models. The regression model in Table 35 was significant ($F = 13.85$; $p < .001$) and the coefficient of determination ($r^2 = 0.39$). That indicated approximately 39% of the variation in connectedness was explained by the variation in the predictor variables.

Table 35*Regression model summary*

	N	R	R²	Adjusted R²	Std. Error	F	Sig.	DW
Model	206	.623	.389	.361	4.444	13.849	<.001	1.774

Key: Std. = standard; Sig. = p-value; DW = Durbin-Watson

Table 36*Regression model coefficients and collinearity diagnostics*

	B	Std. Error	Beta	t	Sig.	LCI	UCI	Tol.	VIF	CI
Constant	6.980	1.344		5.192	<.001	4.328	9.631			1.000
D/NF	0.019	0.039	0.038	0.500	.618	-0.057	0.096	0.537	1.862	5.773
ACP	0.037	0.066	0.035	0.562	.575	-0.093	0.168	0.807	1.239	6.852
F/MO	0.054	0.078	0.051	0.689	.492	-0.101	0.209	0.573	1.744	9.158
SR/SE	0.172	0.049	0.269	3.506	<.001	0.075	0.269	0.530	1.887	9.508
ESC	-0.106	0.073	-0.103	-1.457	.147	-0.250	0.038	0.624	1.603	10.688
PROA	-0.034	0.066	-0.032	-0.515	.607	-0.163	0.096	0.788	1.269	10.978
CM/SC	0.172	0.054	0.261	3.173	.002	0.065	0.279	0.461	2.167	11.626
ENT	-0.003	0.003	-0.068	-0.954	.341	-0.009	0.003	0.616	1.622	13.128
INF/C	0.007	0.002	0.236	3.206	.002	0.003	0.011	0.574	1.742	15.166

Key: Std. = standard; Sig. = p-value; LCI = lower confidence interval; UCI = upper confidence interval; Tol. = tolerance; VIF = variance inflation factor; CI = confidence interval; D/NF = dating/new friendships; ACP = academic purposes; F/MO = following/monitoring others; SR/SE = social recognition/self-expression; ESC = escapism; PROA = professional advancement; CM/SC = companionship/social connectedness; ENT = entertainment; INF/C = information/connectedness

The Durbin-Watson statistic displayed in Table 35 fell within the acceptable range of 1.5 and 2.5, indicating that there was a lack of auto-correlation and independence (Turner, 2020). The sample size, scale of measure, normality, linearity, homoscedasticity, and outlier assumptions were met, as discussed in Chapter 3. As shown in Table 36, the assumption re no multicollinearity was met as the condition index was below 30, the VIF values were below 10, and the tolerance values were greater than 0.2 (Belsley et al., 1980; Field, 2013).

As shown in Table 36, of the nine motives for social media use, only social recognition and self-expression ($b = 0.17$; $p < .001$), companionship and social connectedness ($b = 0.17$; $p = .002$), and information and connectedness ($b = 0.01$; $p = .002$) were significant predictors of connectedness.

Digital flourishing: Civil participation

The second multiple regression model was calculated to identify which motives for social media use predicted civil participation in the sample. The results are presented in Table 37 and Table 38.

Table 37*Regression model summary*

	N	R	R ²	Adjusted R ²	Std. Error	F	Sig.	DW
Model	206	.364	.132	.092	5.463	3.319	<.001	1.917

Key: Std. = standard; Sig. = p-value; DW = Durbin-Watson

Table 38*Regression model coefficients and collinearity diagnostics*

	B	Std. Error	Beta	t	Sig.	LCI	UCI	Tol.	VIF	CI
Constant	21.004	1.652		12.711	<.001	17.745	24.262			1.000
D/NF	0.020	0.048	0.037	0.410	.682	-0.074	0.113	0.537	1.862	5.773
ACP	0.130	0.081	0.118	1.590	.113	-0.031	0.290	0.807	1.239	6.852
F/MO	-0.152	0.096	-0.139	-1.580	.116	-0.342	0.038	0.573	1.744	9.158
SR/SE	0.105	0.060	0.159	1.741	.083	-0.014	0.224	0.530	1.887	9.508
ESC	-0.187	0.090	-0.176	-2.092	.038	-0.364	-0.011	0.624	1.603	10.688
PROA	0.027	0.081	0.025	0.334	.738	-0.132	0.186	0.788	1.269	10.978
CM/SC	0.068	0.067	0.101	1.029	.305	-0.063	0.200	0.461	2.167	11.626
ENT	0.001	0.004	0.031	0.370	.712	-0.006	0.009	0.616	1.622	13.128
INF/C	0.004	0.003	0.146	1.665	.098	-0.001	0.009	0.574	1.742	15.166

Key: Std. = standard; Sig. = p-value; LCI = lower confidence interval; UCI = upper confidence interval; Tol. = tolerance; VIF = variance inflation factor; CI = confidence interval; D/NF = dating/new friendships; ACP = academic purposes; F/MO = following/monitoring others; SR/SE = social recognition/self-expression; ESC = escapism; PROA = professional advancement; CM/SC = companionship/social connectedness; ENT = entertainment; INF/C = information/connectedness

The regression model in Table 37 was significant ($F = 3.32$; $p < .001$) and the coefficient of determination ($r^2 = 0.13$) indicated that approximately 13% of the variation in civil participation was explained by the variation in the predictor variables.

The Durbin-Watson statistic displayed in Table 37 fell within the acceptable range of 1.5 and 2.5, indicating that there was a lack of auto-correlation and independence (Turner, 2020). The sample size, scale of measure, normality, linearity, homoscedasticity, and outlier assumptions were met, as discussed in Chapter 3. As shown in Table 38, the assumption re no multicollinearity was met as the condition index was below 30, the VIF values were below 10, and the tolerance values were greater than 0.2 (Belsley et al., 1980; Field, 2013).

Escapism ($b = -0.19$; $p = 0.038$) was the only significant predictor of civil participation in this model, as shown in Table 38.

Digital flourishing: Positive social comparison

The third multiple regression model was calculated to identify which motives for social media use predicted positive social comparison in the sample. The results are presented in Table 39 and Table 40.

Table 39

Regression model summary

	N	R	R ²	Adjusted R ²	Std. Error	F	Sig.	DW
Model	206	.492	.242	.207	6.325	6.937	<.001	2.016

Key: Std. = standard; Sig. = p-value; DW = Durbin-Watson

The regression model in Table 39 was significant ($F = 6.94$; $p < .001$) and the coefficient of determination ($r^2 = 0.24$) indicated that approximately 24% of the variation in positive social comparison was explained by the variation in the predictor variables.

The Durbin-Watson statistic displayed in Table 39 fell within the acceptable range of 1.5 and 2.5, indicating that there was a lack of auto-correlation and independence (Turner, 2020). The sample size, scale of measure, normality, linearity, homoscedasticity, and outlier assumptions were met, as discussed in Chapter 3.

As shown in Table 40, the assumption re no multicollinearity was met as the condition index was below 30, the VIF values were below 10, and the tolerance values were greater than 0.2 (Belsley et al., 1980; Field, 2013). As shown in Table 40, professional advancement ($b = 0.23$; $p = 0.015$), companionship and social connectedness ($b = 0.19$; $p = 0.014$), and entertainment ($b = 0.009$; $p = .041$) significantly predicted positive social comparison.

Table 40*Regression model coefficients and collinearity diagnostics*

	B	Std. Error	Beta	t	Sig.	LCI	UCI	Tol.	VIF	CI
Constant	10.007	1.913		5.230	<.001	6.234	13.780			1.000
D/NF	0.047	0.055	0.073	0.856	.393	-0.061	0.156	0.537	1.862	5.773
ACP	-0.111	0.094	-0.081	-1.176	.241	-0.297	0.075	0.807	1.239	6.852
F/MO	0.072	0.112	0.053	0.649	.517	-0.148	0.293	0.573	1.744	9.158
SR/SE	0.026	0.070	0.031	0.368	.713	-0.112	0.164	0.530	1.887	9.508
ESC	-0.058	0.104	-0.044	-0.560	.576	-0.263	0.146	0.624	1.603	10.688
PROA	0.228	0.093	0.171	2.445	.015	0.044	0.412	0.788	1.269	10.978
CM/SC	0.191	0.077	0.227	2.480	.014	0.039	0.343	0.461	2.167	11.626
ENT	0.009	0.004	0.163	2.057	.041	0.000	0.017	0.616	1.622	13.128
INF/C	0.003	0.003	0.076	0.922	.358	-0.003	0.008	0.574	1.742	15.166

Key: Std. = standard; Sig. = p-value; LCI = lower confidence interval; UCI = upper confidence interval; Tol. = tolerance; VIF = variance inflation factor; CI = confidence interval; D/NF = dating/new friendships; ACP = academic purposes; F/MO = following/monitoring others; SR/SE = social recognition/self-expression; ESC = escapism; PROA = professional advancement; CM/SC = companionship/social connectedness; ENT = entertainment; INF/C = information/connectedness

Digital flourishing: Authentic self-disclosure

The fourth multiple regression model was calculated to identify which motives for social media use predicted authentic self-disclosure in the sample. The results are presented in Table 41 and Table 42.

The regression model in Table 41 was significant ($F = 3.63$; $p < .001$) and the coefficient of determination ($r^2 = 0.14$) indicated that approximately 14% of the variation in authentic self-disclosure was explained by the variation in the predictor variables. The Durbin-Watson statistic displayed in Table 41 fell within the acceptable range of 1.5 and 2.5, indicating that there was a lack of auto-correlation and independence (Turner, 2020).

Table 41*Regression model summary*

	N	R	R²	Adjusted R²	Std. Error	F	Sig.	DW
Model	206	.378.	.143	.103	7.151	3.625	<.001	2.112

Key: Std. = standard; Sig. = p-value; DW = Durbin-Watson

Table 42*Regression model coefficients and collinearity diagnostics*

	B	Std. Error	Beta	t	Sig.	LCI	UCI	Tol.	VIF	CI
Constant	15.406	2.163		7.122	<.001	11.140	19.672			1.000
D/NF	-0.108	0.062	-0.157	-1.736	.084	-0.231	0.015	0.537	1.862	5.773
ACP	0.036	0.107	0.025	0.341	.734	-0.174	0.247	0.807	1.239	6.852
F/MO	-0.034	0.126	-0.024	-0.271	.787	-0.283	0.215	0.573	1.744	9.158
SR/SE	0.218	0.079	0.250	2.752	.006	0.062	0.374	0.530	1.887	9.508
ESC	-0.117	0.117	-0.084	-1.000	.319	-0.349	0.114	0.624	1.603	10.688
PROA	0.035	0.105	0.024	0.327	.744	-0.173	0.242	0.788	1.269	10.978
CM/SC	0.151	0.087	0.169	1.739	.084	-0.020	0.323	0.461	2.167	11.626
ENT	-0.011	0.005	-0.195	-2.315	.022	-0.021	-0.002	0.616	1.622	13.128
INF/C	0.006	0.003	0.169	1.942	.054	0.000	0.013	0.574	1.742	15.166

Key: Std. = standard; Sig. = p-value; LCI = lower confidence interval; UCI = upper confidence interval; Tol. = tolerance; VIF = variance inflation factor; CI = confidence interval; D/NF = dating/new friendships; ACP = academic purposes; F/MO = following/monitoring others; SR/SE = social recognition/self-expression; ESC = escapism; PROA = professional advancement; CM/SC = companionship/social connectedness; ENT = entertainment; INF/C = information/connectedness

The sample size, scale of measure, normality, linearity, homoscedasticity, and outlier assumptions were met, as discussed in Chapter 3. As shown in Table 42, the assumption re no multicollinearity was met as the condition index was below 30, the VIF values were below 10, and the tolerance values were greater than 0.2 (Belsley et al., 1980; Field, 2013).

As shown in Table 42, social recognition and self-expression ($b = 0.22$; $p = .006$) and entertainment ($b = -0.01$; $p = 0.022$) were the only significant predictors of authentic self-disclosure.

Digital flourishing: Self-control

The fifth multiple regression model was calculated to identify which motives for social media use predicted self-control in the sample. The results are presented in Table 43 and Table 44. The regression model in Table 43 was significant ($F = 4.52$; $p < .001$) and the coefficient of determination ($r^2 = 0.17$) indicated that approximately 17% of the variation in self-control was explained by the variation in the predictor variables.

Table 43*Regression model summary*

	N	R	R ²	Adjusted R ²	Std. Error	F	Sig.	DW
Model	206	.414	.172	.134	6.153	4.515	<.001	1.955

Key: Std. = standard; Sig. = p-value; DW = Durbin-Watson

Table 44*Regression model coefficients and collinearity diagnostics*

	B	Std. Error	Beta	t	Sig.	LCI	UCI	Tol.	VIF	CI
Constant	25.223	1.861		13.552	<.001	21.552	28.894			1.000
D/NF	0.083	0.054	0.138	1.554	.122	-0.022	0.189	0.537	1.862	5.773
ACP	0.026	0.092	0.020	0.282	.778	-0.155	0.207	0.807	1.239	6.852
F/MO	-0.325	0.109	-0.257	-2.993	.003	-0.539	-0.111	0.573	1.744	9.158
SR/SE	0.010	0.068	0.013	0.149	.881	-0.124	0.144	0.530	1.887	9.508
ESC	-0.344	0.101	-0.281	-3.408	<.001	-0.543	-0.145	0.624	1.603	10.688
PROA	0.025	0.091	0.020	0.275	.784	-0.154	0.204	0.788	1.269	10.978
CM/SC	-0.035	0.075	-0.045	-0.470	.639	-0.183	0.113	0.461	2.167	11.626
ENT	0.005	0.004	0.099	1.199	.232	-0.003	0.013	0.616	1.622	13.128
INF/C	0.009	0.003	0.266	3.105	.002	0.003	0.014	0.574	1.742	15.166

Key: Std. = standard; Sig. = p-value; LCI = lower confidence interval; UCI = upper confidence interval; Tol. = tolerance; VIF = variance inflation factor; CI = confidence interval; D/NF = dating/new friendships; ACP = academic purposes; F/MO = following/monitoring others; SR/SE = social recognition/self-expression; ESC = escapism; PROA = professional advancement; CM/SC = companionship/social connectedness; ENT = entertainment; INF/C = information/connectedness

The Durbin-Watson statistic displayed in Table 43 fell within the acceptable range of 1.5 and 2.5, indicating that there was a lack of auto-correlation and independence (Turner, 2020). The sample size, scale of measure, normality, linearity, homoscedasticity, and outlier assumptions were met, as discussed in Chapter 3. As shown in Table 44, the assumption re no multicollinearity was met as the condition index was below 30, the VIF values were below 10, and the tolerance values were greater than 0.2 (Belsley et al., 1980; Field, 2013). Following and monitoring others ($b = -0.33$; $p = .003$), escapism ($b = -0.34$; $p < .001$), and information and connectedness ($b = 0.01$; $p = .002$) were significant predictors of self-control, as shown in Table 44.

Digital flourishing: Total score

The sixth multiple regression model was calculated to identify which motives for social media use predicted the total digital flourishing score in the sample. The results are presented in Table 45 and Table 46.

The regression model in Table 45 was significant ($F = 9.97$; $p < .001$) and the coefficient of determination ($r^2 = 0.31$) indicated that approximately 31% of the variation in the total digital flourishing score was explained by the variation in the predictor variables

The Durbin-Watson statistic displayed in Table 45 fell within the acceptable range of 1.5 and 2.5, indicating that there was a lack of auto-correlation and independence (Turner, 2020).

Table 45

Regression model summary

	N	R	R ²	Adjusted R ²	Std. Error	F	Sig.	DW
Model	206	.560	.314	.283	17.556	9.969	<.001	2.125

Key: Std. = standard; Sig. = p-value; DW = Durbin-Watson

The sample size, scale of measure, normality, linearity, homoscedasticity, and outlier assumptions were met, as discussed in Chapter 3. As shown in Table 46, the assumption re no multicollinearity was met as the condition index was below 30, the VIF values were below 10, and the tolerance values were greater than 0.2 (Belsley et al., 1980; Field, 2013). Social recognition and self-expression ($b = 0.53$; $p = .007$), escapism ($b = -0.81$; $p = .005$), companionship and social connectedness ($b = 0.55$; $p = .011$), and information and connectedness ($b = 0.03$; $p < .001$) were significant predictors of the total digital flourishing score, as shown in Table 46.

Table 46*Regression model coefficients and collinearity diagnostics*

	B	Std. Error	Beta	t	Sig.	LCI	UCI	Tol.	VIF	CI
Constant	78.620	5.311		14.804	<.001	68.146	89.093			1.000
D/NF	0.061	0.153	0.032	0.400	.690	-0.240	0.362	0.537	1.862	5.773
ACP	0.118	0.262	0.030	0.451	.652	-0.398	0.634	0.807	1.239	6.852
F/MO	-0.385	0.310	-0.097	-1.243	.215	-0.996	0.226	0.573	1.744	9.158
SR/SE	0.531	0.194	0.222	2.735	.007	0.148	0.914	0.530	1.887	9.508
ESC	-0.813	0.288	-0.211	-2.823	.005	-1.381	-0.245	0.624	1.603	10.688
PROA	0.281	0.259	0.072	1.084	.280	-0.230	0.791	0.788	1.269	10.978
CM/SC	0.548	0.214	0.223	2.560	.011	0.126	0.969	0.461	2.167	11.626
ENT	0.001	0.012	0.007	0.092	.927	-0.023	0.025	0.616	1.622	13.128
INF/C	0.029	0.008	0.276	3.541	<.001	0.013	0.045	0.574	1.742	15.166

Key: Std. = standard; Sig. = p-value; LCI = lower confidence interval; UCI = upper confidence interval; Tol. = tolerance; VIF = variance inflation factor; CI = confidence interval; D/NF = dating/new friendships; ACP = academic purposes; F/MO = following/monitoring others; SR/SE = social recognition/self-expression; ESC = escapism; PROA = professional advancement; CM/SC = companionship/social connectedness; ENT = entertainment; INF/C = information/connectedness

Conclusion

This chapter reported on the results of the analyses undertaken in this study. It began by detailing the findings on the internal structure and consistency of the scales used throughout this study. A detailed breakdown of the sample's characteristics, in addition to their level of digital flourishing and the various aspects of social media social media use under investigation was then provided. This chapter then reported on the ways in which digital flourishing was associated with the different aspects of social media use as well as how digital flourishing was predicted by the different types of social media use, motives for social media use, and perceived social media literacy in the sample of South African young adults.

Chapter 5: Discussion

Introduction

Chapter 5 provides interpretations of this study's findings in relation to the research aims and existing literature. It will begin by discussing the results of the principal component analyses and how they identified distinct subscales that aligned with theoretical expectations and provided empirical support for the dimensionality of the constructs under study. The internal consistency of the five scales used will then be discussed, followed by an outline of the sample's characteristics as well as their levels of social media use, perceived literacy, motives for social media use, and digital flourishing. This chapter will then discuss the results of the bivariate correlations as well as the results for the regression models, establishing the nature of and possible reasons for the associative and predictive relationships digital flourishing had with the aspects of social media under investigation. The interpretation of these findings will be situated within the broader theoretical framework (i.e. self-determination theory) and previous empirical research relevant to the study.

The structure and internal consistency of the scales used

The internal structure and reliability of the instruments used in this study were established in the sample. The principal component analyses identified three distinct subscales within the dataset for the adapted Active Passive Use Scale, two for the Rational and Emotional Use scale, five for the Perceived Social Media Literacy scale, nine for the Motives for Social Media Use scale, and five for the Digital Flourishing Scale. Although there were some differences, these subscales were generally similar to those identified for each of the measures originally, which suggests that the measures were suitable to capture information about the constructs of interest. It also suggests that the underlying structures differentiate between the measured constructs and indicates that the variables within each subscale share common variance, implying that they represent related psychological dimensions (Field, 2013). Theoretically, this supports the notion that the constructs under investigation are multidimensional (i.e. complex), composed of interrelated yet distinct components (Tabachnick & Fidell, 2019).

Four of the five instruments used reported moderate to high reliability, establishing that the measures used were psychometrically sound. Two subscales of the Perceived Social Media Literacy Scale reported low reliability, indicating inconsistency in the measurement. This suggests that the items on the privacy algorithm awareness and control subscales need to be re-examined and either modified or removed to better capture the underlying constructs

they intend to measure, especially in a South African context. The structure of the Digital Flourishing Scale used in my study was similar to the original (Janicke-Bowles et al., 2023), with only one minor change (the removal of item 21). This indicates that the items were related in ways that they were expected to in a South African context and suggests that the Digital Flourishing Scale is suitable for use in a sample of South African young adults.

Descriptive findings

A majority of the sample was black, female, between the ages of 18-25, English speaking, bilingual, studying full time, and had either completed or was currently completing a bachelor-level degree. These statistics reflect South Africa's current university student population distribution. As the study was circulated through the University of the Witwatersrand, it was expected that a significant portion of the sample would be students of varying kinds, holding some sort of qualification.

25.1% of the participants subscribed to or used five social media sites with 58.7% of them spending 4 hours or less on those sites daily. This contradicts Lukose et al.'s (2023) study which found that on average South African young adults spent 6 hours daily on social media. WhatsApp, Facebook, and Instagram were among the sites that were reported as most used in the sample, reflecting the current statistics on social media sites used by South Africans, although YouTube, Pinterest, and TikTok were also frequently used social media sites in the sample (Cowling, 2024).

Levels of types of social media use, perceived social medial literacy and digital flourishing

This study's participants had moderate levels of overall digital flourishing, with the highest average scores reported for civil participation and self-control and the lowest average scores reported for connectedness, authentic self-disclosure, and positive social comparison. There is limited previous research that has explored levels of digital flourishing in any sample because digital flourishing is a new concept, but Janicke-Bowles (2024) did find that African Americans (Black Americans) reported digitally flourishing the most in positive social comparison and connectedness. This suggests that the profile of digital flourishing may differ across different nationalities, cultures, and demographics, supporting the need for research in the South African context.

There are two possibilities that may account for the levels of digital flourishing observed in the sample. The first possibility is that this could be a result of young adults being

more concerned with personal achievement (comparing oneself to role models can be a potential driving force for this) and their self-image within online spaces (having to be civil mannered and authentic) making fostering deep social bonds not as important (Saggar, 2021). The second possibility is that from a self-determination theory perspective, it could be the case that their competence and autonomy needs take precedence over their need for connecting with others i.e. relatedness as it concerns digital flourishing (Deci & Ryan, 2000; 2008). This could be because the participants were mostly in the first phase/stage of adulthood (i.e. young adulthood), where commonly they would be attempting to establish themselves as adults and to be seen as an independent person who can make their own decisions and who is able to live life according to the means they see fit. This interpretation is supported by the fact that digital flourishing was predicted by the professional advancement motive in this sample. Furthermore, users already having connections or relationships outside these digital spaces could have influenced them to not see this as a priority when navigating those platforms.

In relation to active and passive use, participants had a relatively higher average score for passive use, corroborating most of the empirical research on passive use (Roberts & David, 2023). Communication was the form of active use that participants reported a relatively higher average score for, suggesting that their active use of social media is primarily communicative which corresponds with WhatsApp, a purely communicative social media app, being the most used social media platform in the sample. Participants' average score for routine use and access was relatively higher than their average score for emotional use, indicating that for these young South African adults, social media use was primarily part of their routine rather than tied to emotional investment. According to the literature, routine use of social media has been positively associated with users' psychological well-being, therefore the relatively higher average for routine use and access in the sample may provide an additional account for the sample's average levels of digital flourishing (Bekalu et al., 2019).

The participants' perceived social media literacy level was slightly above average, suggesting that the participants perceived themselves as being relatively social media literate. As media literacy has been positively associated with psychological well-being, this provides some account as to why this sample also had moderate levels of digital flourishing (Keum, 2024). The sample had a relatively high average score for technical competency and relatively lower average scores for social relationships and informational awareness. This suggests that the sample felt they were most competent at navigating the technical aspects of

social media whilst they felt least competent in managing and maintaining social relationships through social media. Their perceived lack of social relationship competence provides further possible explanation as to why this sample also felt that they flourished the least in connectedness.

The sample had relatively highest average scores for the information and connectedness, entertainment, and academic purposes motives for social media use and relatively low average scores for the companionship and social connectedness, dating and new friendships, social recognition and self-expression, and following and monitoring others motives for social media use. The academic purpose motive and the information seeking and connectedness motive can be accounted for by the fact that a majority of the sample were university students. For entertainment, studies have found that young adults are more likely to use social media for entertainment purposes, especially because most social media apps and sites have made modifications to include more entertainment features (High et al., 2023; Pertegal et al., 2019). The relatively lower averages for the motives related to social engagement were slightly surprising given the emphasis often placed on this during young adulthood but these did match with the findings for digital flourishing where personal achievement seemed to be considered as more important than social connections and could be due to similar reasons.

Type of Social media interaction

Active and Passive Use

Significant correlations were found between active and passive social media use and the dimensions of digital flourishing. Active use in the form of posting and online communication was significantly, positively, and moderately correlated with connectedness and was significantly, positively, and weakly correlated with positive social comparison, authentic self-disclosure, and the total digital flourishing score. This means that the more active participants were on social media (i.e. posting and communicating), the more likely they were to feel connected to others online, to be civil in their online interactions, to present their authentic selves online, to make more positive social comparisons and, ultimately, to experience more overall digital flourishing. These findings corroborate studies like Liu et al. (2020), Marciano et al. (2024), and Roberts and David (2023), which have found active social media use to be associated with positive outcomes concerning users' well-being or flourishing.

Passive use was significantly, positively, and moderately correlated with connectedness and was significantly, positively, and weakly correlated with positive social comparison and total digital flourishing. This suggests that the more passive the participants were on social media, the more connected to others they were likely to feel, the more positive their social comparisons, and, ultimately, the more overall digital flourishing they were likely to experience. This contradicts previous findings which concluded that passive use is negatively associated with users' flourishing (Godard & Holtzman, 2024; Keum, 2024; Keum et al., 2022; Liu et al., 2020; Meier & Reinecke, 2021; Roberts & David, 2023; Winstone et al., 2023).

In the regression models, passive use of social media only significantly predicted civil participation. For active use, communication significantly predicted authentic self-disclosure and posting did not significantly predict any aspect of digital flourishing in the sample. A possible explanation for the predictive role played by communication is that the more users communicate with others online and have their efforts as well as intentions in these exchanges reciprocated, the more comfortable they may feel in revealing their authentic selves in these spaces (Ko & Kuo, 2009). According to self-determination theory, this may add to their sense of competence in navigating digital spaces and interactions, which would help satisfy this need enabling them to digitally flourish (Deci & Ryan, 2000; 2008). However, further research is needed to clarify this. For passive use, the findings suggested that the more passive participants were in their social media use, the less civil they were in their online interactions with others, hindering their digital flourishing.

Although the literature is clear about passive use negatively affecting users' well-being, the literature on digital flourishing does not account for why it would negatively predict civil participation. Active use is well documented in some cases as being associated with engaging in or perpetuating negative online interactions (i.e. cyber bullying), but this is not well documented for passive use (Inchley et al., 2020). One explanation for the finding may simply be that passive use of online sites implies a lack of any engagement of any form, both positive and negative. Another possibility, from a self-determination theory perspective, is that engaging with social media passively could make one feel less competent at navigating those online spaces and that feeling of lacking competence could cause users to be more negative or less civil in their online interactions (Deci & Ryan, 2000; 2008). Future studies will be needed to provide clarification on this since there is little empirical evidence to support the possible explanations for these findings.

The limited predictive power of both active and passive use in the sample can perhaps be accounted for in three ways. The first is that there may be a third variable connecting type of social media interaction and digital flourishing, making the former's role in predicting the latter indirect in nature. It is possible that this third variable could mediate the relationship between these two variables or that type of social media interaction may be best positioned as a moderator of the relationships between other variables and digital flourishing. The second possibility is that the relationship which occurred is limited to this sample and is completely coincidental. The final possible explanation is that there is a more complex relationship present here, in that this relationship may be subject to time delays that are not captured by these regression models. The most plausible of the three accounts, as well as my position on this matter, is the first one. This is because there is recent evidence to support it whereas the other two, although in the realm of possibility, at the time of this study remain speculative. Roberts and David (2023) found that type of social media interaction moderated the relationship between social connection, social media usage/intensity (i.e. time spent), and users' psychological well-being. Furthermore, their findings corroborate the ones in my study in that they found passive use had a negative (indirect) effect on users' well-being. It is worth noting that while Roberts and David (2023) provide one possible reading of the first explanation, Liu and Xiao's (2024) provide a different reading, where passive use was moderated by social comparison in facilitating users' flourishing. Passive use did positively correlate with positive social comparison in the study, so it may be the case that its relationship with digital flourishing may be bolstered in the presence of positive social comparison.

Furthermore, it is possible that the study's findings emerged as outlined due to the conception of social media interaction types not being sufficiently nuanced. Shaw et al. (2022) present a similar argument in their study, where they posit that the indirect effect type of interaction has on users' well-being hints at a more nuanced understanding or conceptualisation of this construct. The argument here is that one should move away from the dualistic (i.e. active passive dichotomy) understanding of social media interaction and move towards three types of interactions, passive (consuming other users' content), reactive (reacting to other users' content), and interactive (actively engaging with users' content by sharing it). In this way, future studies should investigate the effect passive, reactive, and interactive use have on digital flourishing.

Routine use vs Emotional Use

Routine use in the form of rational use and access was significantly, positively, and moderately correlated with connectedness, positive social comparison, and total digital flourishing as well as significantly, positively, and weakly correlated with civil participation and authentic self-disclosure. This means that the more routine the participants' use of social media was, the more likely they were to feel connected to others online, to be civil in their online interactions, to present their authentic selves online, to be more positive in their social comparisons, and, ultimately, to experience more overall digital flourishing. This corroborates Bekalu et al.'s (2019) study which found that routine use was positively associated with users' perceived mental health. Despite this, rational use and access only significantly and positively predicted connectedness and civil participation in the regression models. A possible explanation for this is that routine use enabled participants to feel more competent when using social media, as well as to develop a sense of connection and feeling supported in those online spaces, which encouraged their digital flourishing (Deci & Ryan, 2000; 2008). The lack of predictive power rational use and access had with the other three dimensions of digital flourishing can perhaps be accounted for using the three explanations outlined in the type of social media interaction section above (i.e. a possible third variable effect, a coincidental relationship, or a time-based relationship not captured in the study). However, because so little research has been done over the last few years on the routine (i.e. rational) use of social media and it possibly being moderated by or a moderator of users' psychological well-being, too much weight cannot be placed on those explanations. It is necessary for future studies to investigate the possible moderating role of young adults' routine use of social media on digital flourishing as well as the relationship between rational use and access and digital flourishing.

Significant, moderate, positive correlations were found between emotional use and connectedness, positive social comparison, and the total digital flourishing score, in addition to significant, weak, positive correlations between emotional use and civil participation and authentic self-disclosure. This suggests that the more emotionally invested the participants were in social media, the more likely they were to feel connected to others online, to be more civil in their interactions, to present themselves more authentically, to have more positive social comparisons, and, ultimately, to experience more overall digital flourishing. Emotional use also significantly predicted connectedness, positive social comparison, and overall digital flourishing in the sample.

The results suggest that not only is emotional use positively associated with digital flourishing, it also predicts digital flourishing more than the other types of social media use under study, contradicting the limited current literature available. The findings in Bekalu et al. (2019) and Roberts and David (2023) indicate that an increase in users' emotional connection to social media resulted in a decrease in users' psychological well-being. However, these conflicting results could be accounted for by the dual nature of social media. This refers to the notion that just as much as users being overly invested in social media but being constantly exposed to negative content is a reality of navigating online platforms, being exposed to positive content (i.e. positive posts, affirming engagements and interactions) is also a part of that experience (Roberts & David, 2023). So social media users could be spending their time online fostering positive relationships and interactions, the kind that would encourage them to be invested in the events occurring on those platforms. In this way, it is plausible that the relationship between emotional connection and users' digital flourishing is influenced by the kind of content they are consuming and interacting with. It would be worthwhile for future studies to investigate this in order to better understand the relationship between emotional use of social media and digital flourishing. Ultimately, it appeared that the feelings of competence and relatedness that stem from having an emotional connection to social media facilitated experiences of digital flourishing in this sample, particularly positive online social interactions.

Perceived social media literacy

Significant correlations were found between the dimensions of digital flourishing and the three competencies of perceived social media literacy, in addition to the total perceived social media literacy score. Technical competency had significant, weak, positive correlations with three dimensions of digital flourishing, connectedness, civil participation, and self-control, as well as the total digital flourishing score. This means that the more technically competent participants felt they were with social media, the more likely they were to feel connected to others online, to be civil in their online interactions, to exhibit self-control in using social media, and, ultimately, to experience more overall digital flourishing. However, little is known about the relationship between digital flourishing and technical competency and the findings are therefore novel in this sense. Social relationships had a significant, weak, positive correlation with connectedness, as well as significant, moderate, positive correlations with civil participation, self-control, and the digital flourishing total score. This suggests that

the better the participants were at managing their social relationships online, the more likely they were to feel connected to others online, to be civil in their online interactions, to exhibit self-control in using social media, and, ultimately, to experience overall digital flourishing. This supports studies like Kim and Lee (2023), who found that young Korean men's feelings of loneliness were moderated by their level of media literacy.

Informational awareness had significant, weak, positive correlations with connectedness, civil participation, self-control, and the digital flourishing total. This suggests that the more critically aware the participants were of the online content they encountered, the more likely they were to feel connected to others online, to be civil in their online interactions, to exhibit self-control in using social media, and, ultimately, to experience overall digital flourishing. This supports and accounts for research that has found digital informational skills to reduce levels of depression offset by online misinformation (Sun et al., 2024). The total perceived social media literacy score (representing all of the dimensions of perceived social media literacy in a single score) had significant, weak, positive correlations with connectedness, authentic self-disclosure, self-control, and the total digital flourishing score, in addition to a significant, moderate, positive correlation with civil participation. This indicates that the higher the participants' levels of perceived social media literacy were, the more likely they were to feel connected to others online, to be civil in their online interactions, to present their authentic self, to exhibit self-control in using social media, and, ultimately, to experience more overall digital flourishing. This corroborates previous research which has found that higher levels of social media literacy are associated with greater flourishing (Keum, 2024).

Due to issues with normality and multicollinearity in relation to the dimensions of perceived social media literacy, only the total perceived social media literacy score was entered into the regression models as a predictor of digital flourishing. Total perceived social media literacy was a significant and positive predictor of connectedness, civil participation, self-control, and overall digital flourishing in the sample. In the relevant regression model, perceived social media literacy was the most significant predictor of connectedness. This result corroborates studies which have found that social media literacy is associated with social support, a factor that informs the connectedness dimension of digital flourishing (Keum, 2024). In perceiving themselves as social media literate, social media users may be able to offer social support to others as well as to gain social support, thereby building a connection with others, resonating with their relatedness need (Deci & Ryan, 2000; 2008). Perceived social media literacy significantly predicting civil participation in this sample can

be accounted for when it is understood that perceiving themselves as moderately social media literate potentially bolstered participants' feelings of competence (Deci & Ryan, 2000; 2008). Having positive perceptions of or attitudes about oneself has been positively associated with displays of kindness or positive acts towards others, so ultimately in harbouring positive perceptions of themselves, these participants could be more predisposed to have civil engagement or interactions with others on social media (Ferreira et al., 2021; Han et al., 2018; Laguna et al., 2021).

Most of the literature on digital or social media literacy and self-control focuses on this relationship in relation to adolescents' academic performance, so little is known about self-control and social media use in adults (Peng & Yu, 2022). As the result in the current study supports studies which have found that digital literacy promotes self-control in adolescents, I can speculate on this basis that the ability to find and evaluate information as well as content online enables users to make informed decisions about their social media use (Peng & Yu, 2022). This may give them more control over their use of these platforms, thereby reinforcing their autonomy. The fact that perceived social media literacy was a significant predictor of three digital flourishing dimensions and therefore resonated with participants' autonomy and relatedness needs means that it also significantly predicted overall digital flourishing levels within this sample (Deci & Ryan, 2000; 2008). These results corroborate the current literature as they suggest that not only is perceived social media literacy positively associated with users' psychological well-being i.e. digital flourishing, it also significantly predicts this flourishing and has moderate predictive power (Gao, 2024; Tandoc et al., 2021).

Motives for social media use

Various motives for social media use were found to significantly correlate with dimensions of digital flourishing. The dating and new friendship motive had significant, moderate, positive correlations with connectedness, positive social comparison, and the digital flourishing total in addition to a significant, weak, positive correlation with civil participation. This means that when participants used social media to date and make friends, they were more likely to feel connected to others online, to be civil in their online interactions, to make more positive social comparisons, and, ultimately, to experience more overall digital flourishing. Academic purposes had significant, weak, positive correlations with connectedness, civil participation, positive social comparison, and the total digital flourishing score. This suggests that when participants used social media for academic

purposes, they were more likely to feel connected to others online, to be civil in their online interactions, to be more positive in their social comparisons, and, ultimately, to experience more overall digital flourishing. These findings support research which has found that motives for social media use that are more social in nature have been associated with less negative impacts on users' well-being (Law et al., 2020). Despite this, neither dating and friendship or academic purposes significantly predicted any aspect of digital flourishing in the sample.

The literature has noted that there is a relationship between online dating and users' psychological well-being, with a significant portion of that literature finding the relationship to be negative in nature (see Bonilla-Zorita et al., 2021; Holtzhausen et al., 2020; Langert, 2021). Friendship through social media, on the other hand, has largely been found to positively impact users' well-being, providing support for the abovementioned correlations (Chen & Li, 2017; Doğan, 2016, Pouwels et al., 2021). When this is paired with the positive correlations found between the two motives and dimensions of digital flourishing, it would not be unreasonable to expect that social media use for dating and friendship and academic purposes would predict digital flourishing. There are three possible explanations for the non-significant findings in the study. The first concerns how users in this sample may perceive dating and friendship. As will be discussed later in this chapter, the companionship and social connectedness motive significantly predicted digital flourishing in this study. If dating and friendship are different versions or kinds of companionships as well as different manifestations of social connectedness yet they do not predict digital flourishing like companionship and social connectedness did, it may suggest that users within the sample perceived dating and friendship as the kinds of companionship and social connectedness that did not significantly impact their flourishing or resonate with or lead to the fulfilment of their need for relatedness (Deci & Ryan, 2000; 2008). Their desire for a general social connection and perhaps a familial rather than romantic or platonic companionship may have resonated more strongly with these young adults' digital flourishing. However, currently the literature on this is very limited and more research is needed. The second account is that, as mentioned earlier, this sample of young adults could be prioritising other needs, so their using social media for this purpose would not predict their digital flourishing. The third account of the findings is that it may be completely coincidental within this sample. The only way to confirm this would be to replicate this study in different samples in South Africa or abroad. Since so little is known about this motive for social media use's relationship to users'

psychological well-being as well as digital flourishing generally, it is within the realm of possibility that there are additional unknown explanations for this, which future studies may provide clarity on.

For academic purposes, there is a plethora of literature on the effect that social media has on its users' academic performance as well as users' perceptions on using social media for academic purposes, corroborating the correlations observed (see, for example, Alshalawi, 2022). Lim and Richardson (2016) have found that students had positive perceptions about using social media for academic purposes. However, little is known about the relationship between the academic purpose motive and users' psychological well-being. This motive's failure to predict digital flourishing may be due to it having a weak indirect effect on digital flourishing. The argument here would be that if users' academic performance is impacted by their use of social media for academic purposes, then we could posit that it will indirectly affect their digital flourishing. One's academic performance can inform how competent one views oneself to be, so at least theoretically there is reason to believe that using social media for academic purposes could be conducive for digital flourishing.

The following and monitoring others motive had significant, moderate, positive correlations with connectedness and positive social comparison; a significant, weak, positive correlation with digital flourishing; and a significant, weak, negative correlation with self-control. This means that when participants used social media to follow and monitor others, they were more likely to feel connected to others online, to make more positive social comparisons, and, ultimately, to have higher levels of digital flourishing. However, using social media to follow and monitor others also means that it is more likely that the participants had less self-control over their social media use, resulting in a loss or relinquishment of their autonomy. This corroborates studies which have found that social media self-control failure negatively affects users' well-being (Du et al., 2021; Hofmann et al., 2016; Świątek et al., 2023). It was thus unsurprising that following and monitoring others was also a significant, negative predictor of self-control in the sample, although it did not significantly predict any of the other dimensions of digital flourishing.

This could occur because monitoring others online potentially involves being on social media for long periods of time or unexpectedly using those sites/apps due to notifications, rendering people less in control of their usage than they originally were. This relinquished or diminished sense of autonomy would hinder digital flourishing. Furthermore, self-control failure has been found to increase users' social media fatigue and decrease their

mindfulness, thus negatively impacting their psychological well-being (Du et al., 2021; Hofmann et al., 2016; Świątek et al., 2023). Additionally, the following and monitoring others motive is categorised as a kind of passive use of social media, which has been negatively associated with users' psychological well-being (Verduyn et al., 2017). Furthermore, if users' following and monitoring others motive is informed by a fear of missing out, this would further predict lower levels of psychological well-being, as fear of missing out has been associated with reduced well-being (Lukose et al., 2023; Savitri, 2019).

Civil participation and authentic self-disclosure had significant, weak, positive correlations with the social recognition and self-expression motive; and connectedness, positive social comparison, and the total digital flourishing score had significant, moderate, positive correlations with social recognition and self-expression. This suggests that when the participants used social media for social recognition and self-expression, they were more likely to feel connected to others online, to be civil in their online interactions, to make more positive social comparisons, to present their authentic selves online, and, ultimately, to experience digital flourishing. This follows logically because being civil to others online, being true in representing oneself, feeling connected with others, and comparing oneself positively with others would all rely on wanting to be recognised by others online and a genuine desire to express oneself in an online environment (Deci & Ryan, 2000; 2008).

A motive for social recognition and self-expression significantly predicted connectedness, authentic self-disclosure, and overall digital flourishing in the sample. By receiving recognition from their online social community or peers, especially for expressing themselves authentically, users' may feel connected to those people, resonating with their competence need (Amer, 2022). This has been noted in the literature where the validation one receives from others liking their posts builds a sense of connection with those who liked it (Scissors et al., 2016). The connection with authentic self-disclosure is also supported by the literature, as self-disclosure is understood as involving self-expression, and the latter has recently been found to be positively associated with the former (King, 2023). Social recognition, as an intrinsic human need, has a positive impact on people's mental health (Bajo et al., 2024). So, it stands to reason that the young adults in this sample who received recognition for expressing themselves authentically online felt this resonated with their true identities and encouraged them to exhibit other authentic behaviours. The digital flourishing dimensions that social recognition and self-expression predict emerge from the competence and relatedness needs under self-determination theory, so in expressing themselves and attaining social recognition from this, users may feel competent in navigating online

platforms as well as related to by others on those platforms, which ultimately facilitates their digital flourishing (Deci & Ryan, 2000; 2008).

Escapism had a significant, weak, positive correlation with positive social comparison and a significant, weak, negative correlation with self-control. This indicates that when the participants used social media as a form of escapism, they were more likely to make more positive social comparisons and have less self-control. This could be because the events that trigger users' sense of escapism occur unpredictably, making them use social media when they did not plan to and possibly for longer than they intended to, rendering them less in control of their usage (Demirdöğen et al., 2024)). Escapism was also a significant negative predictor of civil participation, self-control, and overall digital flourishing in the sample. Escapism as a predictor of civil participation can perhaps be explained by how digital escapism is commonly understood as having a negative effect on mental health (i.e. addiction, depression, anxiety, etc) (Subudhi et al., 2020; Uram et al., 2024). For example, users' time escaping reality could be spent participating in negative online behaviour like trolling, cyberbullying, or harassing others as a means of venting their frustration with reality, as opposed to spending time in their online communities interacting and bonding with others who share their interests (Partala, 2022). In this instance, users would perpetuate the very same negative emotions and encounters that they are attempting to escape from, making them less civil in their online interactions with others. For self-control, habitually turning to social media to elevate or avoid stress and distress when in a constant high stress/distress environment could render users less in control of their social media use than they were previously. This is supported by research that has found that excessive social media use is related to lower levels of self-control (Du et al., 2021; Hofmann et al., 2016; Świątek et al., 2023). Overall, escapism diminishes the sense of autonomy and competence that users feel while using social media platforms, and, as it negatively predicts different components of digital flourishing, it therefore stands to reason that this motive would more negatively impact users' overall digital flourishing.

Professional advancement had significant, weak, positive correlations with connectedness, civil participation, positive social comparison, and the total digital flourishing score. This means that when participants used social media to advance their careers, they were more likely to feel connected to others online, to be civil in their online interactions, to make more positive social comparisons, and, ultimately, to experience more digital flourishing. Professional advancement significantly predicted positive social comparison in the sample, but did not significantly predict any other component of digital flourishing. In

using social media to advance their careers, users may look to those they deem as better or more professionally successful than them as role models, someone they could be someday, especially if they were once in a similar career situation to the ones the users are in at that moment (Eddleston, 2009). Comparing themselves to these models could enable them to identify their weaknesses, and possibly improve on them, which would increase their sense of competence (Eddleston, 2009).

Companionship and social connectedness had significant, moderate, positive correlations with connectedness, authentic self-disclosure, and the total digital flourishing score, in addition to a significant, weak, positive correlation with civil participation and positive social comparison. This means that when the participants used social media for companionship and social connectedness, they were more likely to feel connected to others online, to be civil in their online interactions, to make more positive social comparisons, to present their authentic selves online, and, ultimately, to experience more digital flourishing. This supports a large portion of the literature on the relationship between the companionship and social connectedness motive and users' well-being, as the cultivation of relationships, even if it occurs in digital spaces, is understood to be the bedrock of human well-being (see Hoffman et al., 2023; Kirk et al, 2019; Kim & Sul, 2023). Using social media for companionship and social connectedness may enable users to feel more supported emotionally as well as possibly materially by others online and to bond with others and increase their social capital, which would increase or maintain their digital flourishing (Hoffman et al., 2023; Xie et al., 2024). Even if that companionship and social connectedness is felt with artificial intelligence, as is the emerging case in China and the United States of America, it will still positively affect their digital flourishing (Xie et al., 2024).

Companionship and social connectedness significantly predicted connectedness, positive social comparison, and total digital flourishing in the sample. Connection is a core human need or motivation that forms part of digital flourishing, so it is not unexpected that companionship and social connectedness, as two kinds of connectedness, predict digital flourishing. Participants seemed to more strongly identify with a general sense of social connectedness in relation to digital flourishing than romantic or platonic relationships; it is possible that identifying as part of a family, group, or community member fulfilled the need for connectedness and this identification ultimately increased their levels of digital flourishing (Hoffman et al., 2023; Kirk et al, 2019; Kim & Sul, 2023; Xie et al., 2024). Fostering meaningful relationships through social media that encourage digital flourishing also requires users to acknowledge and celebrate the positive attributes (i.e. success or

strengths) of others online. This may reduce or negate feelings of envy that are commonly associated with social media use and that negatively impact digital flourishing (Tandon et al., 2021). Companionship and social connectedness predicted several of the components of digital flourishing, and it therefore stands to reason that it would also predict total digital flourishing.

Entertainment had a significant, weak, positive correlation with positive social comparison, suggesting that when the participants used social media for entertainment, they were more likely to make more positive social comparisons. Entertainment was also a significant positive predictor for positive social comparison; however it was a significant negative predictor for authentic self-disclosure. For positive social comparison, users could be using the entertaining content they consume and people they see online as inspiration, which could assist in the self-formation processes that adolescents and young adults undergo (Lüders, 2025). Rigby and Ryan (2016) argue further that people can fulfil their psychological needs through the entertaining content they consume or engage with online. So, it is very possible that users may feel they are attaining their competence need vicariously through the online entertainment content that they engage with. For authentic self-disclosure, a significant portion of the most popular and entertaining online content has been noted to be fake in nature (staged pranks, altercations, celebrations, etc.) so this may send a message to users that they have to exhibit less authentic behaviours online in order to be popular on social media (Dermendjieva & Slavova, 2018). Faking their interactions or behaviour in these spaces could reduce their sense of competence and thus hinder their digital flourishing by reducing their orientation towards presenting themselves authentically and truly.

Information and connectedness had significant, moderate, positive correlations with connectedness and the total digital flourishing score, in addition to significant, weak, positive correlations with civil participation, authentic self-disclosure, and self-control. This indicates that when the participants used social media for information and connectedness, they were more likely to feel connected to others online, to be civil in their online interactions, to present their authentic selves online, to have more self-control, and, ultimately, to experience digital flourishing. Little is known about online information seeking amongst young adults and its effect on their well-being as most of the data is focused on online health information seeking and its impact on older adults' well-being (see Hofer et al, 2019; Nguyen et al., 2021). Most of that literature has found online health information seeking to be positively associated with users' well-being, so it would not be unreasonable to assume that the findings mirror this.

Information and connectedness was a significant predictor of connectedness, self-control, and total digital flourishing in the sample. For connectedness, since both a motive to obtain information and connectedness and experiences of connectedness deal with the connection people strive for online, it seems self-evident that the former would predict the latter. Users' sense of relatedness could be reinforced by the connection they feel with others online, which could aid in promoting their digital flourishing ((Deci & Ryan, 2000; 2008)). A possible explanation for the finding for self-control could be that focusing on seeking a particular piece of information online may give users increased skills to ignore other unrelated content, thereby avoiding going down a rabbit hole (spending more time than intended while seeking additional information) and, ultimately, facilitating control of their social media use (Laran, 2020). Stress is known to decrease users' well-being and trigger unintended social media use (i.e. self-control failure), however, feeling connected to others reduces stress enabling users to have better control over their social media use (Du et al., 2021; Hofmann et al., 2016; Świątek et al., 2023). This self-control reinforces their sense of autonomy, ultimately facilitating their digital flourishing. As information and connectedness resonates with users' competence and autonomy needs and predicted several components of digital flourishing, it follows that it would also predict total digital flourishing.

Conclusion

This chapter provided detailed discussions concerning the findings of this study. The results of the principal component analyses and reliability analyses reinforced the multidimensional nature of the constructs under study whilst the correlation combined with the regression results further clarified the relationships between digital flourishing and the relevant aspects of social media use. The relationships between type of social media use, perceived social media literacy, motives for social media use, and digital flourishing were elaborated through the lens of self-determination theory (the underpinning theoretical framework of digital flourishing) as well as current and previous empirical evidence. However, the novelty of digital flourishing and its corresponding findings meant that some of the results' interpretations were limited to educated speculation, which drew on evidence from similar, relevant studies. There were instances where the findings supported the literature (for example, entertainment as a motive negatively predicting digital flourishing), whilst in other instances they contradicted the literature (for example, passive use being a positive predictor of digital flourishing), revealing unexpected patterns that warrant further

investigation.

Chapter 6: Limitations, Recommendations and Conclusion

Introduction

Chapter 6 will highlight this study's contributions, implications and areas for further inquiry. It will begin by outlining the strengths of this study through the contributions it made to the literature in terms of digital flourishing, the aspects of social media under study and broadly on the potential positive effects social media use can have on user's psychological well-being. There will then be a discussion about the limitations that resulted from doing this kind of study (i.e. limitations on the bases of methodology). This chapter will then conclude on the findings of the current study and research report.

Strengths

This study had three major strengths. The first was that it explored and expanded on a novel conception of psychological well-being: digital flourishing. The research on this construct has been limited to those done by Janice Bowles and their affiliates (see Janicke-Bowles, 2023; Janicke-Bowles et al., 2023; Rosič et al., 2022), where the focus was predominantly to establish the construct's parameters/dimensions as well as validating its corresponding scale. My study went beyond this as it took those established parameters of digital flourishing and identified which features of social media are in addition to being associated with have the potential to promote it amongst users. Additionally, it established the internal structure as well as internal consistency reliability of the measures used in a sample of young South African adults which means the current study established that the constructs under investigated (especially digital flourishing and perceived social media literacy) as well the means to measure them are not limited to western or American contexts.

The second strength is this study's rigour. In that establishing internal structure and internal consistency reliability of the measures in the sample and meeting the statistical assumptions before running the statistical analyses ensured that my findings were reliable and the current study replicable especially in the South African context (Kullas, 2023). Providing clarification on some of the contradicting findings in the literature is the third and final strength of the current study. By examining multiple variables as possible predictors simultaneously, the current study found that the relationships between the variables under study were dynamic. So, what were originally taken to be conflicting results in the literature (e.g. passive use being positively or negatively associated with psychological well-being in different studies) were possibly inaccurate attempts to capture digital flourishing and its relationship with social media use. Granting more legitimacy to the emerging stance in the

literature that the different aspects/features of social media use must not be investigated in isolation from other aspects or it cannot be assumed that the relationships they have with psychological well-being are direct. In this way, the current study contributes to a nuanced insight into digital flourishing and its relationships with social media use, perceived social media literacy and motives for social media use as well as a richer overall understanding of the positive effects social media use has on users' psychological well-being (Roberts & David, 2023).

Limitations

The first major limitation of this study was its cross-sectional nature, in that it was not possible to track trends over different time periods or across different events because the data was collected within a short timeframe (Scholtz, 2021). As the relationship between the various aspects of social media that were under study and digital flourishing could be influenced by time, the results that I obtained in this study might vary if the relationships were investigated for a longer period of time or at different times in the academic year (Scholtz, 2021). In addition to its cross-sectional nature, the fact that the design was non-experimental means that causal claims could not be made on the basis of this study's findings (Scholtz, 2021). This limited the findings to claims about the associative and predictive relationships between the variables that were under study.

Another major limitation is the self-reported nature of this study. This study required that participants to identify and report on their levels of social media use, motives for social media use, and digital flourishing. It is well documented in the literature that there are often discrepancies between participants reported and actual behaviours and/or perceptions (Coyne & Woodruff, 2024). This has specifically been noted in the literature on social media use (and well-being) where participants have thought their use was substantially lower than it was (Coyne & Woodruff, 2024). In this way, there could have been discrepancies between the information that the participants reported and their actual experiences of social media use, motives for social media use, and digital flourishing. Another concern is the possibility for social desirability bias and other forms of response bias, which may have affected the quality of the data obtained (Van de Mortel, 2008). The sample and sampling presented additional limitations. The sample largely consisted of university students this was not representative of young South African adults as the majority of them have never been enrolled in a university or tertiary education institution (Statista, 2024; Statistics South Africa, 2024). Additionally, because this was a volunteer-based study self-selection bias, where people choose to

participate on the basis of their interests or personal traits as opposed to being actual sample representatives, influences the extent to which our findings are generalisable (Zawadzki et al., 2023). Furthermore, since it is evident from this study's findings and the initial literature on digital flourishing that it is a dynamic phenomenon (i.e. it is influenced by various factors), the generalisability of my findings is limited to this context (South Africa) and this particular point in time (Scholtz, 2021).

Another large limitation of this study is the fact that only multiple regressions were performed on the collected data. Although my study establishes novel findings on social media use and digital flourishing within a South African context, as it relates to aspects of social media use's impact on users' psychological wellbeing the current literature is moving towards accounting for the conflicting results obtained through exploring moderating and mediating variables in this relationship. Social comparison, as seen in Liu and Xiao's (2024) study, is one such variable, as it may moderate the effect that passive use has on users' psychological wellbeing. This could possibly account for passive use negatively predicting the civil participation dimension of digital flourishing. Law et al. (2020), Marciano et al. (2024), and Roberts and David (2023) found that time spent on social media and the number of social media apps used had an impact on users' psychological well-being when these were paired with other aspects of social media use (for example, type of interaction and emotional connection). So, although my results speak to which aspects of social media use negatively or positively predict digital flourishing, they are limited in establishing whether those relationships are direct or moderated or mediated by other variables, and it is not possible to identify whether other variables might strengthen or weaken the effects of the original variables on digital flourishing. This strongly supported the need for further research in the field that builds on and expands the findings in this study.

Recommendations for future research directions

The first major recommendation is that future studies on digital flourishing in South Africa are longitudinal as well as cross-sectional in nature and explore the relationships between digital flourishing and various aspects of social media use over time. It would also be important for more research to be done in larger and more representative samples. This would provide insight into digital flourishing amongst young South African adults and enable more generalisable claims to be made about this. Additionally, it will enable the tracking of trends and developments within this population.

The second recommendation is that future studies focus on the possible moderation and mediation roles played by a range of other variables in the relationships between the various aspects of social media use and digital flourishing. This could help to account for some of the conflicts seen between some of my findings and those found in the literature (especially those concerning passive use and active use in the form of posting online). Linked to this, the next recommendation is for variables such as time spent, number of sites belonged to or accessed, online comparison and self-presentation, and the content or nature of the social media posts to be included as additional variables in these future studies as little is known about their effect on digital flourishing and they may be significant predictors of digital flourishing or moderators or mediators of the relationships between other aspects of social media use and digital flourishing. Additionally, future studies should investigate the relationship between passive, reactive, and interactive social media use and digital flourishing as this could provide a more nuanced and accurate account of these relationships.

The next recommendation is that future studies investigate actual social media use, social media literacy, motives for social media use, and digital flourishing. This would clarify whether participants' perceptions and their actual behaviour significantly correspond with each other. Additionally, it would clarify if making claims about users' perceptions in relation to digital flourishing are the same as making claims about their actual digital flourishing.

Lastly, future studies should also investigate the relationships between the academic purposes and dating and friendship motives and digital flourishing. This would provide clarity on these relationships and whether my results were restricted to this particular sample or represent a genuine trend unique to South African young adults. It may also be useful for future studies to consider different modes of investigation, including qualitatively exploring the perceived relationships between different aspects and types of social media use and digital flourishing as well as understandings of the concept of digital flourishing in samples of South African young adults.

Conclusions

The global increase in social media integration necessitates a comprehensive understanding of the effects social media can have on the populace's mental health (Chekole & Abate, 2021; Richter et al., 2019; Sherif, 2024; Wongkoblap et al., 2017). This study was an attempt to bolster the evidence available on the positive effects of social media use on user's psychological well-being. It set out to investigate which aspects of social media use predicted

enhanced psychological well-being, represented by the novel concept of digital flourishing. Digital flourishing, a holistic state of well-being in digital environments characterized by meaningful engagement, connectedness, authentic self-disclosure, positive social comparison, and self-controlled technology use was presented as a comprehensive theoretical framework and means of capturing psychological well-being in digital spaces (Janicke-Bowles, 2023; Janicke-Bowles et al., 2023; Rosič et al., 2022). The novelty of this conception and theoretical framework as well as the resulting limited international research made it imperative to investigate digital flourishing within a South African context in a group that are largely subject to social media integration, young adults.

The relationships between various aspects of social media use and digital flourishing were investigated in a sample of 207 young South African adults who were mostly black, female, bilingual, full time students with some level of tertiary qualification. Types of social media use (i.e. active, passive, rational, and emotional use), perceived social media literacy, and motives for social media use were identified across the literature as aspects of social media use that had the potential to impact users' psychological well-being. This study therefore aimed to determine levels of digital flourishing, types of social media use, perceived social media literacy, and motives for social media use in the sample; the relationships between the different aspects of social media use and digital flourishing; and the extent to which the different aspects of social media use predicted digital flourishing.

In relation to the levels of the variables that were under study, participants reported moderate levels of passive use and active use in the form of online posting and communication, although average passive use was relatively higher. They also reported average levels of perceived social media literacy and most motives for using social media, although the averages for using social media for academic purposes, entertainment, and information and connectedness were relatively higher than the averages for the other motives. Furthermore, the participants in the sample reported average levels of digital flourishing (as well as its five components), with a relatively higher average for civil participation.

Furthermore, the relationships between types of social media use, perceived social media literacy, motives for using social media, and digital flourishing were established. All the types of social media use under study had significant, weak to moderate, positive relationships with digital flourishing as a whole (i.e. the total digital flourishing score) as well as with its dimensions (except self-control). This meant that for the 207 young South African adults in

the sample, the more passive, active, and rational they were in their use in addition to the more emotionally invested they were in social media, the more likely they were to digitally flourish. This contradicts most of the literature which asserts that passive use and an increased emotional connection to social media negatively impact users' psychological well-being (Bekalu et al., 2019).

Perceived social media literacy had significant, weak to moderate relationships with digital flourishing whilst all of the nine motives for social media use had significant, weak to moderate relationships with at least one dimension of digital flourishing. Only escapism and following and monitoring others had significant, weak to moderate, negative relationships with the digital flourishing dimension of self-control. In this way, all but two of the relationships between the aspects of social media under study and digital flourishing were positive, providing evidence to support the position that social media use can have positive effects.

This study found that all aspects of social media use under study, except for posting online and the motives of dating and friendship as well as academic purposes, predicted at least one component of digital flourishing. Additionally, the only variables that were negative predictors of digital flourishing in this sample were passive use and three of the motives, namely escapism, entertainment, and following and monitoring others. This corroborates studies that have found using social media for these three reasons is associated with negative psychological wellbeing outcomes (for example, Sever and Özdemir, 2022). Lastly, this study established the aspects of social media use that predicted different dimensions of digital flourishing. The approximate percentage of variance in digital flourishing explained by the type of social media use and perceived social media literacy within the sample was 27% for overall digital flourishing. For motives for social media use, the approximate percentage of variance explained in overall digital flourishing was 31%. In this way, the types of social media use, perceived social media literacy, and motives for using social media predicted digital flourishing to a significant extent within a sample of young South African adults. Although it is for future studies to determine the role particular aspects of social media use have in predicting digital flourishing as well as possible moderators or mediators of these relationships, this study did identify novel findings about the existence and nature of these relationships within a South African context. Ultimately, the findings of this study establish that social media use can have positive effects on users' mental health.

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Appendices

Appendix A: Participant information sheet



Date: [to be inserted]

Hello,

My name is Nelly Kalonji and I am a student currently completing my Master's degree in Social and Psychological Research at the University of the Witwatersrand. As part of the requirements for my degree, I am conducting research. My research aim is to explore the relationship between various features of social media use and digital flourishing. I will be using data obtained from volunteers who are young adults between the ages of 18 and 35 currently living in South Africa.

If you meet these criteria, I would like to ask you to please consider participating in my study. Participating will require you to access and complete an online survey at a convenient time for you. The survey should take approximately 15 to 25 minutes to complete and you are asked to do this within four weeks of receiving this invitation. Once you have answered the survey, you can submit the completed answers online.

Participation is completely voluntary and you will not be advantaged or disadvantaged in any way, whether you choose to complete the survey or not. You will be asked for informed consent to participate in the study at the end of this participant information sheet and submission of the completed survey will be regarded as consent to participate in the study. If you access the survey, you can choose to stop answering the survey at any point before submitting your answers and you can choose not to answer any questions you prefer not to.

No individually identifying information, such as your name or identity number, will be asked for and you will therefore be completely anonymous. Your responses will remain strictly confidential and your anonymity is guaranteed as no individually identifying information will be recorded in the dataset (i.e. the dataset will be fully anonymised).

There are no direct benefits for participating in the study. In the event that you are concerned by any of the questions asked in the survey and/or if you would like to discuss any of these further, you can contact: The South African Depression and Anxiety Support Group – phone 0800 456 789 or Whatsapp 076 882 2775.

You will be able to obtain feedback for the study in the form of a summary of the general results by requesting this from the researcher; individual feedback will not be possible as the data is anonymous. Data from the survey will be stored securely in the form of a fully anonymised spreadsheet on password-protected computers. With your permission, my supervisor and I would like to store your responses permanently in anonymous, electronic form to possibly use for future research projects and/or for teaching purposes. Findings from this study will be reported in a research report submitted to the University of the Witwatersrand and may be reported in academic journals and/or at conferences as well. The fully anonymised dataset may also be provided to other researchers or academics for verification and/or analytic purposes.

This research will help to better understand social media use and digital flourishing. If you have any questions or concerns, please feel free to contact me or my supervisor as per the details below. Ethical queries can also be directed to: The University of the Witwatersrand Human Research Ethics Committee (non-medical): 011-717-1408; email hrecnon-medical@wits.ac.za.

Thank you for considering participating in my research,

Yours sincerely

Nelly Kalonji

Researcher: Nelly Kalonji (nellybkalonji@gmail.com)

Supervisor: Dr Nicky Israel (Nicky.Israel@wits.ac.za)

I have read the details of this study and consent to participate in the study on a voluntary basis. I also understand that I may withdraw at any point up to submission of the survey.

YES	NO
-----	----

Appendix B: Participant invitation (content)



Date: [to be inserted]

Hi,

My name is Nelly Kalonji and I am a Master's in Social and Psychological Research student at the University of the Witwatersrand. I am doing a study exploring the relationship between various features of social media use and digital flourishing.

In order to get data for the study, I am asking for young adults between the ages of 18 and 35 currently living in South Africa to please fill out an online survey that should take approximately 15 to 25 minutes to complete.

For this study,

- Participation is completely voluntary
- Responses will be completely confidential and anonymous
- Completion of the survey will be considered as consent to participate

If you are aged 18 to 35 and living in South Africa, I would really appreciate it if you would please consider participating in my study!

Please follow the link below which will take you to an online survey with the participant information sheet and survey questions:

[link address to be inserted]

If you know of anyone else who would fit in the sample and who might be interested in participating in the study, please pass this invitation on to them as well.

Thank you in advance,
Nelly Kalonji

Researcher: Nelly Kalonji (nellybkalonji@gmail.com)

Supervisor: Dr Nicky Israel (Nicky.Israel@wits.ac.za)

Appendix C: Access request letter



Date: [to be inserted]

Hello,

My name is Nelly Kalonji and I am a student currently completing my Master's degree in Social and Psychological Research at the University of the Witwatersrand. As part of the requirements for my degree, I am conducting research. My research aim is to explore the relationship between various features of social media use and digital flourishing. I will be using data obtained from volunteers who are young adults between the ages of 18 and 35 currently living in South Africa.

I am writing to please request permission to access students at the University of the Witwatersrand to ask for volunteers to participate in my study by emailing an invitation with a link to an online survey to all registered students.

Participating in the study will require the participant to access and complete an online survey at a convenient time for them. The survey should take approximately 15 to 25 minutes to complete and they will be asked to do this within four weeks of receiving the invitation. Once they have answered the survey, they will be able to submit the completed answers online.

Participation is completely voluntary and participants will not be advantaged or disadvantaged in any way, whether they choose to complete the survey or not. They will be asked for informed consent to participate in the study at the end of the participant information sheet and submission of the survey will be regarded as consent to participate in the study. If they access the survey, they will be able to choose to stop answering the survey at any point before submitting their answers or to leave out any questions they prefer not to answer.

No individually identifying information, such as name or identity number, will be asked for and participants will therefore be completely anonymous. Their responses will remain strictly confidential and their anonymity is guaranteed as no individually identifying information will be recorded in the dataset (i.e. the dataset will be fully anonymized).

There are no direct benefits for participating in the study. In the event that participants are concerned by any of the questions asked in the survey and/or if they would like to discuss any of these further, they can contact: The South African Depression and Anxiety Support Group – phone 0800 456 789 or Whatsapp 076 882 2775.

Participants will be able to obtain feedback for the study in the form of a summary of the general results by requesting this from the researcher; individual feedback will not be possible as the data is anonymous. You are welcome to contact me if you would like to receive this feedback as well. Data from the survey will be stored securely in the form of a fully anonymized spreadsheet on password-protected computers. With permission, I and my supervisor will store the responses permanently in anonymous, electronic form to possibly use for future research projects and/or for teaching purposes. Findings from this study will be reported in a research report submitted to the University of the Witwatersrand and may be reported in academic journals and/or at conferences as well. The fully anonymised dataset may also be provided to other researchers or academics for verification and/or analytic purposes.

This research will help to better understand social media use and digital flourishing. If you have any questions or concerns, you are welcome to contact me or my supervisor as per the details below and participants will be given the same information for queries. Ethical queries can also be directed to: The University of the Witwatersrand Human Research Ethics Committee (non-medical): 011-717-1408; email hrecnon-medical@wits.ac.za.

I would be very grateful if you would please consider my request to invite registered students to participate in my study and to circulate an email invitation to all registered students? If you are willing to allow this, please can you provide me with permission for this in writing?

Thank you for considering my request,

Yours sincerely

Nelly Kalonji

Researcher: Nelly Kalonji (nellybkalonji@gmail.com)

Supervisor: Dr Nicky Israel (Nicky.Israel@wits.ac.za)

Appendix D: Demographic Questionnaire

Please answer the questions below. All of the information you provide will be kept strictly confidential and cannot be used to identify you as an individual.

1. What is your current age (in years): _____

2. Which of the following best describes you?

Male	Female	Non-binary	Other (please specify):	Prefer not to say

3. Which of the following best describes you?

Asian	Black	Coloured	Indian	White	Other (please specify):	Prefer not to say

4. Which languages do you speak fluently (please list as many as apply):

5. Which language do you speak most often or speak most fluently (please list only one language)? _____

6. Please indicate the highest qualification that you have completed or are completing (if you are currently completing a qualification, please select this qualification):

Some high school	National senior certificate/ Matric	Technical/ vocational training	Bachelors/ under-graduate degree	Honours degree	Masters degree	Doctorate	Other (please specify):

7. Which of the following best describes you (please select as many as apply):

Employed full-time	Employed part-time	Self-employed	Not employed	Other (please specify):

8. Which of the following best describes you (please select as many as apply):

Studying full-time	Studying part-time	Not studying	Other (please specify):

9. If you are currently employed in any capacity, please give your occupation and field of work: _____

10. If you are currently studying in any capacity, please give your field of study and your current year of study: _____

Appendix E: Social Media Use Questionnaire

Please answer the questions below. All of the information you provide will be kept strictly confidential and cannot be used to identify you as an individual.

1. How many social media sites or platforms do you currently belong to? _____

2. Which of the following social media sites/ platforms do you currently belong to (please select as many options as apply):

Whatsapp	YouTube	Facebook	Instagram	X (Twitter)	Pinterest	TikTok	LinkedIn
Telegram	Snapchat	Reddit	Tumblr	Signal	Discord	Other (please specify):	

3. Have you ever belonged to social media sites/ platforms that you have deleted or deactivated (either for a time or permanently)? YES / NO

If yes, please briefly explain why you deleted or deactivated the site/s? _____

4. On average, how many hours per day do you spend on social media sites/ platforms (please choose only one option below that best applies):

None	Less than 1 hour	1 to 2 hours	2 to 3 hours	3 to 4 hours	4 to 5 hours	5 to 6 hours
6 to 7 hours	7 to 8 hours	8 to 9 hours	9 to 10 hours	10 to 11 hours	More than 11 hours	Other (please specify):

5. How often do you perform each of the following activities on your social media sites/platforms?

	Never	Rarely	Some-times	Often	Very often
Post videos					
Post photos					
Post status updates					
Post comments					
Share links					
Chat online					
Create or RSVP to events					
Send private messages					
Play games					
Read posts					
View videos					
View photos					
Check in to see what someone is up to					
Read news articles					
Tag photos or videos					

6. Please complete the following:

SD = strongly disagree; D = disagree; N = neither agree nor disagree; A = agree; SA = strongly agree

	SD	D	N	A	SA
I enjoy checking my social media accounts					
I feel disconnected from friends when I have not logged on to social media					
I don't like to use social media					
I would like it if everyone used social media to communicate					
I would be disappointed if I could not use social media at all					
Using social media is part of my everyday routine					
I get upset when I can't log on to social media					
I respond to content that others share using social media					
I prefer to communicate with others mainly through social media					
Social media plays an important role in my social relationships					

Appendix F: Digital Flourishing Scale

Please answer the questions below. All of the information you provide will be kept strictly confidential and cannot be used to identify you as an individual.

SD = strongly disagree; D = disagree; SLD = slightly disagree; N = neither agree nor disagree; SLA = slightly agree; A = agree; SA = strongly agree

	SD	D	SLD	N	SLA	A	SA
I feel part of a community when I interact with others online							
When I interact with others about politics online, I know how to have a civil discussion							
Comparing myself to others online motivates me to accomplish my goals							
I allow my social network to see who I really am							
For the most part, I feel in control of how much time I spend interacting with others online							
I feel a bond to my online community/ network							
During my interactions online, I know how to take a stand for something important to me in a civil manner							
I compare my life to those online who I can learn from							
I feel comfortable presenting who I truly am online, in the same way I do offline							
I feel in control over when to start and when to stop spending time on online communication							
I find great purpose and meaning in my online interactions							
In online discussions, I know how to get my point across without offending people							
Seeing how others present themselves online motivates me to make changes in my own life							
What I post online reflects who I really am							
I communicate online when I want to, not when notifications tell me to							
When I browse through my online communication platforms, I feel a sense of connection to others							
When I interact with others online, I tend to respond reasonably even when they make me angry							
I compare my life to those online who are going to push me to be better							
I show my true self online							
I am able to disconnect from my online interactions when I need a break							
I could turn to my online community if I needed specific advice on how to handle a problem							
When I communicate online, I am careful to adapt my comments and behaviours to be appropriate for my audience							
Seeing others' achievements online inspires me to do better							
When interacting online, I feel comfortable presenting the							

person I am							
When I browse through content online I feel in control of how I spend my time							

Appendix G: Perceived Social Media Literacy Scale

Please answer the questions below. All of the information you provide will be kept strictly confidential and cannot be used to identify you as an individual.

SD = strongly disagree; D = disagree; N = neither agree nor disagree; A = agree; SA = strongly agree

	SD	D	N	A	SA
I know how to create an account on social media					
I know how to delete my account on social media					
I know how to deactivate my account on social media					
I know how to post content such as photos on my social media account					
I know how to remove unwanted content on my social media account					
I know the copyright laws governing social media platforms					
I know how to appropriately handle conflicts in social media					
I am aware of social media policy that applies to me					
I know how to verify whether what is shared on social media is correct					
I know how to use different sources of information to verify information I see on social media					
I can tell whether information on social media is true or false					
Social media sites such as Facebook control what I see on social media					
Information that I post on social media is permanent					
The advertisements that I see on social media are specifically targeted to my preferences					
I know how to control what posts or information I see on social media					
I know how to control who gets to see what I post on social media					
<i>I know what information I should not post or share on social media</i>					

Appendix H: Motives for Social Media Use Scale

The following statements are reasons why people use social media. Please indicate the extent to which each of these applies to why you use social media. All of the information you provide will be kept strictly confidential and cannot be used to identify you as an individual.

1 = completely untrue; 7 = completely true

	1	2	3	4	5	6	7
To hook up							
To look for a date							
To seek a romantic partner							
To make new friends							
To extend my circle of friends							
To meet new people							
To ask about information about what to study for exams/ what to prepare for work							
To ask for or share class notes/ work-related information							
To check or share group assignments/ to consult about work with colleagues							
To not feel disengaged from the world							
To feel connected with people							
To feel socially integrated							
To keep up to date with what my contacts are doing in their day-to-day life							
To know the details of my friends' lives							
To snoop on people that I am interested in							
To fill my free time							
To kill time when I am bored							
To entertain myself							
To stand out from others							
For other people to comment on my posts							
To check that others like my posts							
To express my feelings and thoughts							
To give my opinion on a topic							
To discuss some subject (with other people)							
To keep up with what happens in the world							
To be informed about the news							
To find information about the topics that I like and am interested in							
To forget about work, school, or other things in my life							
To avoid other people							
To avoid work or tasks that I need to complete							
To not be alone							
To have someone to talk to							
To feel less lonely							
To help with my professional future							
To post my CV or references online							
To network with professional contacts							

Appendix I: Open-Ended Questions

1. Is using social media important to you? Please briefly explain your answer.
2. Is there anything that you particularly like about using social media?
3. Is there anything that you particularly dislike about using social media?
4. Does using social media sites ever make you feel positive emotions (e.g. happy, proud, motivated, comfortable, etc...)? Please briefly explain your answer
5. Does using social media sites ever make you feel negative emotions (e.g. sad, angry, demotivated, uncomfortable, etc...)? Please briefly explain your answer
6. Is there anything else you would like to add about using social media or how this makes you feel?

Appendix J: Ethics Certificate



SCHOOL OF HUMAN AND COMMUNITY DEVELOPMENT ETHICS COMMITTEE **CONSTITUTED UNDER THE UNIVERSITY HUMAN RESEARCH ETHICS COMMITTEE (NON-MEDICAL)**

CLEARANCE CERTIFICATE

PROTOCOL NUMBER: MASPR-24-03

PROJECT TITLE:

Social media and digital flourishing in South Africa.

INVESTIGATOR

Kalonji Nelly

SCHOOL/DEPARTMENT OF INVESTIGATOR

SHCD/Psychology

DATE CONSIDERED

07 June 2024

DECISION OF THE COMMITTEE

Approved unconditionally

RISK LEVEL

Low Risk

EXPIRY DATE

31 December 2026

ISSUE DATE OF CERTIFICATE

01 June 2024

CHAIRPERSON

Aline Ferreira Correia

cc: Dr Nicky Israel (Supervisor)

DECLARATION OF INVESTIGATOR

To be completed in duplicate and **ONE COPY** returned to the Chairperson of the School/Department ethics committee.

I/we fully understand the conditions under which I am/we are authorized to carry out the abovementioned research and I/we guarantee to ensure compliance with these conditions. Should any departure be contemplated from the research procedure as approved, I/we undertake to submit an amendment of the protocol to the Committee.

A handwritten signature in black ink, appearing to read 'Khalid', followed by a long horizontal line.

Signature

Date 15/ 07 /2024

Appendix K.1: Principal components analysis for Active and Passive Social Media Use

Table 1a
Communalities

	Initial	Extraction
Item 1	1.000	0.656
Item 2	1.000	0.678
Item 3	1.000	0.440
Item 4	1.000	0.266
Item 5	1.000	0.451
Item 6	1.000	0.487
Item 7	1.000	0.531
Item 8	1.000	0.411
Item 9	1.000	0.141
Item 10	1.000	0.703
Item 11	1.000	0.799
Item 12	1.000	0.835
Item 13	1.000	0.414
Item 14	1.000	0.216
Item 15	1.000	0.562

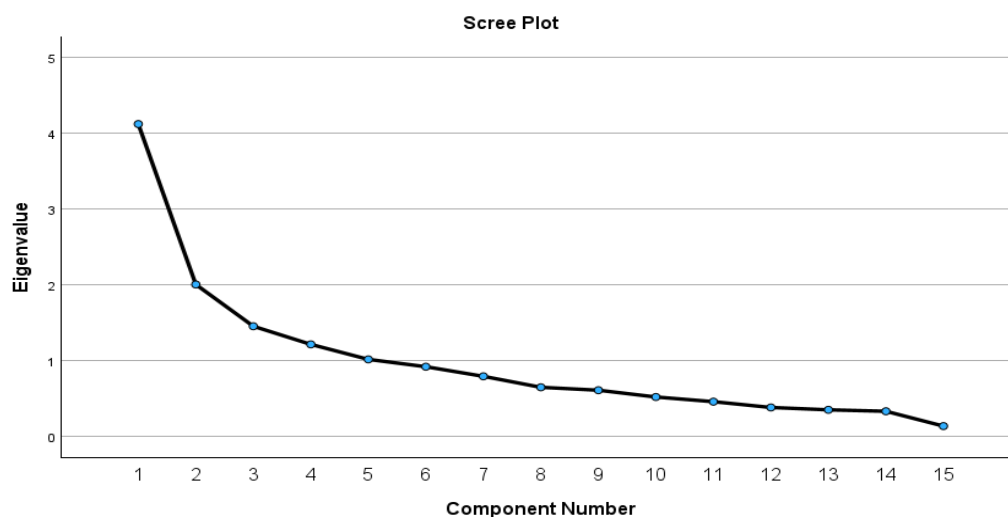


Figure 1

Scree Plot for active and passive social media use scale

Appendix K.2: Principal components analysis for Rational and Emotional Social Media Use

Table 47

Communalities

	Initial	Extraction
Item 1	1.000	0.519
Item 2	1.000	0.273
Item 3	1.000	0.444
Item 4	1.000	0.631
Item 5	1.000	0.576
Item 6	1.000	0.692
Item 7	1.000	0.472
Item 8	1.000	0.510
Item 9	1.000	0.618
Item 10	1.000	0.469

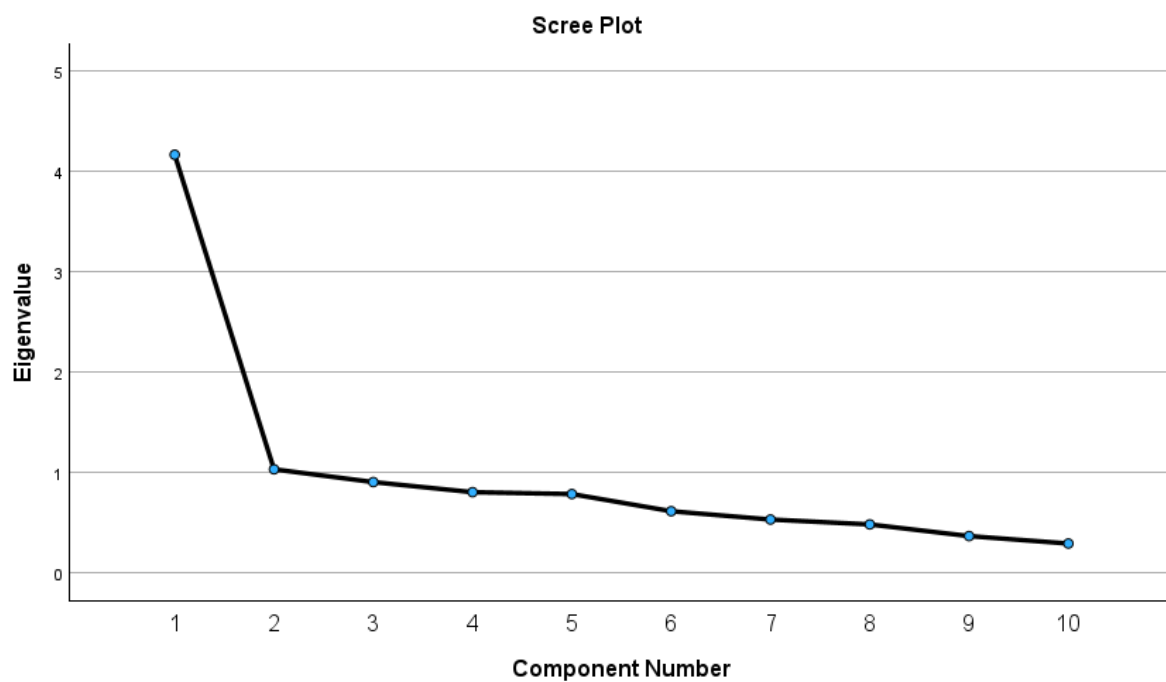


Figure 2

Scree Plot for Rational and Emotional Social Media Use Scale

Appendix K.3: Principal component analysis for Perceived Social Media Literacy Scale

Table 48

Communalities

	Initial	Extraction
Item 1	1.000	0.772
Item 2	1.000	0.781
Item 3	1.000	0.738
Item 4	1.000	0.657
Item 5	1.000	0.565
Item 6	1.000	0.794
Item 7	1.000	0.603
Item 8	1.000	0.726
Item 9	1.000	0.789
Item 10	1.000	0.763
Item 11	1.000	0.771
Item 12	1.000	0.509
Item 13	1.000	0.546
Item 14	1.000	0.616
Item 15	1.000	0.525
Item 18	1.000	0.711
Item 17	1.000	0.489

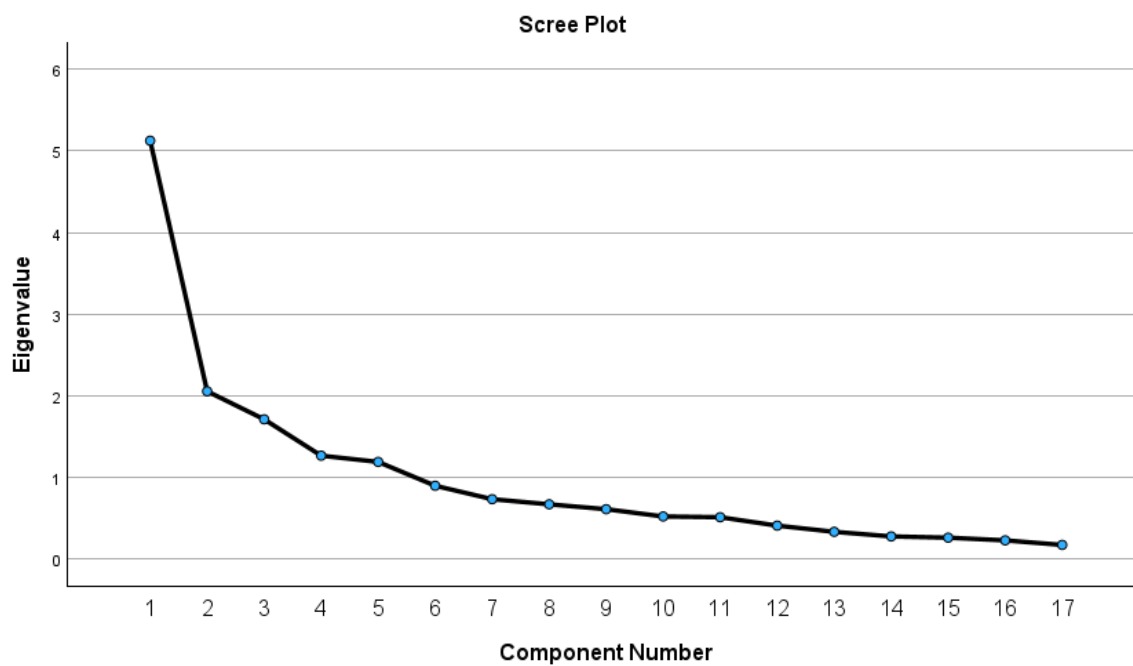


Figure 3

Scree Plot for Perceived Social Media Literacy Scale

Appendix K.4: Principal component analysis for Motives for Social Media Use Scale

Table 49

Communalities

	Initial	Extraction
Item 1	1.000	0.798
Item 2	1.000	0.832
Item 3	1.000	0.808
Item 4	1.000	0.868
Item 5	1.000	0.775
Item 6	1.000	0.830
Item 7	1.000	0.807
Item 8	1.000	0.895
Item 9	1.000	0.874
Item 10	1.000	0.688
Item 11	1.000	0.780
Item 12	1.000	0.852
Item 13	1.000	0.709
Item 14	1.000	0.796
Item 15	1.000	0.625
Item 18	1.000	0.847
Item 17	1.000	0.855
Item 19	1.000	0.756
Item 20	1.000	0.500
Item 21	1.000	0.806
Item 22	1.000	0.784
Item 23	1.000	0.703
Item 24	1.000	0.774
Item 25	1.000	0.763
Item 26	1.000	0.787
Item 27	1.000	0.738
Item 28	1.000	0.734
Item 29	1.000	0.664
Item 30	1.000	0.707
Item 31	1.000	0.754
Item 32	1.000	0.825
Item 33	1.000	0.811
Item 34	1.000	0.823
Item 35	1.000	0.741
Item 36	1.000	0.809

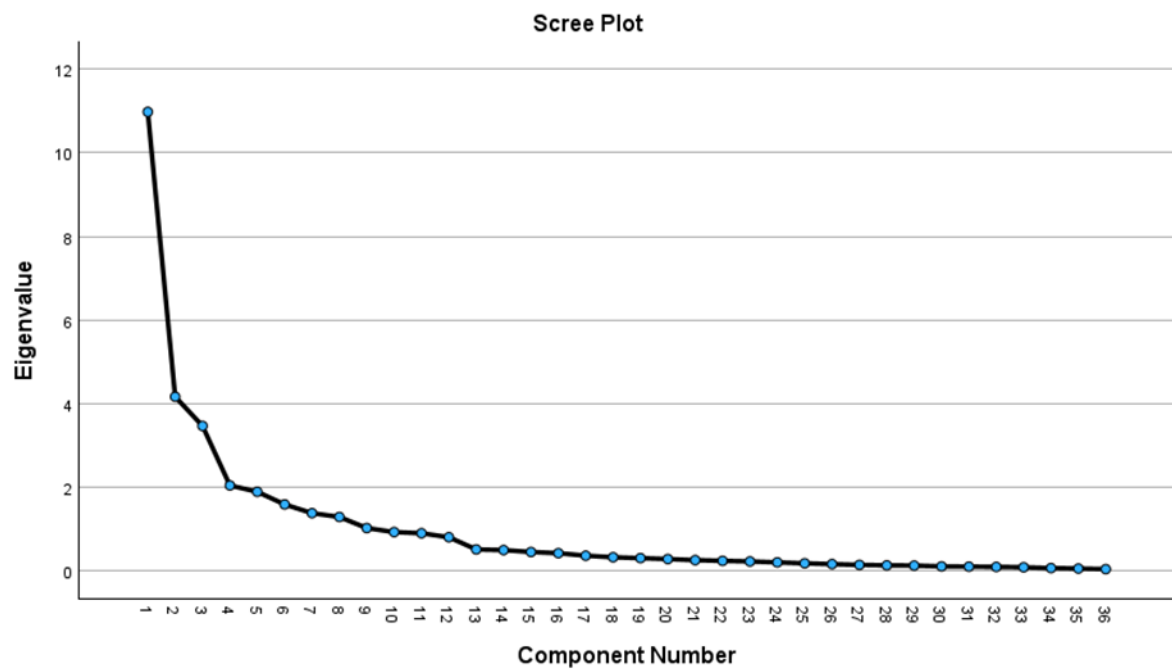


Figure 4

Scree Plot for Motives for Social media Use Scale

Appendix K.5: Principal component analysis for Digital Flourishing Scale

Table 50

Communalities

	Initial	Extraction
Item 1	1.000	0.691
Item 2	1.000	0.507
Item 3	1.000	0.482
Item 4	1.000	0.571
Item 5	1.000	0.642
Item 6	1.000	0.706
Item 7	1.000	0.579
Item 8	1.000	0.650
Item 9	1.000	0.707
Item 10	1.000	0.702
Item 11	1.000	0.615
Item 12	1.000	0.571
Item 13	1.000	0.633
Item 14	1.000	0.635
Item 15	1.000	0.475
Item 16	1.000	0.572
Item 17	1.000	0.586
Item 18	1.000	0.710
Item 19	1.000	0.804
Item 20	1.000	0.572
Item 21	1.000	0.393
Item 22	1.000	0.404
Item 23	1.000	0.628
Item 24	1.000	0.669
Item 25	1.000	0.679

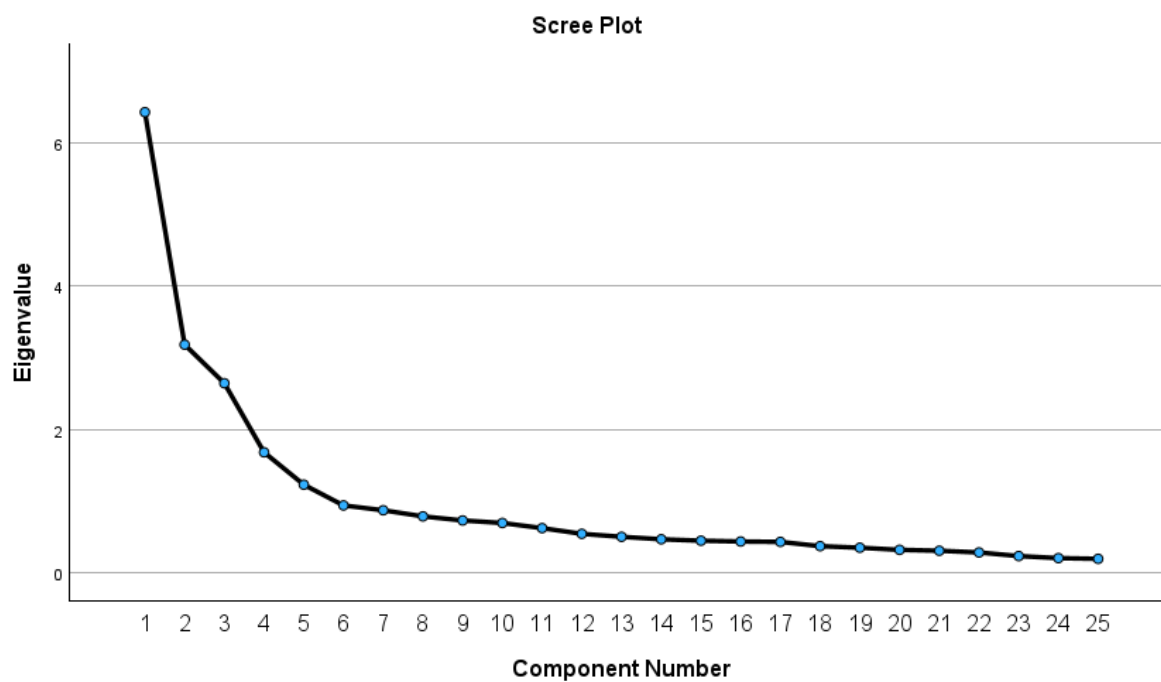


Figure 5

Scree Plot for Digital Flourishing Scale

Appendix L: Descriptive statistics

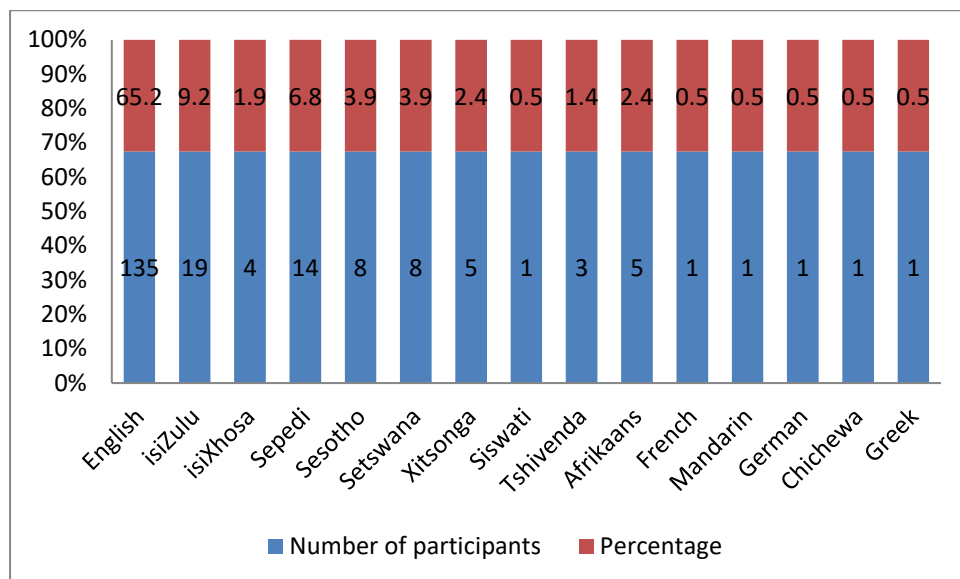


Figure 6

Column graph for Home Languages spoken

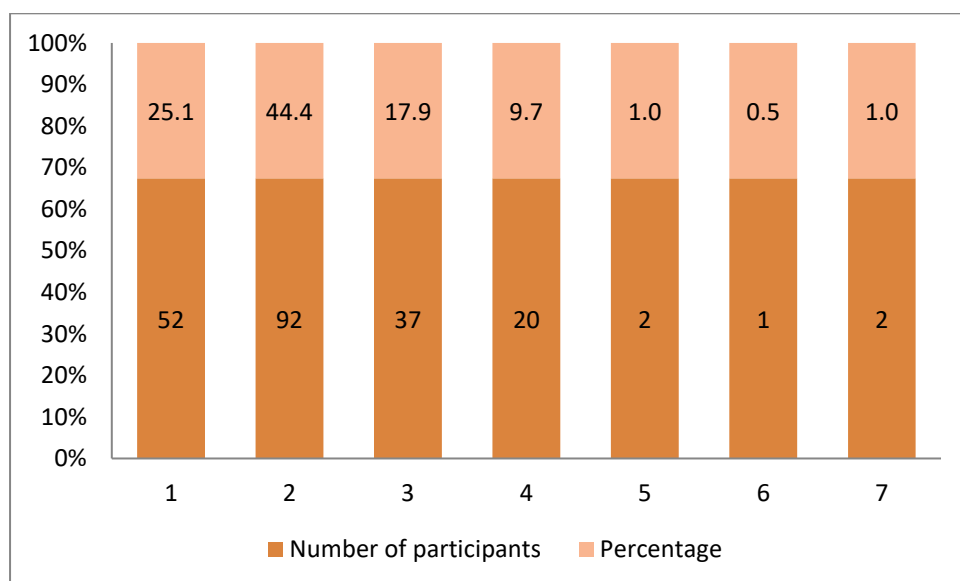


Figure 7

Column graph for Number of Languages Spoken

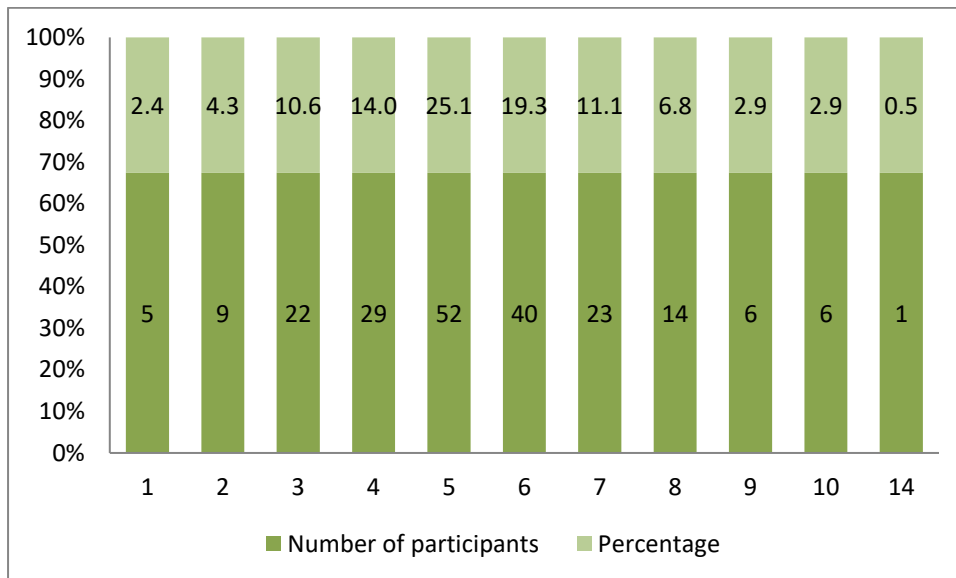
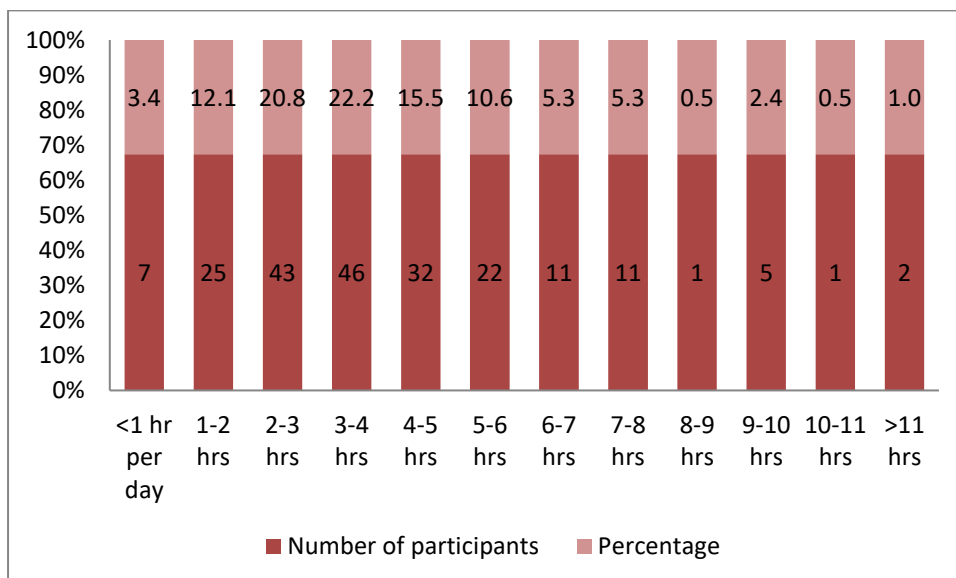


Figure 8

Column graph for number of social media sites/apps subscribed to or used by participants



Key: hr = hours

Figure 9

Column graph for number of hours spent on social media sites/apps

Appendix M: Normality Histograms

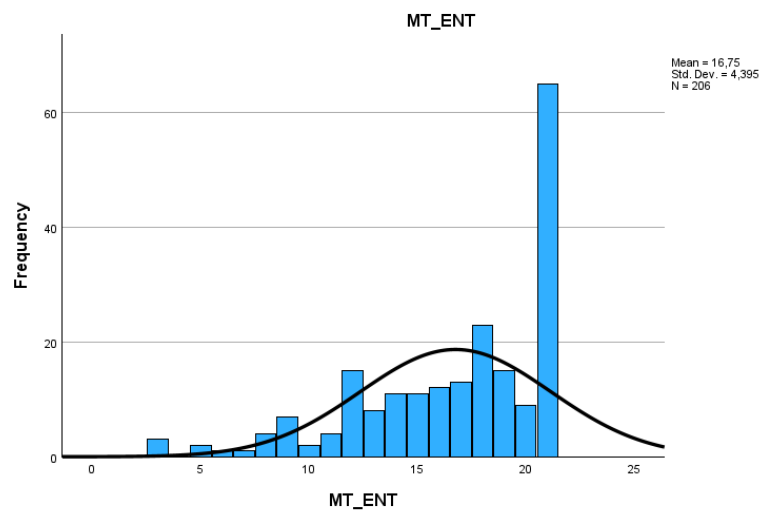


Figure 10

Histogram illustrating the skewed (non-normal) data distribution for the entertainment motive

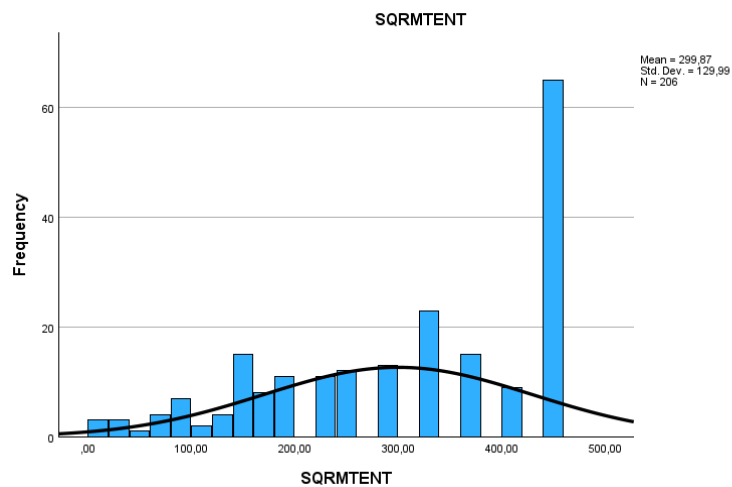


Figure 11

Histogram illustrating the transformed data distribution for the entertainment motive

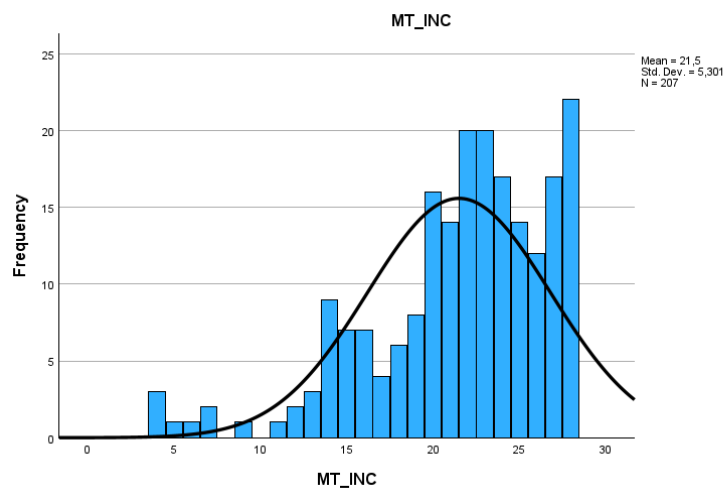


Figure 12

Histogram illustrating the skewed (non-normal) data distribution for the information and connectedness motive

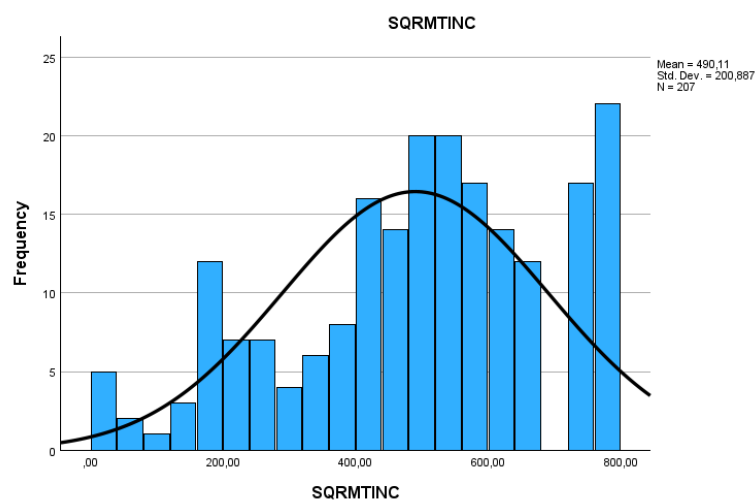


Figure 13

Histogram illustrating the transformed data distribution for the information and connectedness motive

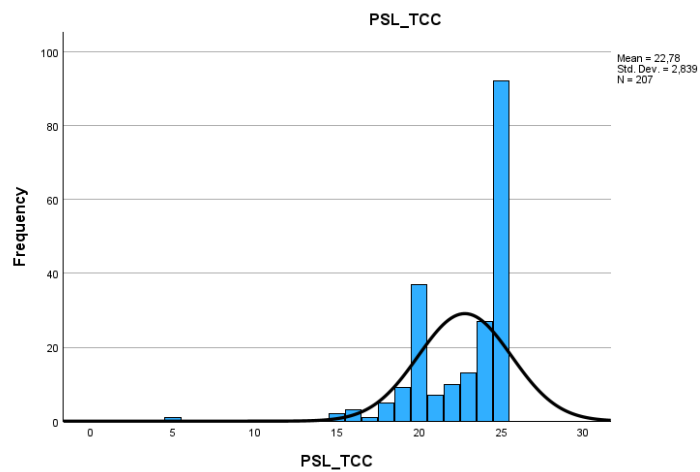


Figure 14

Histogram illustrating the skewed (non-normal) data distribution for technical competency

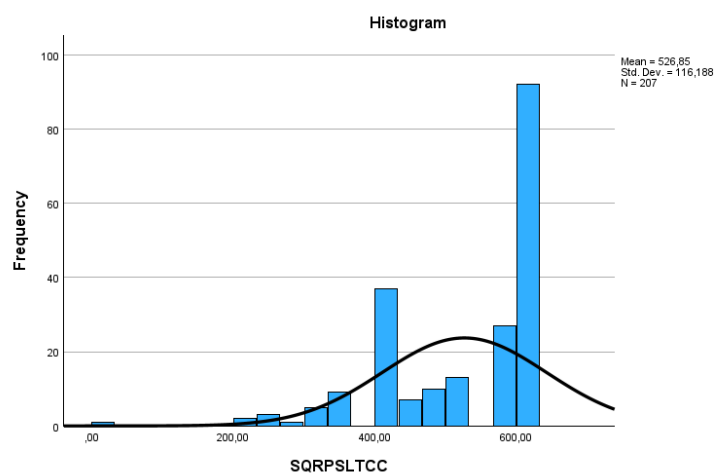


Figure 15

Histogram illustrating the transformed data distribution for technical competency

Appendix N: Multiple regression normality, residuals, and homoscedasticity

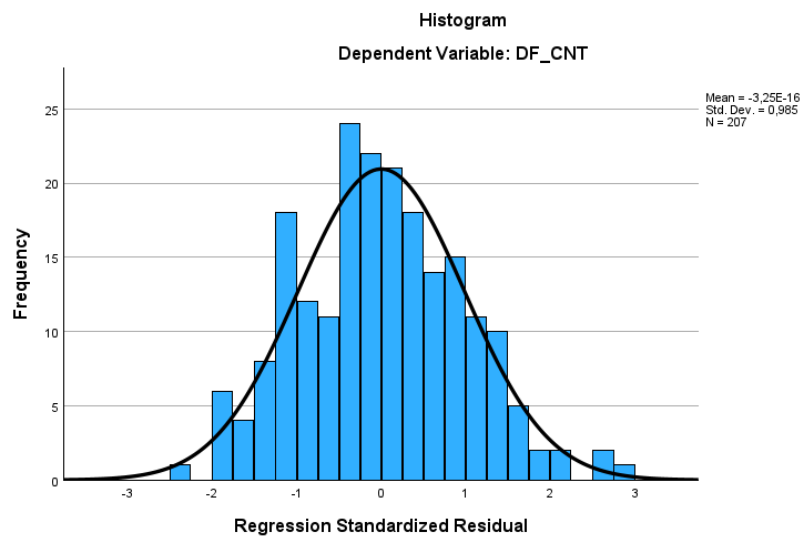


Figure 16

Histogram illustrating the normal distribution of residuals for the regression model that measured digital flourishing connectedness against active and passive use, perceived social media literacy total score as well as the rational and emotional use

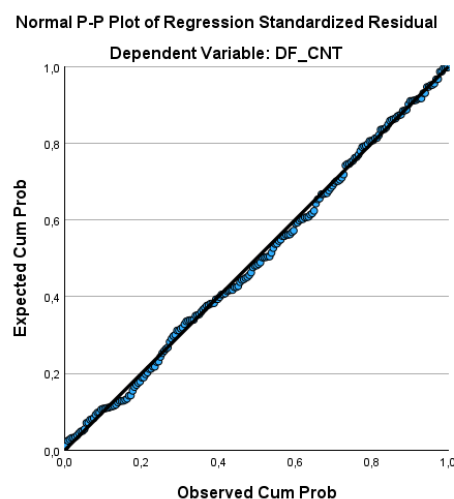


Figure 17

P-plot illustrating the normal distribution of residuals for the regression model that measured digital flourishing connectedness against active and passive use, perceived social media literacy total score as well as the rational and emotional use

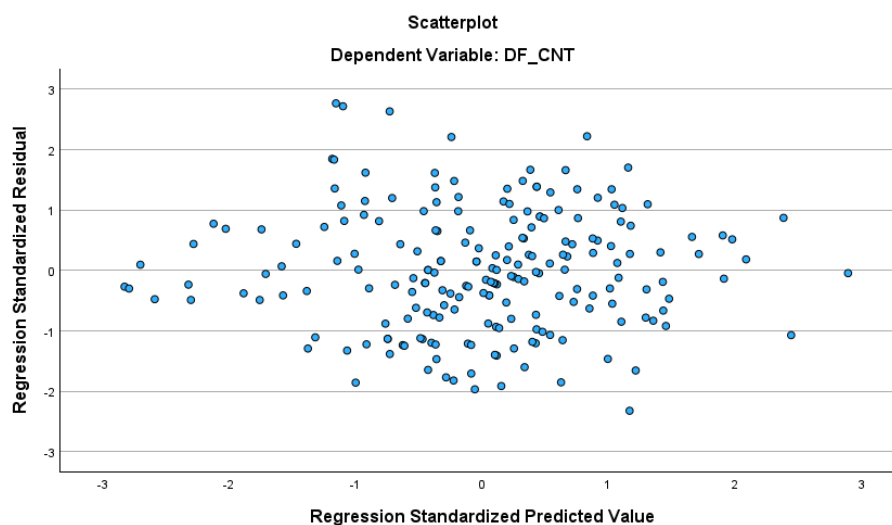


Figure 18

Scatterplot illustrating the homoscedasticity for the regression model that measured digital flourishing connectedness against active and passive use, perceived social media literacy total score as well as the rational and emotional use

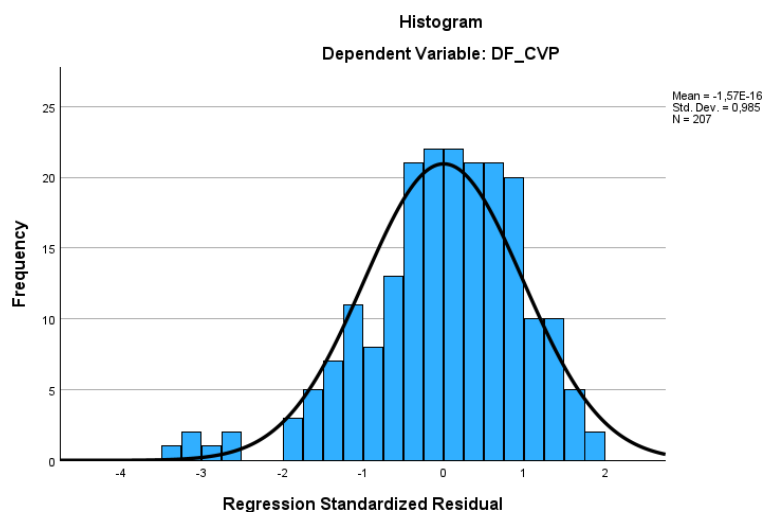


Figure 19

Histogram illustrating the normal distribution of residuals for the regression model that measured digital flourishing civil participation against active and passive use, perceived social media literacy total score as well as the rational and emotional use

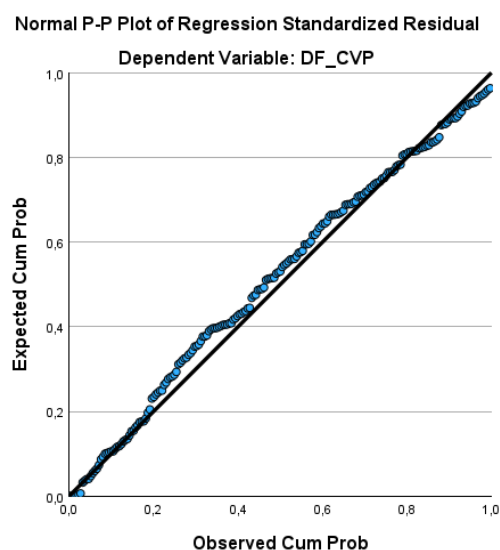


Figure 20

P-plot illustrating the normal distribution of residuals for the regression model that measured digital flourishing civil participation against active and passive use, perceived social media literacy total score as well as the rational and emotional use

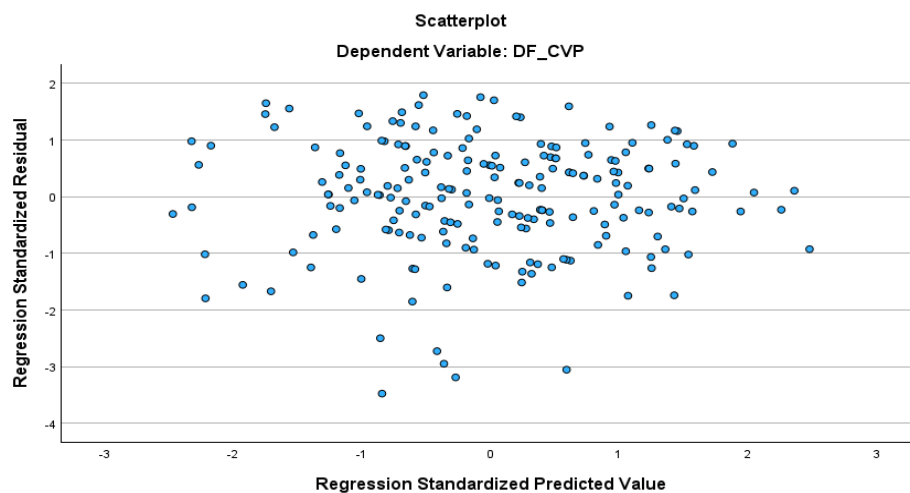


Figure 21

Scatterplot illustrating the homoscedasticity for the regression model that measured digital flourishing civil participation against active and passive use, perceived social media literacy total score as well as the rational and emotional use

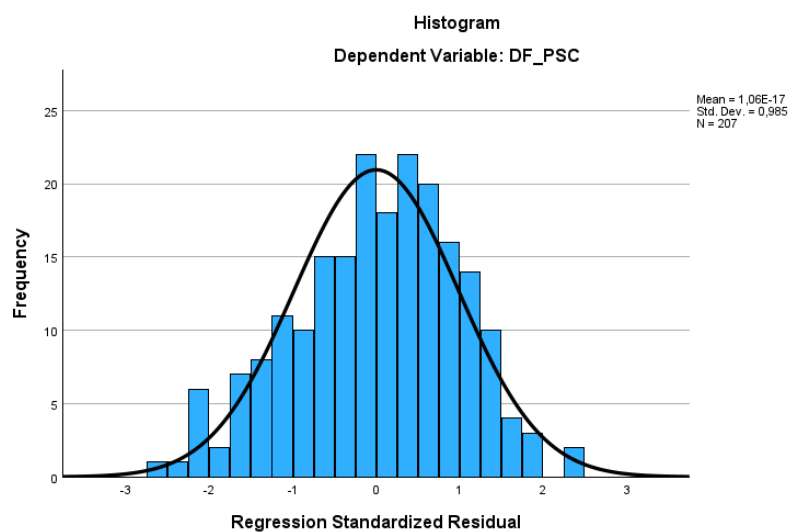


Figure 22

Histogram illustrating the normal distribution of residuals for the regression model that measured digital flourishing positive social comparison against active and passive use, perceived social media literacy total score as well as the rational and emotional use

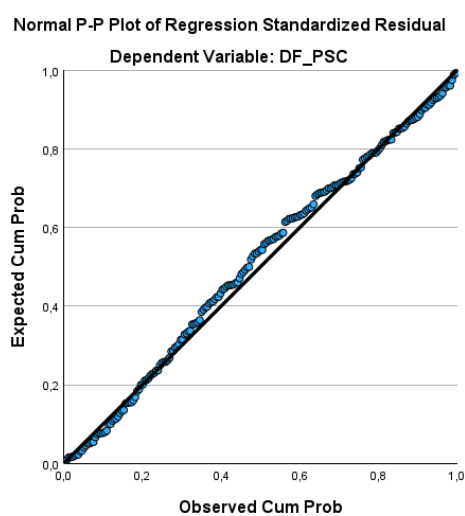


Figure 23

P-plot illustrating the normal distribution of residuals for the regression model that measured digital flourishing positive social comparison against active and passive use, perceived social media literacy total score as well as the rational and emotional use

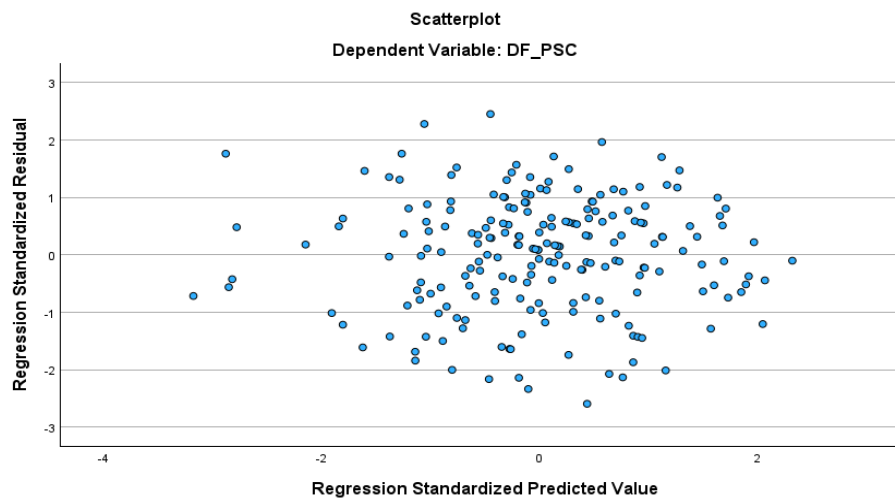


Figure 24

Scatterplot illustrating the homoscedasticity for the regression model that measured digital flourishing positive social comparison against active and passive use, perceived social media literacy total score as well as the rational and emotional use

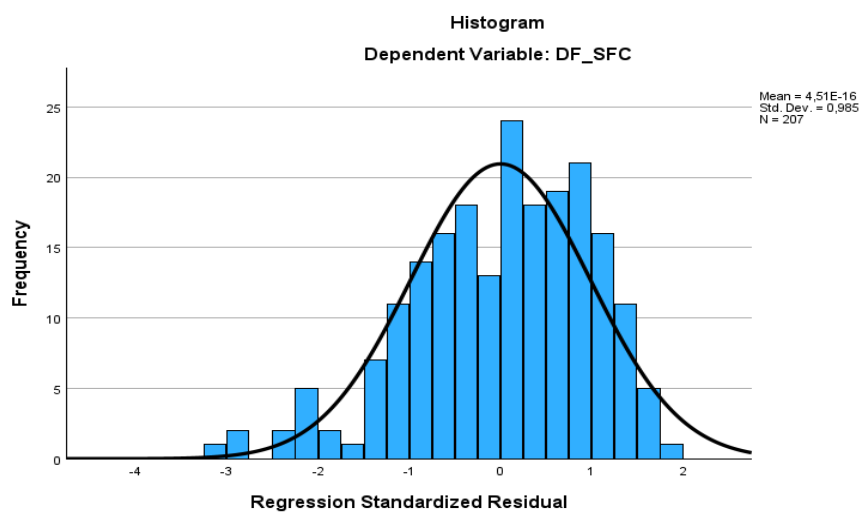


Figure 25

Histogram illustrating the normal distribution of residuals for the regression model that measured digital flourishing self-control against active and passive use, perceived social media literacy total score as well as the rational and emotional use

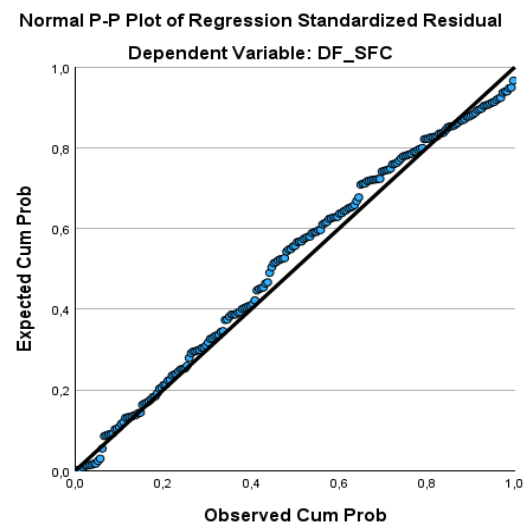


Figure 26

P-plot illustrating the normal distribution of residuals for the regression model that measured digital flourishing self-control against active and passive use, perceived social media literacy total score as well as the rational and emotional use

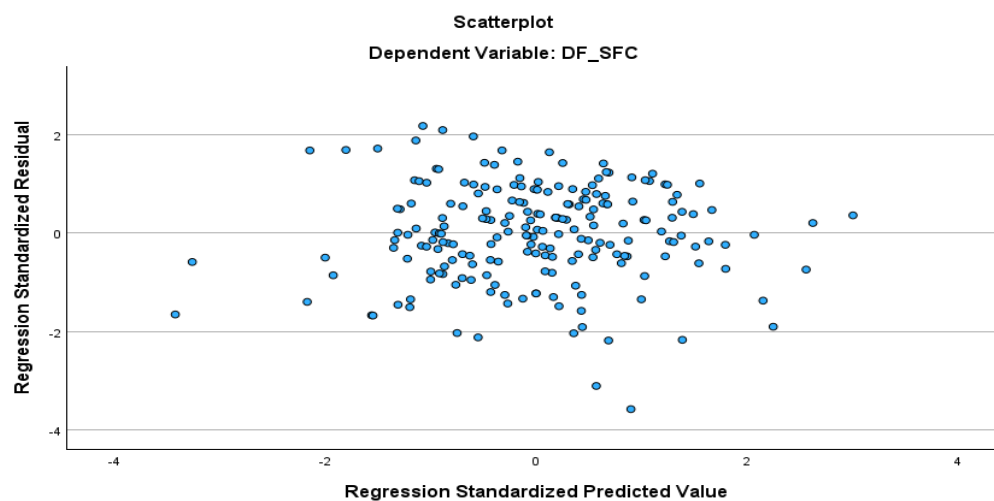


Figure 27

Scatterplot illustrating the homoscedasticity for the regression model that measured digital flourishing self-control against active and passive use, perceived social media literacy total score as well as the rational and emotional use

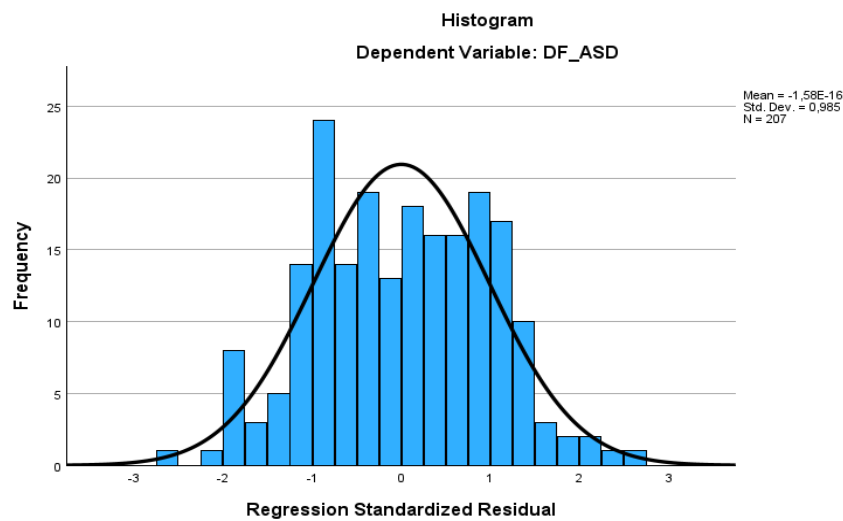


Figure 28

Histogram illustrating the normal distribution of residuals for the regression model that measured digital flourishing authentic self-disclosure against active and passive use, perceived social media literacy total score as well as the rational and emotional use

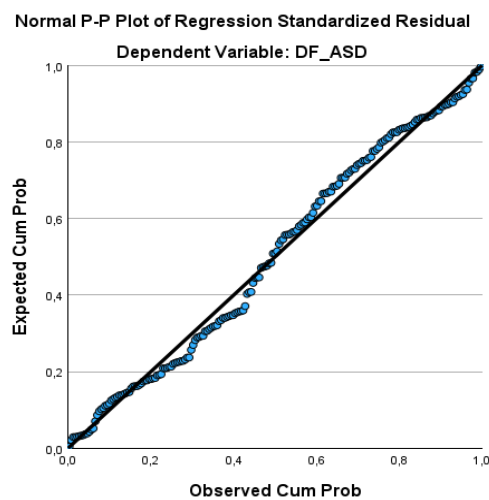


Figure 29

P-plot illustrating the normal distribution of residuals for the regression model that measured digital flourishing authentic self-disclosure against active and passive use, perceived social media literacy total score as well as the rational and emotional use

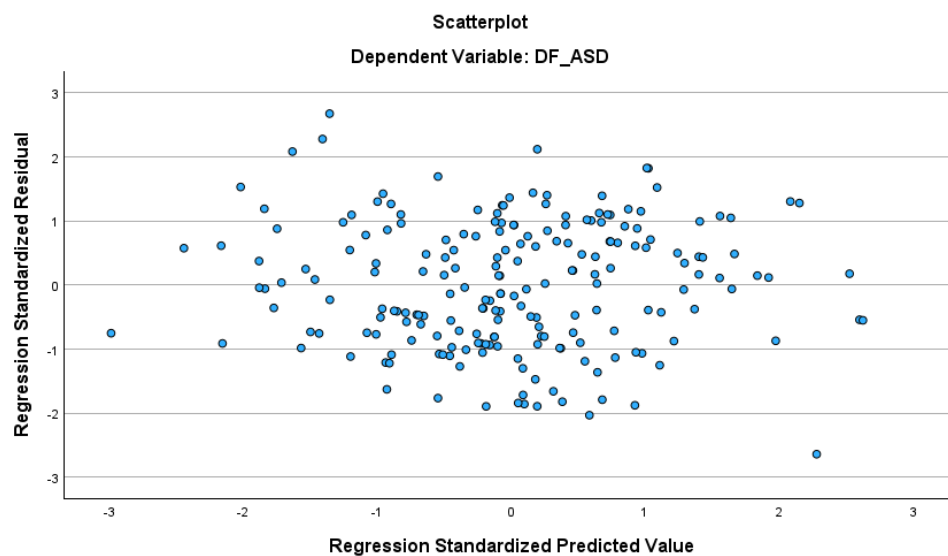


Figure 30

Scatterplot illustrating the homoscedasticity for the regression model that measured digital flourishing authentic self-disclosure against active and passive use, perceived social media literacy total score as well as the rational and emotional use

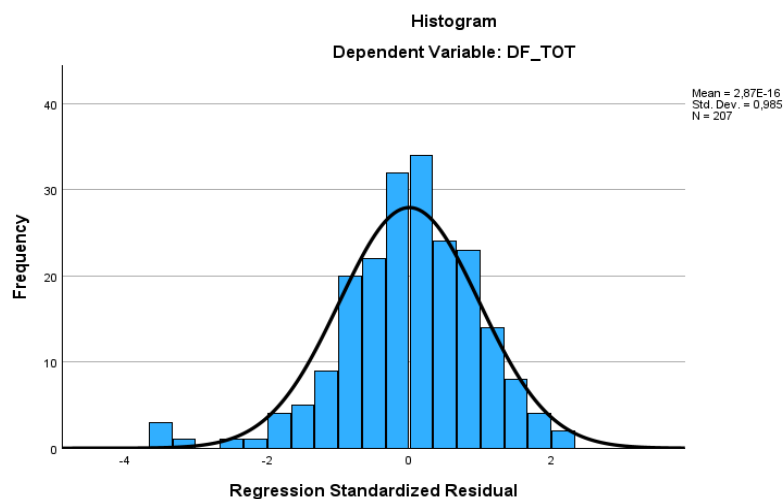


Figure 31

Histogram illustrating the normal distribution of residuals for the regression model that measured digital flourishing total against active and passive use, perceived social media literacy total score as well as the rational and emotional use

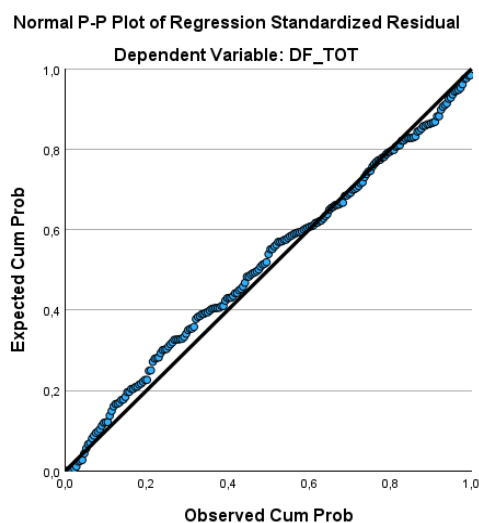


Figure 32

P-plot illustrating the normal distribution of residuals for the regression model that measured digital flourishing total against active and passive use, perceived social media literacy total score as well as the rational and emotional use

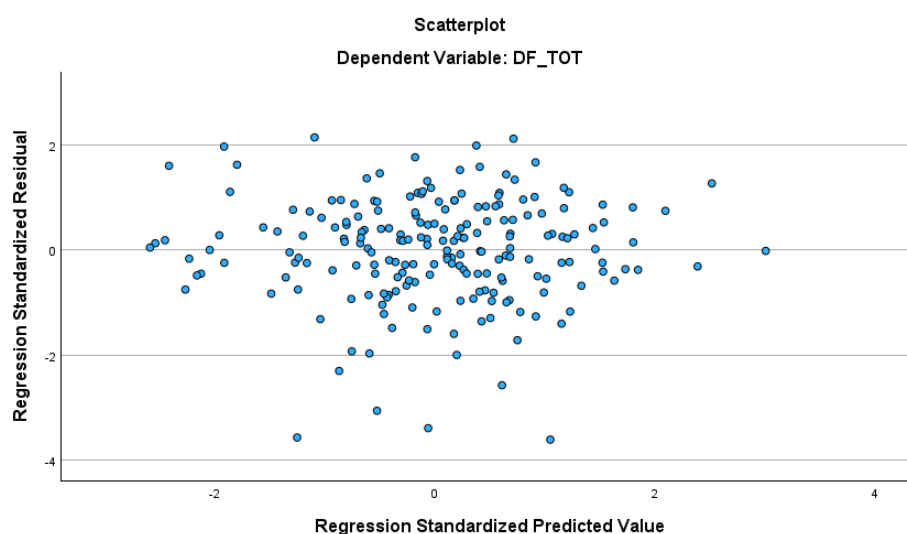


Figure 33

Scatterplot illustrating the homoscedasticity for the regression model that measured digital flourishing total against active and passive use, perceived social media literacy total score as well as the rational and emotional use

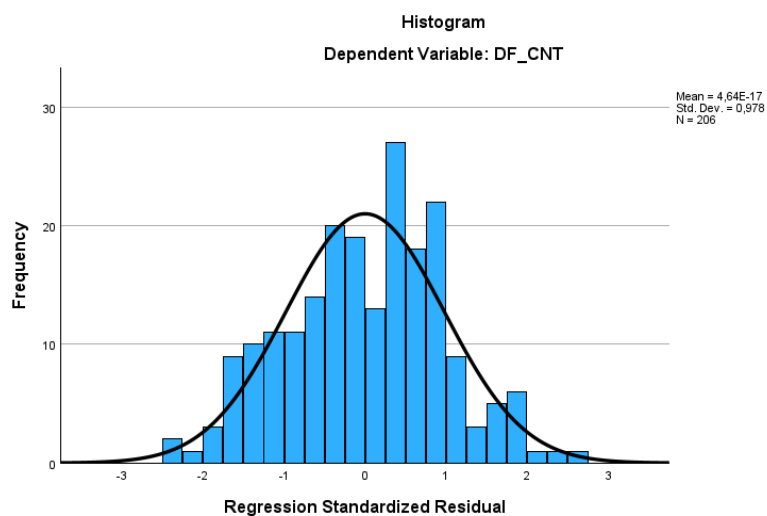


Figure 34

Histogram illustrating the normal distribution of residuals for the regression model where all nine motive subscales were measured against digital flourishing connectedness

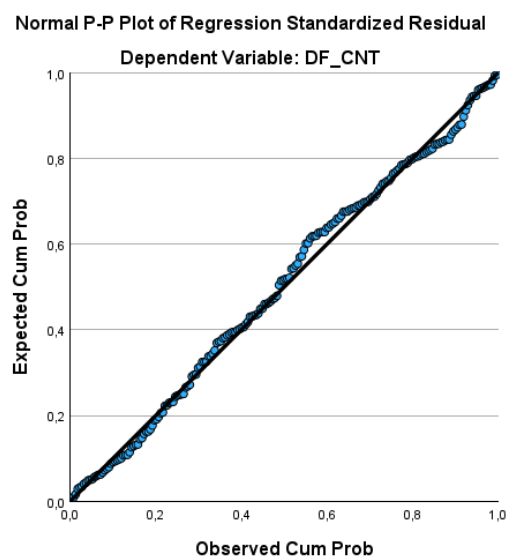


Figure 35

P-plot illustrating the normal distribution of residuals for the regression model where all nine motive subscales were measured against digital flourishing connectedness

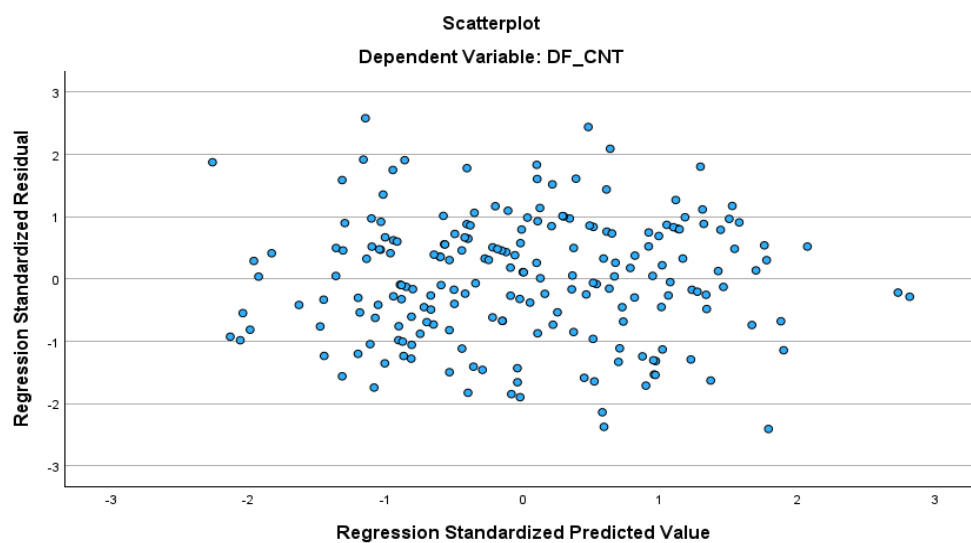


Figure 36

Scatterplot illustrating the homoscedasticity for the regression model where all nine motive subscales were measured against digital flourishing connectedness

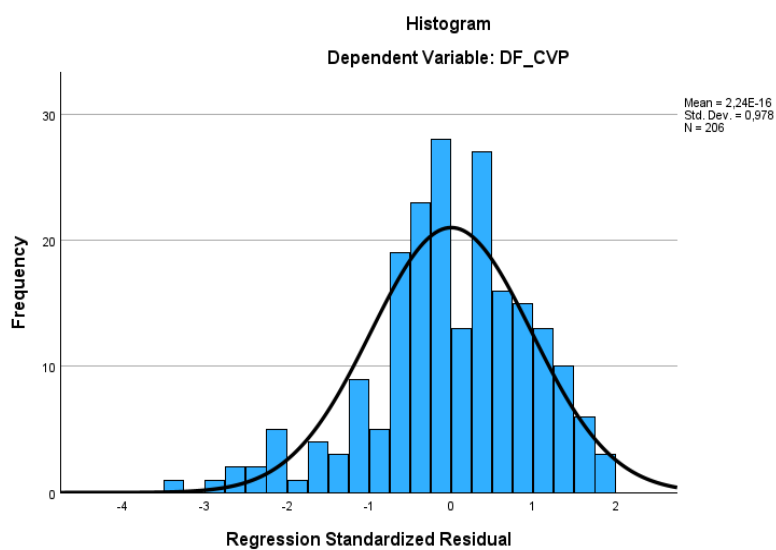


Figure 37

Histogram illustrating the normal distribution of residuals for the regression model where all nine motive subscales were measured against digital flourishing civil participation

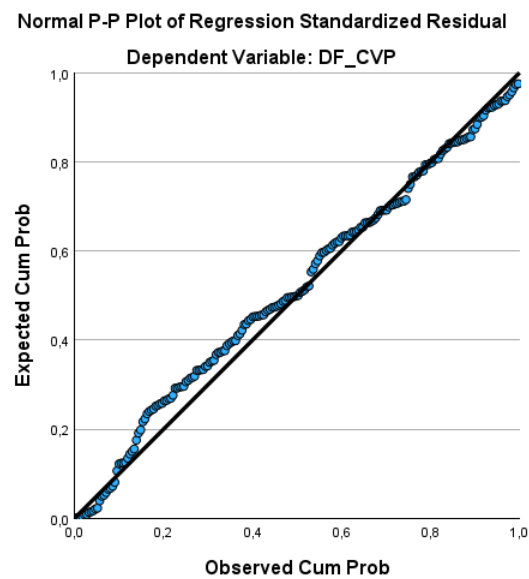


Figure 38

P-plot illustrating the normal distribution of residuals for the regression model where all nine motive subscales were measured against digital flourishing civil participation

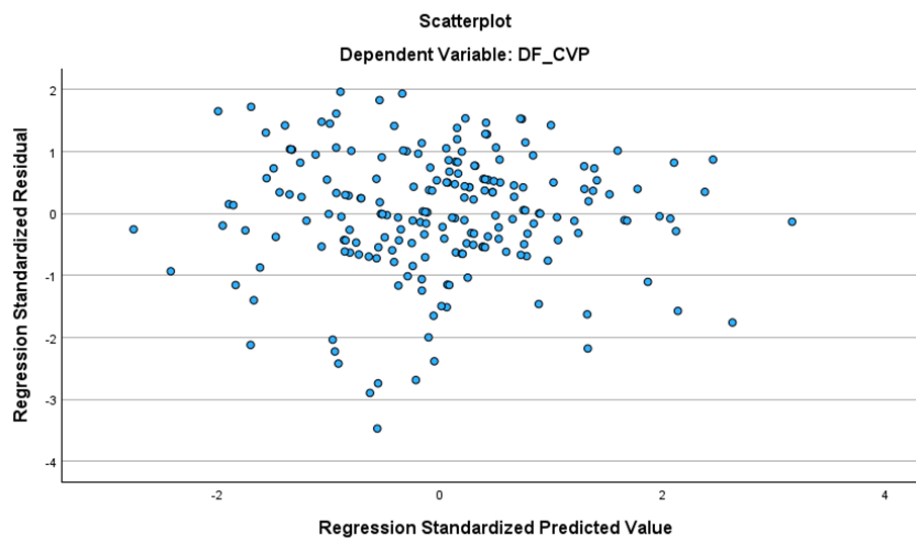


Figure 39

Scatterplot illustrating the homoscedasticity for the regression model where all nine motive subscales were measured against digital flourishing civil participation

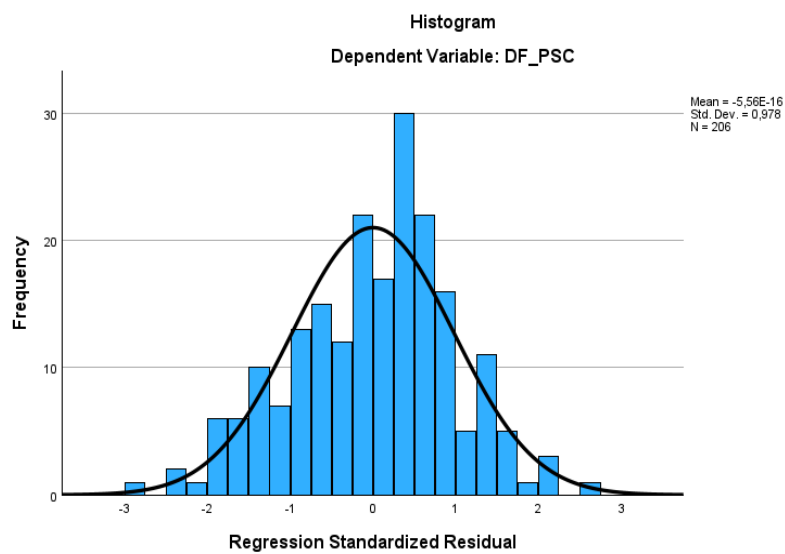


Figure 40

Histogram illustrating the normal distribution of residuals for the regression model where all nine motive subscales were measured against digital flourishing positive social comparison

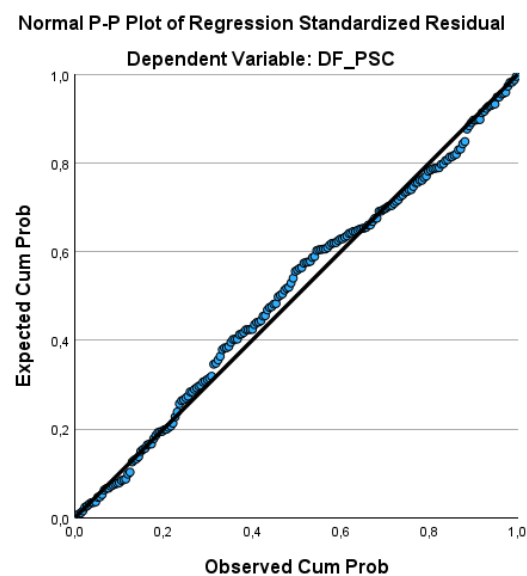


Figure 41

P-plot illustrating the normal distribution of residuals for the regression model where all nine motive subscales were measured against digital flourishing positive social comparison

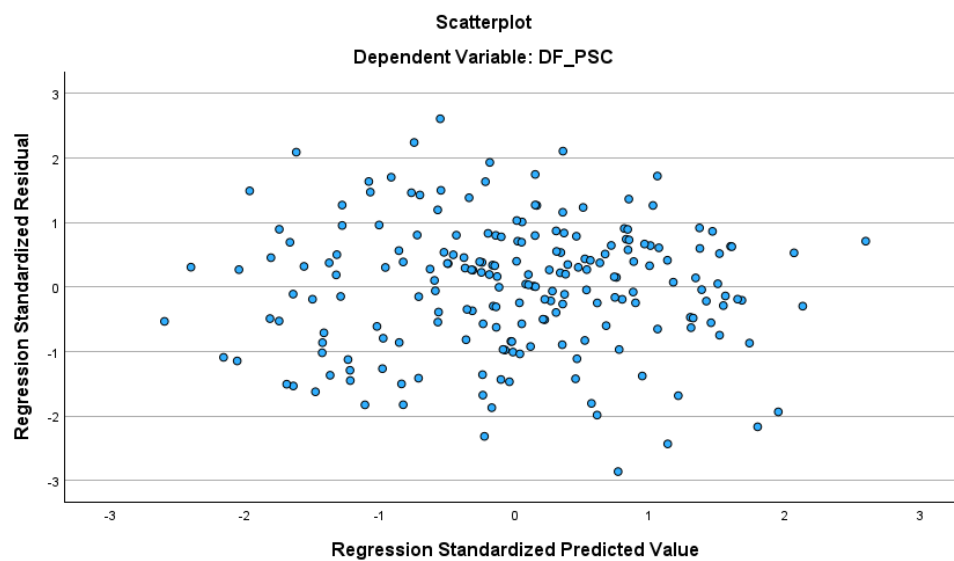


Figure 42

Scatterplot illustrating the homoscedasticity for the regression model where all nine motive subscales were measured against digital flourishing positive social comparison

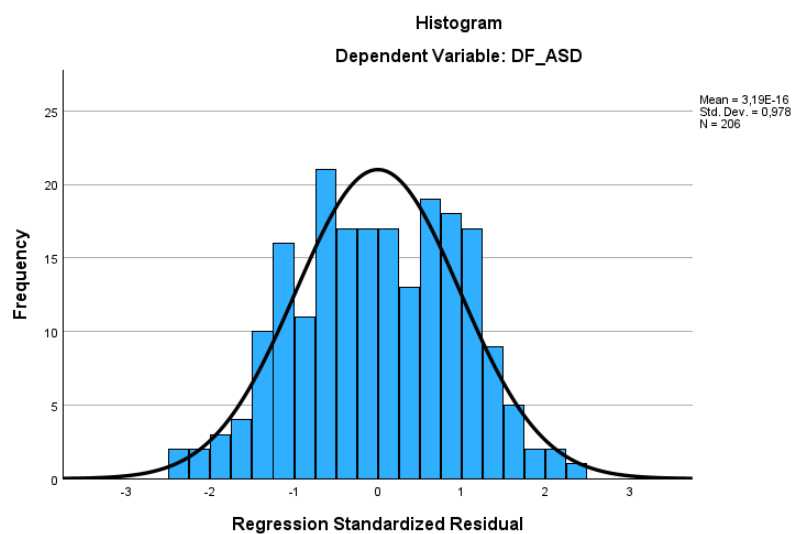


Figure 43

Histogram illustrating the normal distribution of residuals for the regression model where all nine motive subscales were measured against digital flourishing authentic self-disclosure

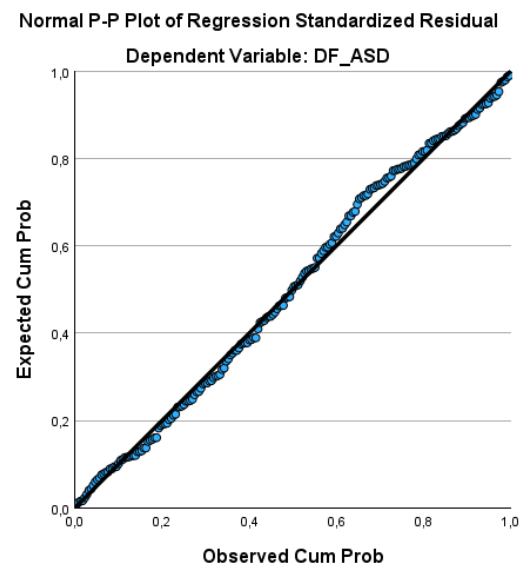


Figure 44

P-plot illustrating the normal distribution of residuals for the regression model where all nine motive subscales were measured against digital flourishing authentic self-disclosure

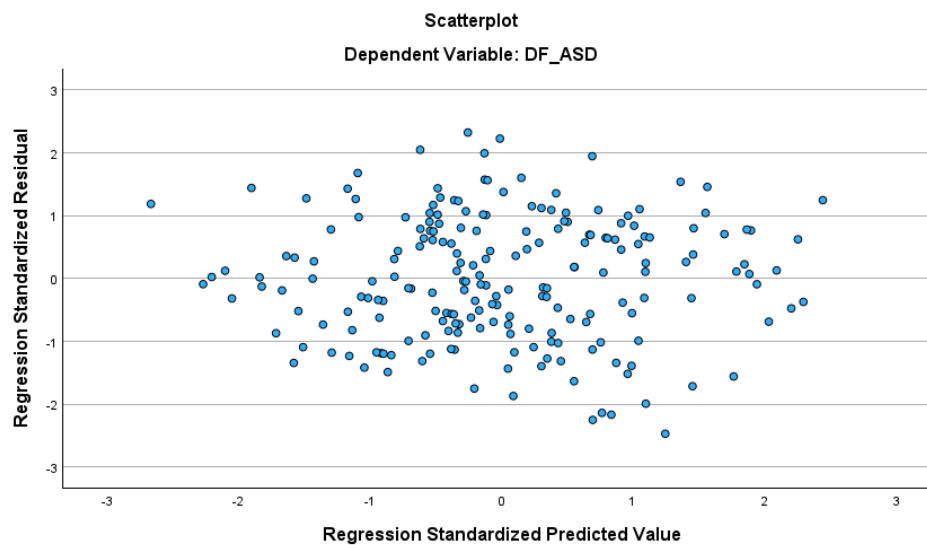


Figure 45

Scatterplot illustrating the homoscedasticity for the regression model where all nine motive subscales were measured against digital flourishing authentic self-disclosure

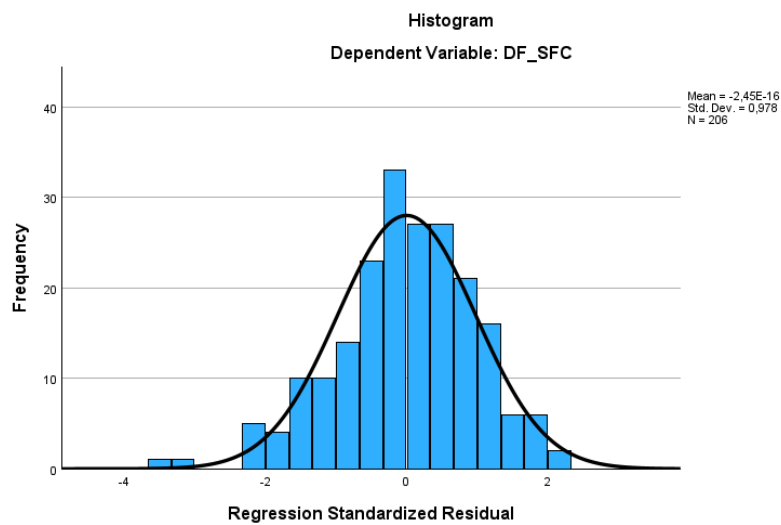


Figure 46

Histogram illustrating the normal distribution of residuals for the regression model where all nine motive subscales were measured against digital flourishing self-control

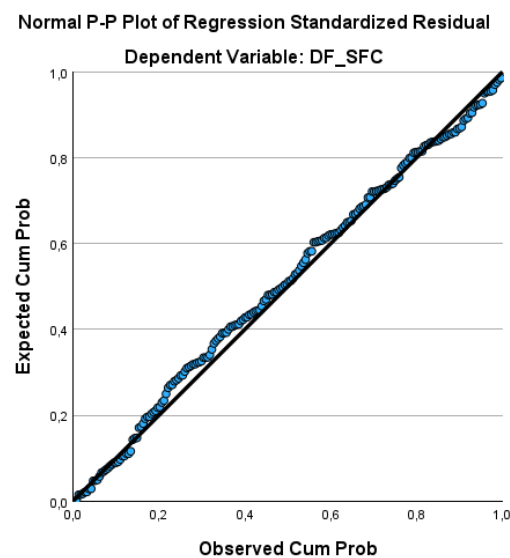


Figure 47

P-plot illustrating the normal distribution of residuals for the regression model where all nine motive subscales were measured against digital flourishing self-control

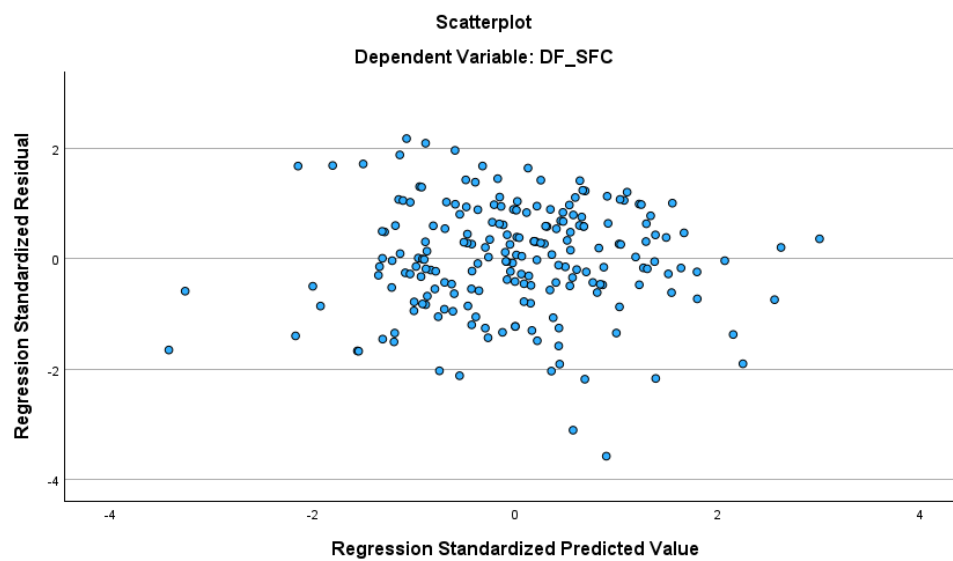


Figure 48

Scatterplot illustrating the homoscedasticity for the regression model where all nine motive subscales were measured against digital flourishing self-control

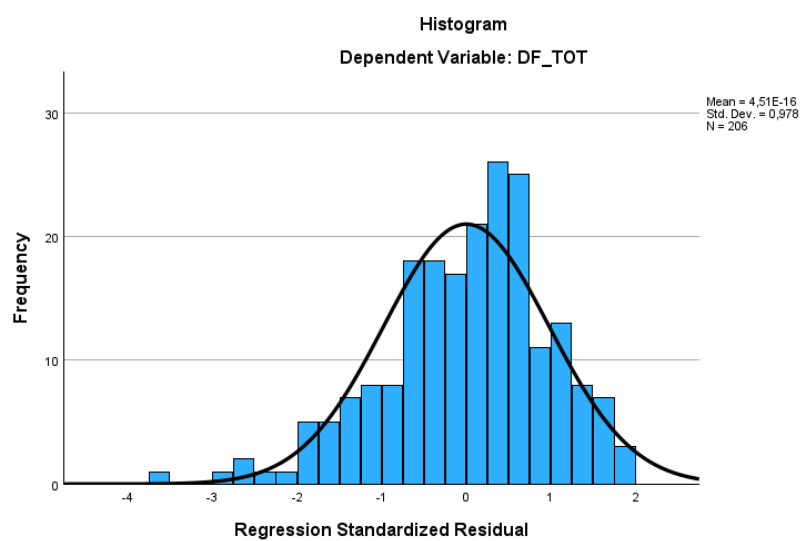


Figure 49

Histogram illustrating the normal distribution of residuals for the regression model where all nine motive subscales were measured against digital flourishing total

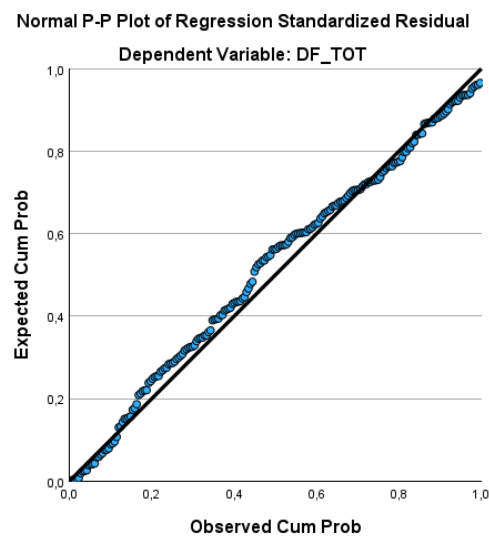


Figure 50

P-plot illustrating the normal distribution of residuals for the regression model where all nine motive subscales were measured against digital flourishing total

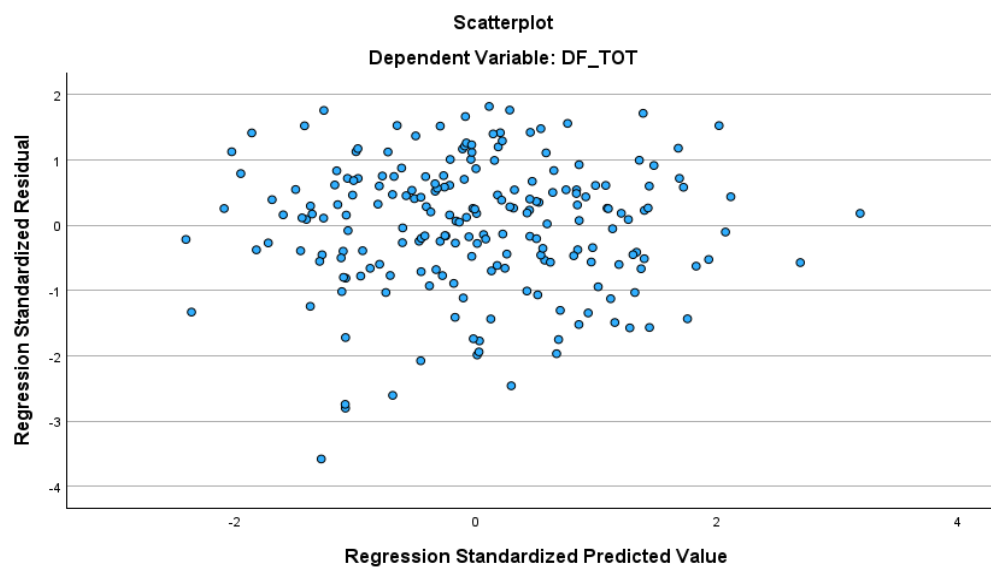


Figure 51

Scatterplot illustrating the homoscedasticity for the regression model where all nine motive subscales were measured against digital flourishing total

