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# **Examining the consequences of social media use on people's wellbeing**

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**Bachelor Thesis for Obtaining the Degree**

**Bachelor of Science in**

**International Management**

**Submitted to Davis Gibbs, MSc**

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## Affidavit

I hereby affirm that this Bachelor's Thesis represents my own written work and that I have used no sources and aids other than those indicated. All passages quoted from publications or paraphrased from these sources are appropriately cited and attributed. The thesis was not submitted in the same or a substantially similar version, not even partially, to another examination board and was not published elsewhere.

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## Abstract

With the recent increase in social media usage, there are some studies highlighting the positive impacts emphasizing social media as a novel interaction form, while others have emphasized the negative impacts on peoples' well-being. As a result, there exist contradictory indicators in the literature concerning how social media impacts the well-being of users, pointing to a requirement for additional research that concentrates on the mechanisms by which social media use influences well-being. Thus, this study aims to investigate the impacts of social media use on the well-being of people. The aim was fulfilled through three sub-aims, including determining the social media platform algorithms/design that influences the usage behaviour and well-being of users: finding out the relationship between social media use factors and individuals' well-being and identifying the emotional, physical and psychological effects of social media use on the well-being of individuals. The thesis was a quantitative study that utilized data from a survey collected through social media to address the research questions. To determine how social media use affects people's well-being, the survey data was analyzed through the SPSS program to test the connection between social media use and individuals' well-being, whether the correlation is negative or positive. The findings revealed a positive correlation between social media usage and physical, psychological and emotional well-being. At the same time, the regression analysis suggested that social media usage frequency has a significant but modest association with overall well-being. The study concluded that further research is needed to explore additional predictors and validate the findings with more extensive and diverse samples.

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## List of Abbreviations

<i>Abbreviation</i>	<i>Definition</i>
<i>FOMO</i>	Fear of missing out
<i>SNS</i>	Social Networking Sites
<i>SM</i>	Social Media

# 1 Introduction

## 1.1 Presentation of the problem

Recent times have witnessed a significant surge in social media usage (Ostic et al., 2021). Accordingly, social media entails the online technologies and websites that enable users' interactions by allowing them to exchange ideas, interests, and information (Leong et al., 2019). Further expanding on the definition, Naslund et al. (2020) state that social media are mobile platforms and web technologies that enable the connection of individuals within a virtual network such as Snapchat, Facebook, Instagram, Twitter, or LinkedIn, where these people can exchange, share, or co-create various digital content types, like videos, knowledge, messages, or pictures.

According to Schemer et al. (2021), social media is utilized by individuals for many reasons, including communication, gathering information, and entertainment, among others. Many individuals, especially young adults and teenagers, devote more of their time to social media and online networking sites to texting and connecting with friends, family, or relatives (Ostic et al., 2021). According to Valkenburg et al. (2022), the use of social media by adults and youths is estimated to be between 2 and 3 hours daily. They typically mix and match five to seven platforms to communicate with pals, read posts from other individuals, and interact with their followers and friends. Indeed, social media may have altered how individuals engage with one another in groups and the societal and individual behaviour of the people who use it internationally (Goodyear et al., 2018; Kales et al., 2020).

The increased usage of social media has resulted in more concerns regarding the adverse effects of social media addiction, particularly on one's psychological, emotional, and physical health (Leong et al., 2019; Ostic et al., 2021). In this case, smartphone addiction may emerge from excessive social media use, primarily due to users' fear of being left out if offline (Valkenburg, 2022). In line with this, smartphone users may occasionally be drawn away from social engagement and toward romantic connections (Ostic et al., 2021; Valkenburg et al., 2022). Consequently, using social media has been linked to negative impacts such as loneliness, sadness, anxiety, and social exclusion. Excessive use has also been linked to "phubbing" (Ostic et al., 2021), which is the word that denotes how much an individual utilizes or gets preoccupied

with the process of a face-to-face discussion with another person. As such, Keles et al. (2020) claim that although they are engrained in our daily lives, online social networking sites are to blame for a surge in mental health concerns among young people.

Roeder (2020) suggests that social media use can create a feeling of connectedness for users with essential people, which can help minimize social isolation. Social media offers many approaches to interacting with weak ties, like acquaintances, coworkers, and strangers, as well as close ties, like friends, relatives, and family. It also plays an essential role among people as they apply their sense of belonging to different communities (Goodyear et al., 2018). Social networking with those whom users care about is always healthy, according to Graciyal and Viswam (2021). Conversely, using social media may also cause social disorder. This happens when the constant communication results at a point when the users' offline lives are supplanted by their online lives, which are typically connected with addictions. From this background, this study intends to investigate the effects of social media usage on individuals' well-being.

However, according to Roeder (2020), despite worries regarding the probable adverse impacts of social media use on users' well-being, there are also more studies highlighting social media as a novel interaction form, illustrating that it can play a fundamental role in developing a person's online identity, reputation, and presence. These social media platforms encourage social interaction, build and maintain relationships, and encourage sharing ideas, all of which are likely to be strongly linked to social support. Notably, it is worth noting that a recent study contends that the effect of smartphone use on users' mental, psychological, and physical well-being varies depending on the activities they engage in and the duration they take when using specific social media applications (Ostic et al., 2021).

As a result, there exist contradictory indicators in the literature concerning how social media impacts the well-being of users, emphasizing both the societal benefits and potential shortcomings. Because of this, despite social media's pervasive use in contemporary culture, additional research is still required to concentrate on the mechanisms by which social media use influences well-being. Additionally, more research must be done to address the gap created by unclear results, which indicate

that social media use has negative and positive impacts on users' well-being. Thus, this information gap highlights the importance of more research to enhance the comprehension of the complex interaction between social media use and users' well-being. As such, this study aims to investigate the impacts of social media use on the well-being of people.

## **1.2 Aim of the study**

This research aims to explore the consequences of social media use on the wellbeing of people. This main aim will be fulfilled through the following sub-aims:

- 1.To determine the social media platform algorithms/design that influences the usage behavior and wellbeing of users
- 2.To find out the relationship between social media use factors and individuals wellbeing
- 3.To identify the emotional, physical and psychological consequences of social media use on the wellbeing of individuals

### **Research questions:**

- 1.What are the consequences of social media use on people's physical, psychological, and emotional wellbeing?
- 2.What are the social media platform algorithms/design that influences users' usage behavior and wellbeing?
- 3.What is the relationship between social media use factors and individuals' wellbeing?

This thesis considers several variables that the literature has pinpointed as affecting the association between social media use and people's psychological, physical, and emotional well-being, including smartphone addiction, social exclusion, and phubbing.

By doing this research, there are numerous contributions that this paper makes to the literature. The first contribution is that it explores the contradictory data put forth by

various ideas and enhances peoples' understanding of how using social media impacts people's well-being. It will also further detail the drawbacks of overusing social media and how people may become addicted to it. Last but not least, it gives empirical evidence and a sound numerical analysis demonstrating that both negative and positive consequences coexist, helping to clear up any contradictions in the literature. The essay offers valuable information to society, professionals, academics, and other groups.

## 2 Literature review

### 2.1 Theoretical framework

#### 2.1.1 Attachment theory

According to attachment theory, a relational bond exists between people and specific targets. An individual's behavioural and emotional resource allocation to particular objects, such as people, money, or job titles, will be influenced by their attachment to those particular objects. In the psychology community, such as Bretherton's in 1992, attachment theory is frequently linked with investigating interpersonal attachments, such as mother-infant or romantic relationships (Cao et al., 2020). Two aspects of attachment, such as identification and bond-based connections, have been discovered in the social media literature by Ren et al. (2012) to explain the behaviour of users in online communities. In this instance, Wan et al. (2017)'s study divided attachment into two aspects, functional dependency and emotional dependence, which had a substantial impact on users' social media platform usage behaviour. According to Wan et al. (2017), users are likely to engage with and get support emotionally from other SM users.

On the contrary, the SM platform's environment can embolden people to fulfil their goals, and this immensely encourages the functional dependence of users in the social media environment (Cao et al., 2020). Users' psychological states are reflected in their functional and emotional attachments after they believe the platform can help them have a pleasurable experience and meet their user aspirations (Cao et al., 2020). As a result, this thesis will make appropriate use of the affective and functional attachments that significantly impact how users use social media. Additionally,

attachment theory can be used to explain the addiction problem connected to drug and alcohol addiction, according to Cao et al. (2020). Flores (2011), for instance, investigated the connection between addiction and an uneasy attachment style. Flores pointed out that attachment issues are the root of addiction. In this context, users would allocate their time, effort, and money to strengthen the relationship when connected to the objective. Therefore, the current study will use technical systems and motivational theory to predict users' intention to use, intention to continue using, and high engagement. However, because addictive behaviours are tightly related to users' psychological reliance, such a system and theory may fall short of directly explaining social media addiction (Cao et al., 2020).

### **2.1.2 Extending the motivation theory**

Motivation theory is frequently applied to study how consumers use IT (Lin & Lu, 2011). Both intrinsic and extrinsic variables influence the incentive to use IT systems. When an action is carried out because it is seen to help reach desired results, this is referred to as extrinsic motivation. Engaging in an activity due to a desire for the action, such as enjoyment, is referred to as intrinsic motivation. Perceived delight is a significant intrinsic drive for expanding people's use of IT (Cao et al., 2020). According to Lin and Lu (2011), people's dominant intrinsic motive was their perceived enjoyment, which may favour their continued social media usage.

Furthermore, Cao et al. (2020) note that earlier research has indicated that the perception of satisfaction is a critical factor in developing IT use addiction. According to Cao et al. (2020), social incentives are the most significant extrinsic element influencing how people use social media. According to Kuss and Griffiths (2017), social factors that serve as external incentives will impact how often people use social media. Cao et al. (2020) add that social engagement significantly improves users' feelings of affiliation with the virtual platform. Additionally, user social engagement might satisfy the users' social demands, facilitating their continued usage. Based on these justifications, the current study examines people's use of social media by using reported enjoyment and social connection as their intrinsic and extrinsic incentives. The theoretical model is shown below.

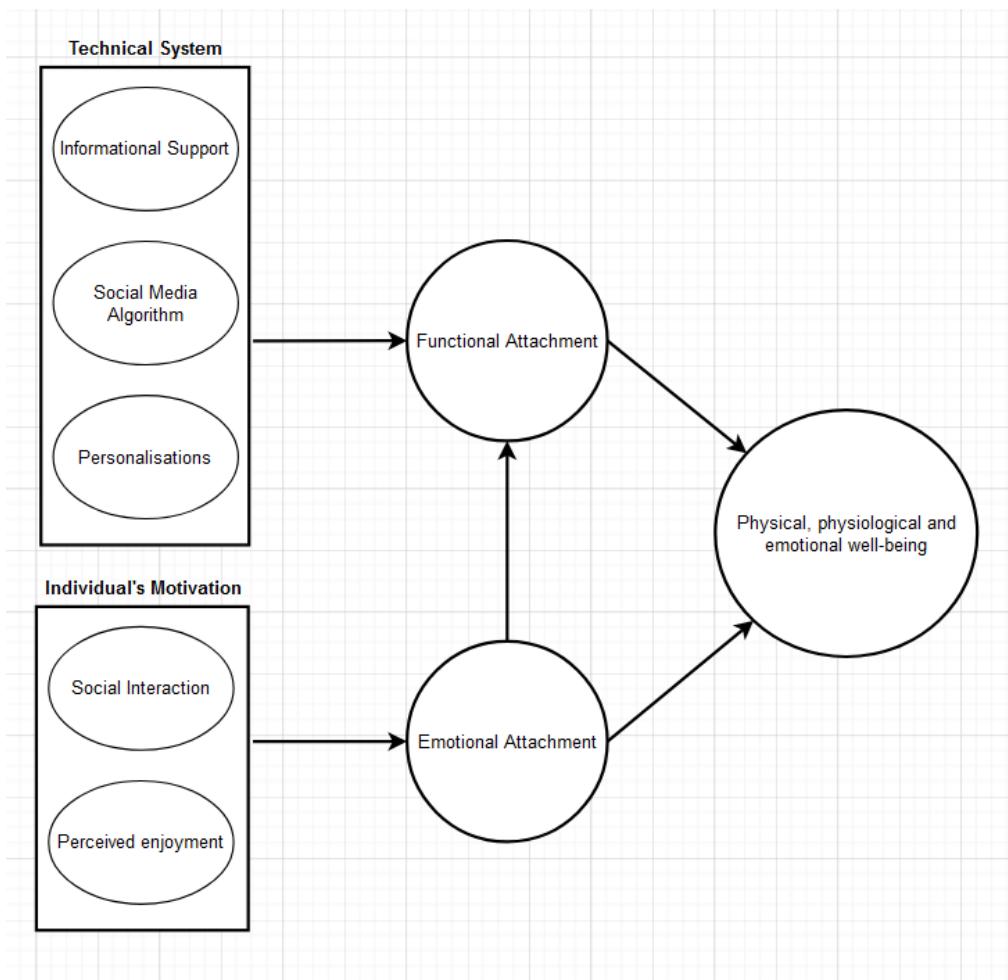


Figure 1:: Theoretical model for the study (source: Author derived from Cao et al., 2020).

## 2.2 People's wellbeing

It is crucial to comprehend the term "well-being" in this context because this research focuses on how people's use of social media affects their well-being. According to Dienlin and Johannes (2022), well-being is a subtype of mental wellness. Health, prosperity, and happiness are "the experiences that make up well-being. It entails having a positive outlook on life, feeling content with it, finding meaning or purpose in it, and being able to handle stress. In a broader sense, being well simply means feeling well. Being happy, healthy, socially engaged, and having a purpose are just a few of the many good aspects of well-being that almost everyone seeks" (Davis, 2017 p. 1). Unfortunately, at least in the United States and even globally, well-being seems

to be declining. Furthermore, improving an individual's well-being can be challenging if one has no idea what to do or how to go about it (Davis, 2019).

Further concurring with this definition, Tov (2018) describes well-being as the condition of being at ease, healthy, or cheerful. However, the authors note that it is crucial to understand that well-being comprises more than the present happiness of an individual. This is because other components are included in the well-being definition other than happiness, such as life satisfaction degree of an individual and their sense of control and purpose in life. Accordingly, people's feelings, behaviors, and assessments of their overall lives are all considered to be indicators of their level of well-being (Tov, 2018).

Graciyal and Viswam (2021) define well-being as the body's, soul's, and spirit's static psychological functioning. The eudaimonic approach and the hedonic approach are two major views that are based on research on conceptions of well-being. The eudaimonic method is rooted in self-realization and the meaning of life, whereas the hedonic approach derives from happiness, achieving pleasure, and avoiding pain.

According to Course-Choi and Hammond (2021), psychological, physical, and social resources and difficulties must coexist for people to be in a state of well-being. This concept recognizes the value of social support and includes psychological resources such as self-worth, mental wellness, and life happiness. People with relationships with higher levels of closeness, quality, and connection through social networks are generally happier. The themes of this investigation are mental, emotional, and physical health (Course-Choi & Hammond, 2021).

According to Course-Choi and Hammond (2021), on the one hand, being physically fit refers to the capacity to carry out the physical tasks necessary for both daily living and participation in sports. Possessing the strength, stamina, and flexibility necessary for daily life, work, and pleasure, as well as having fewer illnesses, diseases, and injuries, are all aspects of being physically healthy. It also includes enjoying physical activity. On the other hand, emotional or mental health is associated with personal happiness, which includes self-confidence. Self-esteem and self-respect are essential components of emotional health, as is the ability to recognize and express emotions, control them according to the circumstances, identify and control the factors

influencing emotions, and have a positive outlook on life, which involves feeling practical and hopeful about the future (Graciyal & Viswam, 2021).

Social health, another aspect of wellness, also impacts positive thoughts about interpersonal relationships and the wider ecosphere. Social well-being implies interacting with various people effectively and having a sense of belonging. It also involves being empathetic, respecting, and tolerating other people. It also involves controlling one's emotions depending on the circumstances. Finally, it involves awareness of one's rights and obligations (Graciyal & Viswam, 2021).

Dienlin and Johannes (2022) assert that eudaimonic well-being, such as satisfaction with life, is stable in empirical terms. Despite the claim made by some researchers that 40% of happiness is erratic and flexible, more recent studies contend that the impacts of potentially stabilizing elements like heredity and life conditions are significantly more significant. These findings support the set-point theory, which holds that life satisfaction fluctuates around a constant level with significant inter-personal variability but little intrapersonal variation. The stability of life satisfaction ratings has been frequently shown in empirical research, which has supported the concept. As a result, using digital technology is unlikely to be a reliable indicator of eudaimonic happiness (Dienlin & Johannes, 2022).

Hedonistic wellbeing, on the other hand, including good and negative affect, is unstable and prone to significant swings. Therefore, utilization of digital technology is linked to a hedonic well-being factor in that while viewing of humorous content may make people happy by smiling, critical comments reading can also make people become mad and get depressed (Dienlin & Johannes, 2022). In conclusion, life satisfaction is steady, and using technology is more likely to have a transitory impact on hedonic well-being measurements than it is to have a lasting impact on eudaimonic well-being indicators. If so, people can anticipate moderate to medium-sized effects on short-term affect but insignificant to nonexistent impacts on both life satisfaction and long-term affect (Dienlin & Johannes, 2022).

## 2.3 Social Media

This study is specifically focused on exploring the effect of social media use on the well-being of people; thus, a thorough investigation of the term social media is essential. According to Course-Choi and Hammond (2021), an internet platform qualifies as social media if it enables the creation of online communities by users and sharing of user-generated content. These online communities may consist of offline and online friends, online-only acquaintances, or members of a particular interest group. Sharing this content involves actions like commenting, posting, and commenting (publicly through one another's profiles or privately through direct messages). Content may also include user profiles (which may include data like age and name), videos, activity updates, and photos. Another essential feature of social media platforms is the presentation of social network contacts, such as followers or lists of friends, which aggregate user-created profiles and link them together (Ortiz-Ospina & Roser, 2023).

Besides, social media, according to Akram and Kumar (2017), is a digital medium that individuals utilize in building social networks or social connections with others who share their interests, activities, history, affiliations, or contacts in real life in social or professional spheres. Accordingly, Edosomwan et al. (2021) claim that social media has fundamentally changed how we engage and communicate with one another by enabling people to connect across geographical borders. Billions of individuals worldwide communicate and share knowledge via social media. Thanks to social media, people can engage with friends and family, discover new things, follow their hobbies, and be entertained. On a professional level, social media can grow or expand one's expertise in a particular industry and develop one's expertise network by contacting others in the same field. We may professionally engage with our audience through social media, solicit client feedback, and build our brand (Akram & Kumar, 2017).

According to Venkateswaran et al. (2019), most social media platforms encourage members to like, comment on, and share content that interests them. This is because they believe that participation and opinions are essential (Venkateswaran et al., 2019). Additionally, these social media platforms offer users the option of communicating with others, meeting new people, providing quick comments on other

users' content, and expressing their creativity (Ortiz-Ospina & Roser, 2023). Additionally, users can keep in touch with friends, family, peers, and those with common interests. In this situation, social media platforms can be utilized for professional, private, or recreational purposes, but most aim to create online communities by fusing the three (Harvey, 2014).

Notably, social media provides a platform for people and businesses to sell their goods, organize events, discuss their opinions, launch campaigns, and partake in other activities (Ortiz-Ospina & Roser, 2023). These websites are some of the most well-known and well-liked. Connecting with an individual on social media always requires their consent, and either party may decide to end the relationship at any time (Edosomwan et al., 2021).

### 2.3.1 Facebook

The platform was initially created in 2004 by Mark Zuckerberg, Andrew McCollum, Chris Hughes, Eduardo Saverin, and Dustin Moskovitz to promote networking among students at Harvard. However, it took the platform's creators only a short time to realize their service potential, so in 2006 they made Facebook public (Edosomwan et al., 2021). As a result, with an unparalleled total of 2.8 billion active members per month, Facebook has grown to become the world's most outstanding social media network (Facebook, 2021). Over the years, Facebook has acquired several companies, including WhatsApp and Instagram, which collectively have 3.3 billion users (Edosomwan et al., 2021).

One can find friends and coworkers and connect with their networks on Facebook. One can also share text, links, photographs, and videos with your friends. For friends of friends to see what you have posted, the platform fosters post-sharing. If they choose, they can also spread it across their networks. One of the things that makes Facebook such an attractive location to promote your book is this multi-stage sharing across various social groupings (Facebook, 2021). Users can explore various features, such as the ability to create events and invite friends to them, creating a user-specific "fan page" where they can publish updates or other content. Nevertheless, it allows one to form their particular interest group

and talk about pressing issues or issues about their research (Ortiz-Ospina & Roser, 2023).

### 2.3.2 Twitter

Jack Dorsey, Evan Williams, Noah Glass and Biz Stone founded this platform in 2006, and as of 2020, it had over 200 million active users every month (Statista, 2021). Accordingly, Twitter.com is an online social media platform that lets users read and post 140-character messages called tweets, according to the company's website. Short comments, online links, and photographs can all be shared by users, but obviously, lengthy texts are not supported. Although it is a handy way to distribute links, it is beautiful for fast-sharing news and less suitable for in-depth debates (Twitter, 2021).

Notably, the social media site seeks to foster healthy discourse on timely and relevant subjects among users worldwide, online communities' formation and influencing the interactions of individuals in the modern period (Twitter, 2021). Users can follow one another on Twitter to stay informed about topics, interests, and viewpoints and to ultimately respond to each other people's tweets again in order to improve interactions (Twitter, 2021). Instead of actively sharing a way of life, as with other online platforms, this social media concentrates on facts and thoughts exchange about pertinent topics (Edosomwan et al., 2021).

### 2.3.3 Instagram

Instagram serves as a venue for online networking using visuals. The platform, which has over a billion monthly active users, is under the ownership of Facebook (Facebook, 2021). Many users use it to upload content on related subjects, like food, fashion, travel and crafts. The location is renowned for its excellent channels that offer video and photo-editing features. Most Facebook users also use Instagram (around 95%) (Hartmans, 2020). Mike Krieger and Kevin Systrom developed the renowned networking platform, and as of 2012, Facebook acquired Instagram (Hartmans, 2020). It made its debut in October 2010. Using photographs and videos, users can communicate with friends, family, strangers, and strangers about their hobbies and way of life. (Ortiz-Ospina & Roser, 2023).

Contrary to Facebook, Instagram lets users choose between creating a public profile that anyone can access and interact with and a reserved profile that needs the permission of the account owner in order to follow them and view their news feed (Ortiz-Ospina & Roser, 2023). In this case, Instagram provides its users with various features to improve their engagement and interactions with one another. These features also let users connect with others and express themselves on the platform (Facebook, 2021). These features include "stories," which are posts (pictures or videos) organized in a slideshow that is only available on the home feed and last for 24 hours; The channel also offers "direct messages," which give users the option of texting, video calling, or content sharing with other people via a private or group chat; Users can produce and share long-form films on "IGTV," "Search & Explore," and "reels," which are multi-clip short videos of up to 30 seconds that allow users to be inventive with things like AR filters, music, and audio; for their users, "direct messages" and "shopping" functions allow them to directly purchase goods from various brands without leaving the site (Facebook, 2021).

#### **2.3.4 LinkedIn**

LinkedIn.com is a professional network that is mainly focused on articles and profiles that are work-related. On LinkedIn, contacts are referred to as connections, and users can connect with people in their local region, participate in specialized groups and forums, and build an international professional network of peers (Ortiz-Ospina & Roser, 2023). Users are guided through building their professional profile, including experience, qualifications, and other information when creating a LinkedIn account. Aside from submitting messages such as videos, text, links, and images, one can also give and get professional recommendations. Additionally, it is a great spot to include any work or article by a particular author because it increases the likelihood of connecting with peers in a related field (Ortiz-Ospina & Roser, 2023).

#### **2.3.5 TikTok**

With the help of the video-sharing software TikTok, users may create and upload brief videos about any topic. Although the online app is still available, TikTok is

primarily a mobile platform. The platform allows users to showcase their creativity with their content by using stickers, filters, sound effects, voiceovers, and background music (Geyser, 2022). Romano (2020) describes TikTok as an app that enables short-form video sharing with a feed featuring an endless stream of small videos created by its users. Combining up to 60 seconds' worth of videos with a 15-second maximum run time is allowed. The app is well known for its heartwarming, frequently humorous content that showcases real individuals and genuine, home-produced videos (Romano, 2020).

In April 2018, the Chinese company ByteDance purchased the app, formerly known as the karaoke service Musical.ly, and integrated it into the TikTok platform. With billions of downloads since then, it has had tremendous global growth (Romano, 2020). According to Edosomwan et al. (2021), who concur with this statement, TikTok is among the most rapidly expanding apps and has exceeded prior social media applications regarding user count and usage volume. According to recent statistics from Geyser (2022), there have been 3 billion installations of the TikTok app. Additionally, the app is boasting 1 billion active users monthly (Geyser, 2022). Given that TikTok only had 133 million active monthly users when it was first introduced in 2018, this 1 billion figure is astonishing. Given the considerable user growth, the platform's engaging nature and popularity speak for themselves (Geyser, 2022).

TikTok operates on-site- and interest-based interactions. Users hurriedly adjust to the culture of participation of the app, which aims to foster creativity and promote fun through its trends, content, and community. Although Millennials and members of Generation Z make up the bulk of its users, other age groups are swiftly catching on to its appeal (Romano, 2020).

### 2.3.6 WhatsApp

WhatsApp Messenger is a multi-platform instantaneous messaging app for smartphones, tablets and laptops. The app utilizes an Internet connection to transmit pictures, text files, video, and audio to users who have installed the app (Edosomwan et al., 2021). Founded in January 2010, Facebook acquired this app on February 19, 2014, for a reported \$19.3 billion. Over one billion individuals use

the service to connect with family, friends, and customers (Akram & Kumar, 2017).

### **2.3.7 YouTube**

Millions of people may locate, view, and share original videos on YouTube, the most well-known online video network worldwide, which was founded in 2005 (YouTube, 2005). YouTube offers people a platform for interacting, informing, and inspiring other individuals worldwide as a significant dissemination network for advertisers and original content creators, both small and large (Akram & Kumar, 2017). Different user-generated video content, like music videos, TV clips, movie clips and amateur films like video blogging and short original works, are displayed on the YouTube website, which is situated in San Bruno, California, using Adobe Flash videoconferencing technology (Edosomwan et al., 2021).

## **2.4 The algorithm and AI design behind different platforms of social media**

Social media algorithms support all social networks. They are to enable the sorting of vast chunks of daily content and present each user with the content they will interact with the most (Swart, 2021). According to Kim (2017), a social media algorithm is a system of guidelines and indicators that determines the relevance of the material on a social network based on the likelihood that each particular social media user would engage with it. The social media algorithm is made to identify the material that will appeal to a particular audience the most. Although it is a highly complex procedure, it also impacts all the daily activities of internet users (Zimmer et al., 2019).

According to Kim (2017), even if they follow duplicate accounts, no two users will ever see the same social media information because of algorithms. For instance, algorithms explain why the "For You Page" is the name of the primary TikTok user feed. Based on how you have previously used the app, content has been precisely chosen for you (Kim, 2017). As a result, these social media platform algorithms govern what users see when they log onto their preferred site and whether or not posted content will appear in their newsfeeds. The algorithm's objective is to keep users interested and to return,

so they will stay on the platform longer and possibly even utilize it as their primary news source. (Zimmer et al., 2019).

Although each social networking platform has a distinct algorithm, all are based on machine learning and ranking signals, a set of factors. The ranking signals for each user's assessment of the worth of each piece of content are exactly what they sound like. Ranking signals are unique to each user because they frequently rely on your previous interactions with the application (Swart, 2023).

The algorithms highlight content viewers are highly likely to interact with. More comments, shares, and likes to increase the likelihood that a post will appear in someone's newsfeed than fewer do. Due to low traffic, some posts might not receive the attention they deserve (Kim, 2017). The algorithm's audience targeting also puts consumers at a higher risk of addiction (Zimmer et al., 2019).

Kim (2017) notes that the advantages that social media algorithms offer enable users' involvement to rise and their likelihood of becoming addicted to the platform to rise. These include publishing pertinent and excellent material. Because the primary purpose of algorithms on social media is to show people stuff they are likely to be interested in, relevance and quality of content are ranking signals for all social algorithms. This is significant since, in general, people are not drawn to irrelevant or subpar content (Swart, 2023).

According to Cetina Presuel and Sierra (2019), user data on social media platforms enables them to discover audiences interested in particular content. Platforms may provide users with material that will always keep them interested by determining their interests. While it is frequently the case that users' newsfeeds on platforms such as Facebook contain very minimal substantive news mixed in with many other personalized data: personal observations, gossip, commercial messages, and commentary, data demonstrates that users appear to respond favourably to the accessibility of real news through social media and engage with their social media platforms, at least in part, to search for and consume the news (Cetina et al., 2019).

Second, algorithms support the platform's ability to deliver on its promises. In the early years of social media, clickbait was an actual issue. In order to effectively

downvote content that looks deceptive or spammy, all the networks have programmed their algorithms to do so. Ensure your hashtags, caption, and headline are precise and understandable (Kim, 2017). The algorithms also aid in comprehending platform trends. Social media platforms seek to provide more of the trending information since it keeps users reading and interested (Kim, 2017).

Social media algorithms also determine the ideal posting times. Recency and early interaction are two important ranking signals used in many algorithms. As a result, a user must be aware of the optimal times for reaching their audience on each social media site (Swart, 2021). The algorithms also aid in promoting shares, comments, and saves. Engagement, particularly early engagement, is a crucial rating signal for all social media algorithms, as Kim (2017) mentioned. Simply asking for increased engagement is a straightforward way to do this. Notably, platforms are not advised to solicit users to comment on or share their posts with their followers. As a second option, social media platforms use algorithms to create content that encourages user interaction (Kim, 2017).

Algorithms are used to help develop content to increase engagement. Encourage users to share exceptionally educational information with others who might benefit from it or to bookmark the post for later use when it is created by the platforms (Swart, 2021).

## 2.5 Social Media's addictive nature

The phrase "social media addiction" describes a pattern of symptoms resembling addiction or a lack of self-control when using social media (Qin et al., 2022). In Section 3 of the DSM-5 list, the American Psychiatric Association classified social media addiction as a specific kind of online addiction known as online gaming disorder, according to Leong et al. (2019). Leong et al. (2019) further assert that addiction to social media can be broadly characterized as an emotional dependence on using social media that can interfere with other, more important activities. According to Savci and Aysan (2017), it is more specifically defined as having an unwarranted concern for social media, being motivated by an overpowering impulse to log on to or utilize social media, and investing a lot of time and energy in social media that it negatively affects other significant life areas.

As a subcategory of online addiction, addiction to social media is further defined by Qin et al. (2022) as including other addictions related to contexts like computer addiction, cybersexual addiction, smartphone addiction, net compulsions (like online trading, shopping, and gaming), overload of information, online auction addiction, and Internet gaming addiction, among others (Leong et al., 2019). According to Savci and Aysan (2017), the term "social media addiction" refers to the internet addiction category known as "online relationship addiction." It is defined as a condition in which a person has an overwhelming desire to engage in social media activities and will go to great lengths to do so, even at the expense of other vital aspects of their lives (Savci & Aysan, 2017).

According to TFE Times research from 2017, users aged 15 to 19 spent an average of not less than three hours daily on their favourite social media platforms, while those aged 20 to 29 spent around two hours daily doing so. Social media accounts for 28 per cent of all media time used (TFE, 2017). Furthermore, 1.23 billion users spend about 17 minutes logging into social media daily, amounting to a daily Facebook usage time of 39,757 years (TFE, 2017). According to the survey, 16 per cent of users rely on Twitter or Facebook for their morning news, while 18 per cent cannot leave for more than a few hours without checking their Facebook (TFE, 2017). Additionally, 500 million tweets and 5 million photographs are posted daily on Instagram and Twitter, and daily, the five billion "Google+1" button clicks and the two new members added to LinkedIn every second are additional indicators of social media addiction (TFE, 2017). Additionally, according to TFE Times (2017), 28 per cent of Twitter users read their feeds when they wake up.

In light of this, Qin et al. (2022) claim that social media usage has increased dramatically. Nevertheless, due to the popularity of social media platforms like Facebook, Instagram, WhatsApp, WeChat, YouTube and Twitter, among others, many users have developed addictions without even realizing it (Qin et al., 2022). This is connected to social media's addictive quality. Social media's addictive qualities are discussed by Kuss and Griffiths (2017), who also claim that behavioural addictions, such as those to alcohol and drugs, have a comparable effect on the brain as social media use. People who use social networking apps commonly release dopamine in their brains from viewing and consuming visual content, posting and obtaining

approval from others, and other stimuli. Dopamine and neurotransmitters combine to create rewarding and pleasurable experiences (Kuss & Griffiths, 2017). According to Schou, Andreassen, and Pallesen (2014), this process causes the formation of pathways to addiction in the brain, which makes it difficult to restrain one's cravings or break a habit.

In this case, according to Kuss and Griffiths (2017), a person's brain will resort to social media more frequently to get another hit the more they use it and enjoy the pleasant dopamine high it creates. Users may utilize social networking sites more frequently to achieve the same results. As a result, a tolerance sets up and demands more stimuli—in this example, social media—to produce the same dopamine response. This tolerance may cause the user to grow dependent on social media and require it to feel normal. If the adverse effects of this dependence are not addressed, an addiction may form (Kuss & Griffiths, 2017).

Social networking's addictive qualities are significantly exacerbated because it is frequently free, simple to use on current technology, and accepted in society. Because of this, users can use social media apps excessively without worrying about being watched or facing the consequences, which is not the case with many substances (Schou et al., 2014). For instance, using Facebook or TikTok excessively rarely results in legal issues (Kuss & Griffiths, 2017).

Furthermore, according to Qin et al. (2022), the most prominent social media sites like Tiktok, Twitter, YouTube, and Facebook spend billions on advertising and hire programmers who are paid to produce content that is addictive. These websites monitor your online behaviour and tailor their feeds only to show you stuff you are likely to read, watch, or respond to. This is consistent with how social media platforms use algorithms to generate user-interesting and engaging content. Social media has become more addictive, making it more difficult for the ordinary individual to disconnect (Qin et al., 2022).

The unhealthy and dependent usage of social media is a comparatively recent concern in the research on information systems, claim Leong et al. (2019). Salience (for example, when social media usage is dominating users' thinking and behaviour), mood modification (when using social media affects mood), tolerance, conflict (when using

social media causes problems in relationships, education, employment, and other areas), and relapse are some the negatives effects of unhealthy and dependent usage of social media. A social media addiction could negatively affect a person's daily life and psychological, emotional, and physical health (Qin et al., 2022).

## **2.6 Physical, emotional and psychological health impacts of social media use**

It is conceivable to see social media as a two-edged sword. According to studies (Keles et al., 2020), using social media is advantageous in enabling people to express their emotions and thoughts and to get social support. Additionally, research has shown a link between using social media and issues with psychological, physical, and emotional health (Akram & Kumar, 2017; Chegeni et al., 2021).

According to Chegeni et al. (2021), social media sites have ingrained themselves into people's daily lives to the point that they can be used to fulfil any number of demands. Social networks provide advantages, but they also have a flip side that, if utilized poorly and without purpose, can result in behavioural addiction and irreversible negative impacts (Chegeni et al., 2021). Excessive and compulsive social media use has been classified as a behavioural addiction. This type of behavioural addiction seriously impairs a person's mental and physical health and fosters the emergence of risky behaviours. Functionality, mental and well-being issues, a loss of positive emotions, loneliness, and a drop in social connections are health hazards that may harm users' and even their families' quality of life (Chegeni et al., 2021).

In their study, Ostic et al. (2021) discovered that using social media significantly impacted the formation of social capital. This suggests that using social media during the pandemic assisted students in maintaining close connections with friends, family and other individuals they are closely related to. In this situation, students are highly likely to engage with social media podiums to boost their ability to organize others, gain more emotional support, and generate social networks that promote a social belonging sense (Ostic et al., 2021). The results also showed that heavy social media use increases smartphone addiction and social isolation, which have detrimental psychological effects. Smartphone addiction was more likely to result from overusing smartphones for social networking, entertainment (viewing movies and music), and

playing electronic games. As a result, the data imply that smartphone addiction correlates with phubbing, a critical indicator of psychological health (Ostic et al., 2021).

Social media communication and its relationship to mental well-being can have beneficial and harmful effects, according to a study by Graciyal and Viswam (2021). While negative associations lower self-esteem due to social comparison, positive associations promote more online partnerships. While text communication accompanied by causal discourse does not impact a person's well-being, individualized and intimate dialogue between people in relationships shows a variation in well-being standards. Platforms like social media can help develop wholesome interactions through the quest for joy and happiness free from pain (Graciyal & Viswam, 2021).

According to Graciyal and Viswam's results from 2021, everyone's pursuit of happiness is a natural aspect of life. When someone is content, they are more social and engaged. Happiness levels not solely focused on fleeting pleasures can lead to long-term psychological and subjective well-being. SM interactions encouraging favourable recommendations and impartial participation continually strive for timing synchronization. It helps a person maintain the best possible emotional balance, which leads to pleasure and joy without suffering (Graciyal & Viswam, 2021). The effect of social media communication on the emotional well-being of an individual is entirely up to the user. Perfect well-being is aided by the sense of connectivity and higher levels of intimacy in virtual relationships. The psychological and subjective well-being of the person might be harmed by social comparison or any other activities that result in flaws or aberrations in relationships (Graciyal & Viswam, 2021).

Another study was undertaken by Bekalu et al. (2019) to investigate the connections between SM use incorporation into everyday life and psychological attachment to its utilization and three health-related results: social well-being, self-reported health and favourable mental health. The results suggest that there might be various relationships between frequent usage of social media and the three health-linked outcomes. The three outcomes were all positively interrelated with routine use, but none were positively correlated with emotional attachment to SM. The information

also revealed that different social groups have relationships between routine use, emotional attachment, and the three health-related outcomes (Bekalu et al., 2019).

Keles et al. (2020) did a systematic analysis and synthesis of the research on the role of social media use on anxiety, depression and mental distress in adolescents to highlight the detrimental effects of social media use on people. According to the authors, online social media is to blame for rising mental health issues among young people despite being ingrained in our everyday lives. The systematic review results were divided into four social media domains: activity, time spent, addiction and investment. According to Keles et al. (2020), all dimensions were associated with psychological distress, anxiety, and depression.

Around 350 million people use social media, with users between the ages of 16 and 25 showing the most symptoms of Facebook addiction syndrome, according to a poll by Gaille (2018). Furthermore, 61 per cent of users said they needed to visit Facebook more than once a day, and nearly 68 per cent of users admitted to checking their social media accounts ten times daily (Gaille, 2018). Most users admitted that they could only go a day without utilizing social media (Gaille, 2018). Social media sites like Instagram, Tiktok, Facebook, and Twitter have a multitude of benefits for both people and businesses, claim Schemer et al. (2021). However, it is crucial to keep in mind the disadvantages as well. Many users of social media platforms quickly develop addictions to them, which results in an increasing amount of productivity loss. Additionally, various users are subject to cyberbullying and deal with privacy issues, including identity theft and exploiting their data by advertising firms (Schemer et al., 2021).

Furthermore, according to Schemer et al. (2021), spending too much time on social media—which is typically estimated to be around two hours per day—has been linked to worse academic performance, higher levels of stress, worse moods, and higher rates of anxiety, as well as lower melatonin production and poorer sleep quality. This suggests that using social media has a detrimental psychological impact on users. Akram and Kumar (2017) note that social media has both beneficial and adverse physical and psychological consequences, suggesting that there are two sides to social media. Positively, professionals can benefit from using social media as a resource. By helping fresh grads market their abilities and hunt for jobs, they can do this. Social

networking websites can also be utilized effectively for networking (Akram & Kumar, 2017). Conversely, a variety of concerns come with participating in online groups, including cyberbullying, which is harassment that is carried out using technology. Social media addiction can also lead to mental health problems (Akram & Kumar, 2017).

### **3 Methodology**

The development of research methods is covered in this chapter. It includes a discussion of the methodology, research strategy, and philosophical foundations used for this study before explaining their application. This chapter also explains data collection methods, sample tactics, data analysis procedures, and the justification for choosing a quantitative or qualitative study design. The chapter also discusses practical ethical issues before concluding with a comment on the methodology's shortcomings in this study.

#### **3.1 Research objectives**

This research is guided by the following objectives:

- 1.To determine the social media platform algorithms and design that influence the usage behavior and wellbeing of users
- 2.To find out the relationship between social media use factors and an individual's wellbeing
- 3.To identify the emotional, physical, and psychological effects of social media use on the wellbeing of individuals

#### **3.2 Research Strategy**

According to Ormston et al. (2014), the research strategy entails the strategies and tactics the researcher employs to clarify the numerous presumptions and methods used in data collection and their interpretations. There are two primary methods of research: deductive and inductive. Information and knowledge must be created to create new theories using the inductive approach. On the other hand, the deductive

method entails examining the reliability of assumptions and current theories. Notably, with this method, the researcher begins with an idea and then refines it into specific hypotheses used in the data collection (Saunders et al., 2012). Based on this foundation, this study will use an approach known as deductive reasoning. This method will be used to gain insight into how social media use impacts the well-being of users. The data obtained from the participants can be used to draw generalizations and apply them to other social media users (Bryman, 2015).

According to Bryman (2015), a research plan aids in determining the nature and type of data that should be collected. Case studies, surveys, experiments, and grounded theory are the research methods that researchers use. Ormston et al. (2014) assert that a researcher's choice of research strategy depends on the specifications of the study, including the subject's level of control, the study's scope, and the research questions or objectives. The survey is used in this investigation. The reason a survey is chosen for this study is twofold: first, it allows for various procedures for participant recruitment, data collection, and equipment. For instance, a survey can make use of mixed techniques, which incorporate both approaches: qualitative study tactics (such as employing open-ended questions) and quantitative research strategies (such as questionnaires with statistically rated items) (Creswell & Creswell, 2018). As a result, a survey gave the researcher several ways to gather information for this study. Second, surveys may quickly and cheaply gather information from a broad population sample because they are simple to create, manage, and simplify (Creswell & Creswell, 2017). Since this study requires a sizable population sample, the survey is the most appropriate method because it is simple for the researcher to get information from the sample. Thirdly, surveys are frequently used in psychological and social research to characterize and investigate human behaviour (Creswell & Creswell, 2018). Therefore, the survey is most appropriate for this study because it examines social media use and how it affects people's well-being. However, one drawback of the survey is that biases could occur, either in the precision and quality of the collected replies or in the absence of responses from expected respondents (Creswell & Creswell, 2017).

### **3.3 Research approach**

In light of the main study issues, qualitative as well as quantitative methods of research could yield the desired results. This is because the methodology and research plan speed up the adoption of both practices. However, this study adopted quantitative research design. According to Creswell and Creswell (2017) quantitative research quantifies the research challenge by generating numerical data. It entails quantifying ideas, behaviours, and attitudes and generalizing findings from a larger sample. This is so that the identified problem may be investigated using numerical measurement and theory testing in a quantitative research design. As a result, by examination of the link between variables (which is social media use and people's wellbeing), this approach aided in the testing of objective ideas from the data that was collected using descriptive statistics, correlation analysis and regression analysis.

Additionally, adopting this approach aided in determining whether the generalizations of the prediction theory are accurate (Bryman, 2015). The association between SM use and its impact on well-being were examined using the quantitative approach, which is correlation and regression analysis. Thus, because the questionnaire can collect data from a population with a larger sample size, quantitative approaches were used because they increase the validity of the research (Creswell & Creswell, 2017).

### **3.4 Data collection**

Interviews, focus groups, and questionnaires are some of the frequently utilized data collection techniques that researchers might use (Creswell & Creswell, 2017). In this investigation, questionnaires were used. With open-ended or closed-ended questions, participants in questionnaires are asked for information. It is used to collect numerical data, which can be evaluated using numerical methods like descriptive or inferential statistics. Additionally, questionnaires make it possible for the researcher to collect data from a larger sample of the community with little effort and expense (Bryman, 2015), unlike the interview approach, which is lengthy since it requires training to conduct the interview and much time to evaluate the responses. In addition, there is a chance that the interviewer's bias will influence and affect the course of interviewing the respondents (Wilson, 2014). As a result, data was gathered

from the general public through social media, making questionnaire appropriate for this study. However, questionnaires are also challenging because participants may need to be more honest when they respond to questions and may do so casually, interfering with the study's trustworthiness (Bryman, 2015).

In this case, the validity and reliability of the study are two other crucial factors when gathering data. By controlling the study's sample size and enhancing the measuring techniques, the researcher in this study ensured that the results are valid. Additionally, developing questionnaires with identical questions or ensuring high levels of consistency improved the study's dependability (Ormston et al., 2014).

Ormston et al. (2014) claim that sampling involves choosing people from an interested group to participate in a particular research project. Sampling techniques allow researchers to acquire the least amount of data possible by focusing on a subset rather than the entire case. Sampling techniques allow researchers to acquire the least amount of data possible by focusing on a subset rather than the entire case (Bell et al., 2022).

The general public from social media platforms participated in this study so that researchers could learn more about how social media use impacts people's well-being. The sampling of the general public to participate in the study was done through convenience sampling. Convenience sampling is a technique of non-probability sampling where units are chosen for the sample based on their accessibility to the researcher. This may be as a result of close proximity geographically, availability at a specific moment, or willingness to take part in the study (Bell et al., 2022). In this study, the researcher chose convenience sampling based on the participants' availability and willingness to take part in a study. Besides, convenience sampling was chosen because it made it simpler and quicker for the researcher to contact the participants. This indicates that the researcher's effort and expenses to obtain study participants were minimal (Ormston et al., 2014). Bell et al. (2022) add that convenience sampling is a good fit for a research if the researcher wants to get an idea of the opinions and attitudes of people, which is the focus of this study.

Accordingly, to draw the sample, the researcher wrote a post on three social media platforms (Facebook, Instagram and Twitter) informing participants of the study

purpose and inviting them to confirm their willingness to take part through commenting on the post. To entice members to participate, a small coupon was attached to members who were willing to participate. In the end, the researcher ended up with 150 participants from social media as the sample size. This large size of sample helped to minimize the sampling bias. Also, the researcher distributed the surveys to the selected participants at different times and days (Roberts, 2014).

In line with sample frame, one hundred and fifty questionnaires were given to the respondents by the researcher. The questionnaires were distributed to the sampled population by sending a link to the participants in their social media accounts or through email for the participants who provided their email in the comment section of the post for invitation to participate. The researcher gave a maximum of 24 hours for the participants to answer the questions and return the questionnaires. To encourage the participants to provide accurate and suitable answers, the researcher informed the respondents about the study and assured them of their privacy. With a target of 150 participants, the researcher received over 100 legitimate responses.

### **3.5 Hypothesis**

The researcher will test the following three hypotheses:

***H1: Social media platform algorithms/AI design have a significant influence on the usage behavior and wellbeing of users***

***H0: Social media platform algorithms/AI design does not significantly influence the usage behavior and wellbeing of users***

Previous studies have indicated that algorithms on social media influence users' usage behavior that, in turn, impact their wellbeing. However, this study aims to give more insights into this claim and determine if this correlation exists.

***H2: Social media use factors is positively related to individual's wellbeing***

***H0: Social media use factors is not positively related to individual's wellbeing***

Several studies have revealed mixed findings of both a positive and negative correlation between social media use and the wellbeing of people. However, this

study aims to uncover whether both the relationship is positive, negative or mixed. The study also aims to give more insights into why a positive or negative correlation may exists.

***H3: Social media use have a significant negative effect on the emotional, physical, and psychological wellbeing of individuals***

***HO: Social media use does not have a significant negative effect on the emotional, physical, and psychological wellbeing of individuals***

Prior studies have also revealed that social media use impacts users emotionally, psychological and physical wellbeing. However, it would be interesting to understand the influence differs on these three variables and which one is greatly impacted.

### **3.6 Data analysis**

While SPSS was used to efficiently analyze and produce inferential data for correlation and regression analysis, the researcher used Microsoft Excel to gather, clean, and generate frequency data. Because it is easy to import data from one application to the other while utilizing their capabilities, using Excel and SPSS software was acceptable for this study (Saunders et al., 2012). Additionally, it is easy to interpret the results because data tables can be quickly and easily shown (DeCoster & Claypool, 2014).

The researcher arranged the questions on nominal and Likert scales to quantify the variables. In the demographics section, respondents were asked four questions regarding their age, gender, education, occupation, and how often they use social media. The respondents were asked to state that gender was measured by being a female (F) or male (M); age was measured on a scale of 18–25 and 40–65; occupation was measured by being employed, a student, or owning a business; education was measured by high school, undergraduate, master's degree, and doctorate; frequency of using social media was measured by less than 1 hour, 1–2 hours, 2–3 hours, more than 3 hours, and I do not use social media.

On the question SM effects on well-being, respondents were asked ten different items arranged in ascending order "SM use affects my physical health, social media use affects my psychological well-being, SM use affects my emotional well-being, social

media use affects my overall health, I experience FOMO (Fear of Missing Out) due to social media use, social media use has a positive impact on my self-esteem, social media use has a positive impact on my body image, social media use affects my sleep patterns, social media use affects my productivity in daily activities and social media use affects my relationships with friends and family" which were measured on a 5-point Likert scale. On this scale, 1 was equivalent to totally disagreeing, while five was equivalent to totally agreeing, with 3 being the middle point of neutrality.

Regarding social media platform algorithms, design, and usage behaviour, respondents were asked six questionnaire items: "Which social media platforms do you use regularly? How often do you spend more time on social media than you intended? Do social media platforms show content tailored to your interests and preferences? How much do you rely on recommendations from social media platforms when engaging with content? How often do you engage with sponsored or advertising content on social media platforms? Moreover, do you feel pressure to present an idealized version of yourself on social media? The first question on social media platforms was measured using Facebook, Tiktok and others; questions on how often they found spending more time on social media than they had intended, how much they relied on recommendations from social media platforms when engaging with content, and how often they engage with sponsored/advertisement content on social media platforms was measured on a 5-point Likert scale where one means never, two mean rarely, three is occasionally, four is frequently, and five implies all the time; and the question on whether they feel the pressure of presenting a perfect version of themselves on SM, as well as whether SM platforms show content tailored to their interests and preferences was measured on a 5-point Likert scale where one is equivalent to disagree. At the same time, five is equivalent to agreeing, with three being the middle point of neutrality.

Finally, on the question of the relationship between SM use factors and well-being, respondents were asked to show their level of agreement concerning the eight questionnaire items, including "the time spent on social media affects my overall well-being, the number of social media platforms I use affects my overall wellbeing, the frequency of my social media use affects my overall wellbeing, the content I consume on social media affects my overall wellbeing, the level of interaction with others on

social media affects my overall wellbeing, the comparison of myself with others on social media affects my overall wellbeing, the privacy concerns related to social media use affect my overall wellbeing, the level of social support received on social media affects my overall wellbeing." These questions were measured on a 5-point Likert scale, where one is equivalent to totally disagreeing, and five is equivalent to totally agreeing, with 3 being the middle point of neutrality.

### **3.6.1 Description of the data analysis procedure**

Using the allocated values for every variable described in Section 3.4 Data Analysis of this thesis, the data was entered into the 'Data tab' of SPSS and then analyzed. Following the entry of all the values for each variable in the "Data tab," those values were further coded in SPSS's "Variable View" tab by entering the appropriate numerical values for every value in each variable, as illustrated in appendix 1.

The variables indicating demographics of respondents are: gender is indicated by female (F) or male (M); age is measured on a scale of 18–25 and 40–65; occupation is indicated by being employed, a student, or owning a business; education is measured by high school, undergraduate, master's degree, and doctorate degree; frequency of using social media is measured by less than 1 hour, 1 to 2 hours, 2 to 3 hours, and I do not use social media, as shown below in appendix 2.

For variables designating the effects of SM on well-being, the questions "social media use affects my physical health, social media use affects my psychological well-being, social media use affects my emotional well-being, social media use affects my overall well-being, I experience FOMO (Fear of Missing Out) due to SM usage, social media use has an effect impact on my self-esteem, social media use has a positive impact on my body image, social media use affects my sleep patterns, social media use affects my productivity in daily activities and social media use affects my relationships with friends and family" are represented on a 5-point Likert scale, with one equivalent to totally disagree while five equivalent to agree totally as shown in appendix 3.

For the variables indicating social media platform algorithm and usage behaviour, the first question on social media platform is represented by Facebook, Tiktok and others; questions on how often they found spending more time on social media than they had intended, how much they relied on recommendations from social media platforms

when engaging with content, and how often they engage with sponsored/advertisement content on social media platforms are represented on a 5-point Likert scale where one means never, two mean rarely, three is occasionally, four is frequently, and five implies all the time; and the question on whether they feel pressure to present an idealized version of themselves on social media, as well as whether social media platforms show content tailored to their interests and preferences is represented on a 5-point Likert scale where one is equivalent to totally disagree while five is equivalent to agree totally as shown in appendix 3.

For variables representing the correlation between SM use factors and well-being, the questions “the time spent on SM affects my overall well-being, the number of SM platforms I use affects my overall well-being, the frequency of my social media use affects my overall well-being, the content I consume on social media affects my overall wellbeing, the level of interaction with others on social media affects my overall wellbeing, the comparison of myself with others on social media affects my overall wellbeing, the privacy concerns related to social media use affect my overall wellbeing, the level of social support received on social media affects my overall wellbeing” is represented on a 5-point-Likert scale where one is equivalent to disagree totally. At the same time, five is equivalent to agree totally as shown in appendix 3.

## 4 Findings and Analysis

### 4.1 Introduction

This section presents the findings from the survey, and analysis of those findings. The survey included 105 respondents, representing different age groups, genders, educational backgrounds, and employment statuses. Frequency analysis and descriptive statistics were used to analyse the characteristics of the participants and their responses. Inferential statistics was used to analyse the associations between social media use and wellbeing.

## 4.2 Descriptive statistics

### 4.2.1 Demographic analysis

Frequency analysis was used to analyse the demographics of the participants. The distribution of respondents across these demographic factors is discussed. First, 46.7% of the respondents identified as male, while 53.3% identified as female, indicating a relatively balanced representation of genders in the study. This agrees with the findings of Alnjadat et al. (2019), who observed that there was little discrepancy in terms of gender in overall social media usage.

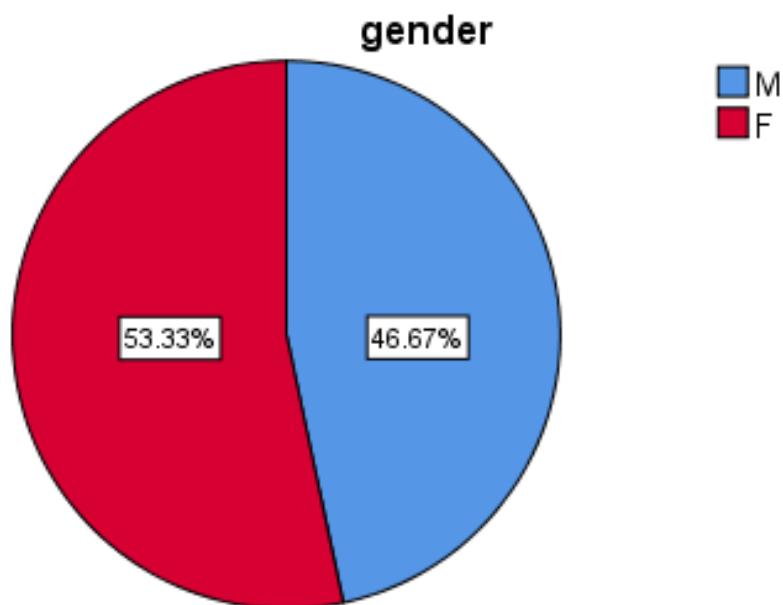
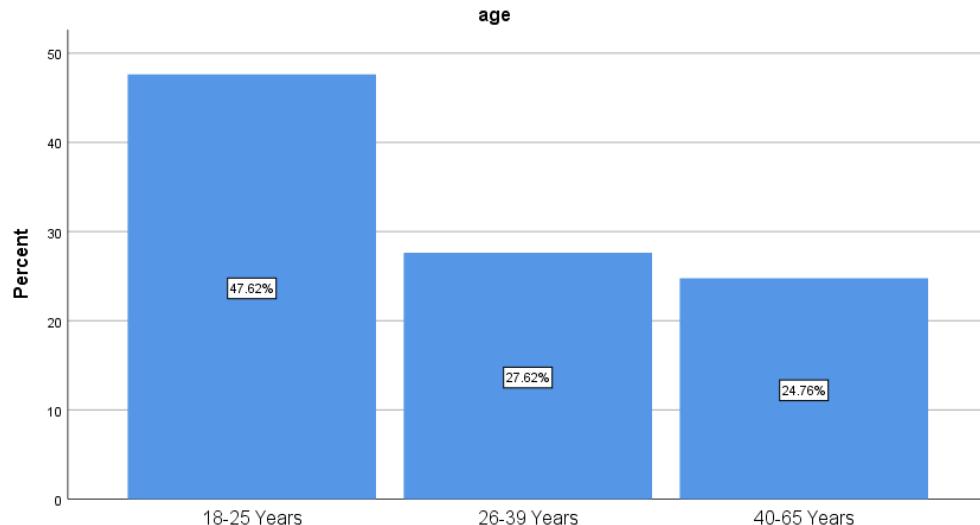


Figure 2: Gender of participants

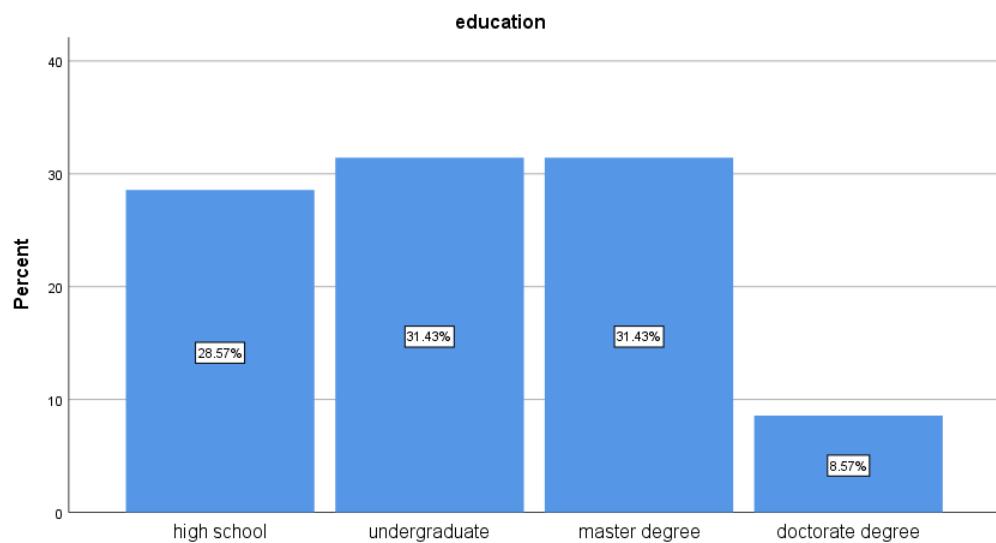
Secondly, in terms of age, 47.6% of the respondents fell within the 18-25 years' age range, indicating that a significant portion of the participants were young adults. Notably, 27.6% of the respondents were aged between 26-39, which suggests that there is a diverse representation of participants across different stages of adulthood. It was also noted that 24.8% of the respondents were in the middle-age category, ranging between 40-65 years of age. This indicates that there were also participants from older age groups, and this goes to agree with Duggan and Brenner (2013), who

noted that although social media usage is dominated with younger people, even older people use it although usage declines with age.



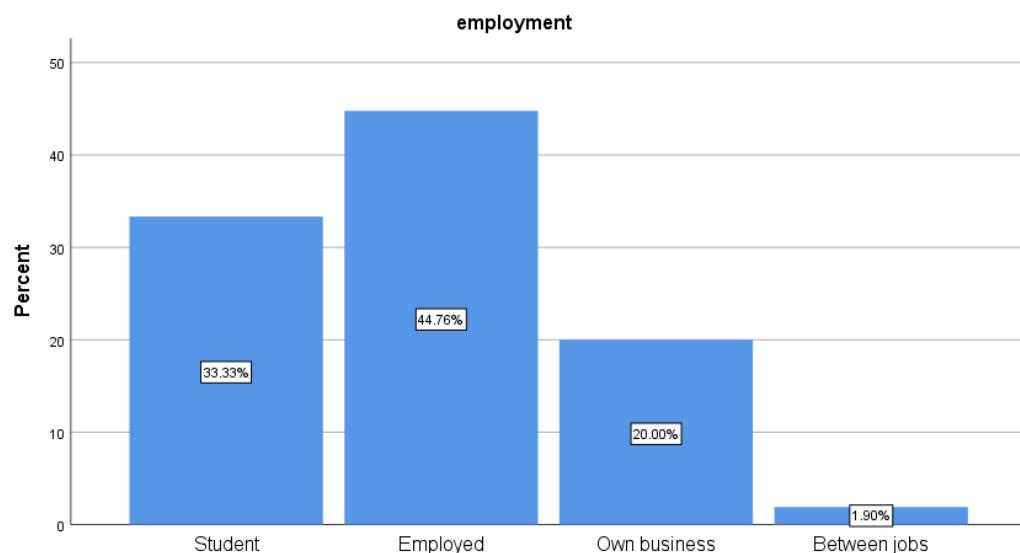
*Figure 3: Age distribution of participants*

Education was another important demographic consideration, and it was found that respondents had diverse educational backgrounds, with 28.6% having a high school education, 31.4% being undergraduates, 31.4% holding a master's degree, and 8.6% possessing a doctorate degree. This distribution suggests a broad range of educational qualifications among the participants, and highlights the significantly smaller number of participants with post-master's level of education. Factors that can explain this could be that a majority of people within the doctorate category are also likely to be much older, which would align with the smaller number of participants seen in the 40 years+ category above.



*Figure 4: Education level of participants*

Regarding employment, the respondents represented various employment statuses, as follows. Of the participants, 33.3% were students, 44.8% employed, and 20.0% owning their own business. Interestingly, as well, 1.9% indicated that they were between jobs, which implies that they were neither student, employed, or self-employed, and were therefore jobless at the time of the survey. This distribution indicates a mix of participants from different professional backgrounds.



*Figure 5: Employment status of social media users*

#### 4.2.2 Social media usage patterns

Regarding the frequency of social media use, it was found that a majority of the respondents, or 24.8% of the respondents, used social media between 1 hour to 3 hours a day, followed by 33.3% who used social media for more than 3 hours per day, and thirdly, 19% of the respondents used the platforms for less than an hour daily. Notably, nearly 10% of the participants used the platforms very infrequently, at less than an hour per week, and 13.3% of participants did not use social media at all.

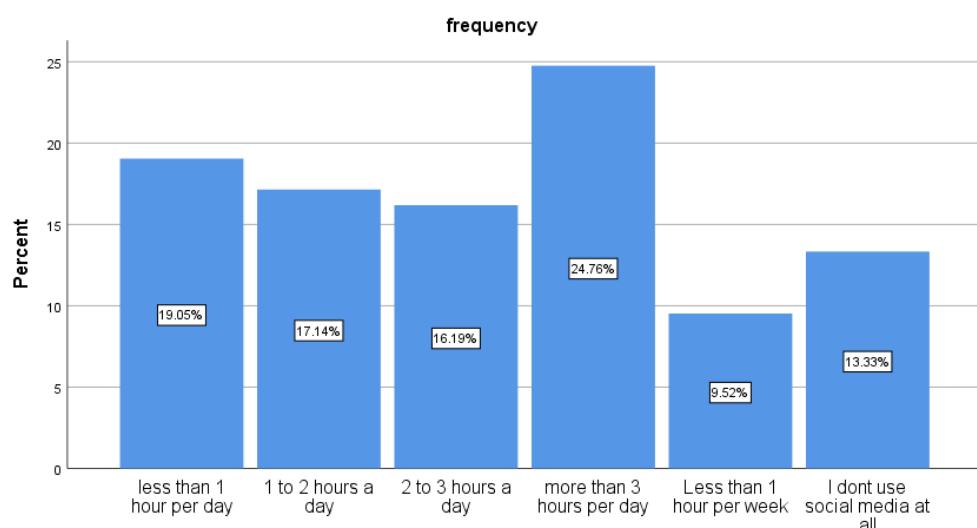


Figure 6: Frequency of use of social media

#### 4.2.3 Social media usage and wellbeing

Descriptive analysis was used to analyse the effects of social media on wellbeing using ten different items as shown in the table below, arranged in ascending order of mean based on a 5-point Likert scale. On this scale, 1 was equivalent to totally disagree while 5 was equivalent to totally agree, with 3 being the middle point of neutrality. Thus, scores below 3 show disagreeable views, while scores above three show agreeable views. The data shows that the respondents disagree that social media affects their relationships, physical health, and body image. On the contrary, they were in agreement that social media use affected their emotional wellbeing, productivity, and

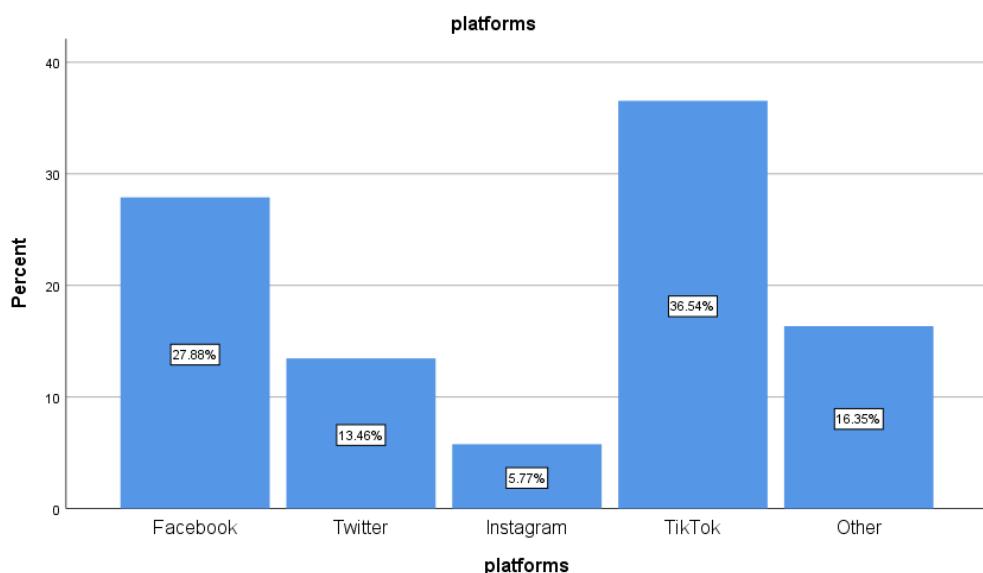
overall wellbeing. At the same time, the respondents felt that they experienced the fear of missing out (FOMO) due to social media use. The strongest agreeable scores among the respondents were when they were asked whether social media affected their psychological wellbeing, self-esteem, and sleep, all of which scored a mean of more than 3.3. This finding agrees with the views from Duggan and Brenner (2013), who noted that the use of social media impacted the wellbeing of users across different aspects. This occurred because when people use social media for a long time, they begin to have fewer hours to do other activities that are important to them, such as sleeping, working, learning, socializing outside in the real world, and even resting.

*Table 1: Social media use and wellbeing frequency analysis*

	Mean	Std. Deviation
Relationships	2.7019	1.48049
Physical	2.7333	1.03093
BodyImage	2.9333	1.55209
Emotional	3.0962	1.26583
Productivity	3.1429	1.60185
Overall	3.1538	1.32760
FOMO	3.2190	1.34437
Psychological	3.3365	1.26653
Sleep	3.3524	1.45431
SelfEsteem	3.3810	1.58345

The study also looked at social media platform algorithms and their relationships with user behaviours. Using the six questionnaire items, the participants were asked which platforms they used the most regularly because it was also important to understand

the most popular platforms used by the participants. According to the data, the two most dominantly used social media platforms were TikTok and Facebook, at 36.5% and 27.9% respectively, with Twitter (13.5%) and Instagram (5.8%) attaining a lower score. This data agrees with that of Eghesadi and Florea (2020), which showed that TikTok had rapidly risen to be a popular social media platform but contrasts the data by Castillo-Abdul et al. (2022), which showed that Instagram was more popular than Twitter.



*Figure 7: Social media platforms used by the participants*

Further, they were asked how often they found spending more time on social media than they had intended, how much they relied on recommendations from social media platforms when engaging with content, and how often they engage with sponsored/advertisement content on social media platforms. The response was captured on a 5-point Likert scale where 1 meant never, two meant rarely, 3 was occasionally, 4 was frequently, and 5 implied all the time. Table 2 presents those findings. From the table below, on whether they found themselves spending more time than they intended online, the participants mean score was 3 which implies that they occasionally did. This was the same for how often they engaged with ads when using the platforms. Notably, on how much they relied on recommendations when

using social media, the participant mean was 4, which implies that they frequently did.

*Table 2: Algorithm and overindulgence, ad interaction, and engagement from recommendations*

	Mean	Std. Deviation
Timeonline	2.9429	1.34328
Ads	3.0762	1.55474
Engagement	3.6000	1.38397

Still on social media impact on usage behaviour, the participants were also asked whether they feel pressure to present an idealized version of themselves on social media, as well as whether social media platforms show content tailored to their interests and preferences. The results were captured on a 5-point Likert scale where 1 was equivalent to totally disagree while 5 was equivalent to totally agree, with 3 being the middle point of neutrality. From the table below, the data can be interpreted as follows. The mean score for the participants' perception of peer pressure to present an idealized version of themselves on social media is 3.5. This suggests that, on average, the participants feel a moderate level of pressure to showcase an idealized image on social media. At the same time, social media platforms tailoring content to their interests and preferences is 3.8. This indicates that, on average, the participants believe that social media platforms strongly cater to their interests and preferences when displaying content. This finding agrees with those of Castillo-Abdul et al. (2022), which questioned the role of social media in influencing individuality and identity, and looked at the how social media preferences affected user behaviour. In both cases, it was found that social media algorithms affected how people used the platforms.

*Table 3: Social media algorithms and preferences, idealized version of self*

	Mean	Std. Deviation
peer Pressure	3.4667	1.45488
Preferences	3.8095	.92086

Lastly, the study also looked at the perceptions of users' social media usage and how it affected their overall wellbeing. A total of 8 items were tested using a 5-point-Likert scale. On this scale, 1 was equivalent to totally disagree while 5 was equivalent to totally agree, with 3 being the middle point of neutrality, with the outcomes arranged in an ascending order as per the table below. It was found that when asked whether "comparison of myself with others on social media affects my overall wellbeing", the mean score was 2, indicating disagreement. The same was recorded when they were asked "privacy concerns related to social media use affect my overall wellbeing" and "level of social support received on social media affects my overall wellbeing", both of which scored less than 3 on the Likert scale, when rounded off to the nearest whole digit. This implies that participants did not affirm those statements, hence disagreeing with them. On the other hand, participants were neutral when it came to the question of whether interaction with others on social media affects their overall wellbeing, and whether the content they consume on social media affects their overall wellbeing. As the data shows, when asked whether the frequency of their social media use affects their overall wellbeing, and whether the number of social media platforms they use affects their overall wellbeing, the participants' score averaged more than 3 implying that they agreed with these statements. These findings are in line with those of Naslund et al. (2020), who found that certain social media use factors like the nature of content, frequency of use, and platform type affected wellbeing of its users.

*Table 4: Perceptions of social media usage impacts on overall well being*

	Mean	Std. Deviation
peersWellbeing	1.9524	1.22773
privacyWellbeing	2.3143	1.31788
socialsupportWellbeing	2.5524	1.40727
interactionWellbeing	2.8857	1.46310
ContentWellbeing	2.9714	1.54084
frequencyWellbeing	3.4476	1.49345
platformsWellbeing	3.5429	1.37301

### 4.3 Hypothesis Testing

To test the hypothesis developed in the study, inferential statistics was used. In particular, the to test significance of the relations between social media use and wellbeing, algorithm design and overall individual well-being, the study conducted correlation and regression analysis.

#### 4.3.1 Hypothesis 1

***H1: Social media use have a significant negative effect on the emotional, physical, and psychological wellbeing of individuals.***

As shown in the table below, the correlation analysis focused on the relationship between social media usage frequency and various aspects of well-being, namely physical, psychological, and emotional well-being. The results show the associations between these variables.

Table 5: Correlations

		Frequency	physical	Psychological	emotional
Frequency	Pearson Correlation	1	.465**	.301**	.233*
	Sig. (2-tailed)		.000	.002	.018
	N	105	105	104	104
Physical	Pearson Correlation	.465**	1	.536**	.450**
	Sig. (2-tailed)	.000		.000	.000
	N	105	105	104	104
psychological	Pearson Correlation	.301**	.536**	1	.755**
	Sig. (2-tailed)	.002	.000		.000
	N	104	104	104	104
Emotional	Pearson Correlation	.233*	.450**	.755**	1
	Sig. (2-tailed)	.018	.000	.000	
	N	104	104	104	104

The correlation coefficient between social media usage frequency and physical well-being was found to be positive and significant ( $r = 0.465$ ,  $p < 0.01$ ). This indicates that as individuals engage more frequently with social media platforms, their physical well-being tends to be positively affected. This is opposite from the findings of several authors including Leong et al., (2019) and Ostic et al. (2021) who failed to observe that social media use may provide opportunities for individuals to access health-related information, engage in physical activities, or participate in online communities that promote well-being.

Furthermore, the correlation between social media usage frequency and psychological well-being was also found to be positive and significant ( $r = 0.301$ ,  $p <$

0.01). This suggests that individuals who spend more time on social media platforms tend to experience higher levels of psychological well-being. There are a number of reasons why this may be the case, as noted by Roeder (2020). Notably, it is possible that social media use offers opportunities for social connections, self-expression, and positive interactions, which contribute to individuals' psychological well-being. However, as Schemer et al. (2021) cautions, it is important to consider the potential negative aspects of social media, such as the impact of comparison, cyberbullying, or information overload, which may also influence psychological well-being which were not covered by the scope of this study.

Additionally, the correlation between social media usage frequency and emotional well-being was also tested. It was found to be positive and significant ( $r = 0.233, p < 0.05$ ). The implication of this is that individuals who use social media more frequently tend to have higher levels of emotional well-being, compared, for instance, to those who do not use it as frequently. This is counterintuitive, because several studies have theorized that increased social media use should have a significant negative correlation with emotional well-being (Akram and Kumar, 2017). Some reasons why this association may be positive include the possibility that social media platforms may provide a platform for self-expression, emotional support, and connection with others, which can positively impact individuals' emotional well-being. However, this is not often the case, and as the study by Qin et al. (2022) show, in some cases, the correlation may be negative. Which means, while social media has its advantages, it can also be a source of emotional distress, as it may expose individuals to negative or triggering content, cyberbullying, or social comparison that can adversely affect emotional well-being.

#### 4.3.2 Hypothesis 2

##### ***H2: Social media platform algorithms/AI design have a significant influence on the usage behavior and wellbeing of users***

A correlation analysis was also conducted to test the association between algorithm and design of social media platforms and overall wellbeing. It was found that there was a positive but insignificant correlation between the two variables, with a Pearson

correlation coefficient of  $r = 0.20$ ,  $p > 0.01$ , which shows that the correlation is not significant. This means that the hypothesis can neither be confirmed nor denied at this point, and there would be need for additional research on this aspect of the study to make more conclusive findings.

*Table 6: Correlations 2*

		overall	Algorithm And Design
overall	Pearson Correlation	1	.020
	Sig. (2-tailed)		.837
	N	104	104
AlgorithmAndDesign	Pearson Correlation	.020	1
	Sig. (2-tailed)	.837	
	N	104	105

#### 4.3.3 Hypothesis 3

##### ***H3: Social media use factors is positively related to individual's wellbeing***

A correlation was conducted to test whether there was any association between social media usage factors and overall individual wellbeing. The correlation coefficient between social media usage frequency and overall well-being was found to be positive and significant ( $r = 0.276$ ,  $p < 0.01$ ). This indicates that there is a moderate positive association between the frequency of social media use and individuals' overall well-being. These findings suggest that as individuals engage more frequently with social media platforms, their overall well-being tends to be positively influenced.

*Table 7: Correlations 3*

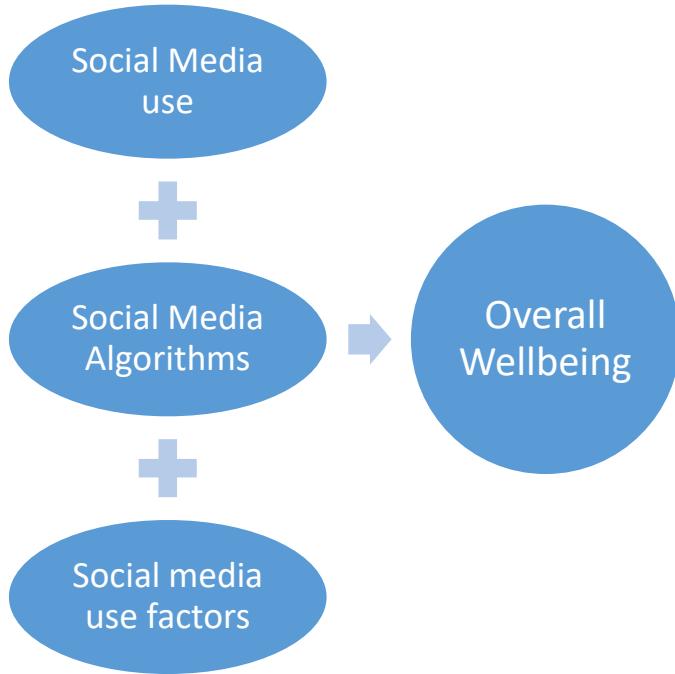
		overall	frequency
Overall	Pearson Correlation	1	.276**
	Sig. (2-tailed)		.005
	N	104	104
Frequency	Pearson Correlation	.276**	1
	Sig. (2-tailed)	.005	
	N	104	105

\*\*. Correlation is significant at the 0.01 level (2-tailed).

#### 4.3.4 Conceptual Model

From the ongoing findings and analysis, it clearly emerges that there is a link between the use of social media and emotional, physical, and psychological well being. It is also found that there is a direct association between social media usage and overall wellbeing. Further, the data indicates that there is a link between social media algorithms and designs and wellbeing of the users. As previous literature shows, these findings align with some of the extant literature, such as those of Naslund et al. (2020) and those of Roeder (2020) as well. But Chegeni et al. (2021) and several other researchers have noted that the relationship between social media usage and overall well-being cannot always be positive, and the outcome depends on what aspects are measured and how the measurement is done. This means that the outcome is likely to be influenced by various factors, both online and offline, that were not captured in this analysis. This includes factors such as individual characteristics, motivations for social media use, and the specific content and interactions experienced on social media platforms. At the same time, the regression analysis suggests that social media usage frequency has a significant but modest association with overall well-being. Despite these findings, as a precaution, the study notes that other factors may

influence well-being but were not included in the model. Further research is needed to explore additional predictors and to validate the findings with larger and more diverse samples. Nevertheless, the overall research model for this study is as shown below.



*Figure 8: Conceptual Model*

## 5 Discussion and Results

### 5.1 Social media and usage wellbeing

The results found no impact of social media on people's relationships, physical health, and body image. On the contrary, results also revealed that social media use affected people's emotional well-being, productivity, and overall well-being. At the same time, the results also showed that there is a fear of missing out (FOMO) due to social media use. Also, the findings demonstrated that social media affect people's psychological well-being, self-esteem, and sleep. This finding agrees with the views of Duggan and Brenner (2013), who noted that the use of social media impacted the well-being of users across different aspects. This occurs because when people use social media for

a long time, they begin to have fewer hours to do other vital activities, such as sleeping, working, learning, socializing outside in the real world, and even resting.

Furthermore, the findings revealed that the two most dominant social media platforms were TikTok and Facebook, at 36.5% and 27.9%, respectively, with Twitter (13.5%) and Instagram (5.8%) scoring less. This data agrees with that of Eghesadi and Florea (2020), which showed that TikTok had rapidly risen to be a popular social media platform but contrasts the data by Castillo-Abdul et al. (2022), which showed that Instagram was more popular than Twitter.

## 5.2 Social media usage patterns

The study found that a majority of the respondents, or 24.8% of the respondents, used social media between 1 hour to 3 hours a day, followed by 33.3% who used social media for more than 3 hours per day, and thirdly, 19% of the respondents used the platforms for less than an hour daily. Notably, nearly 10% of the participants used the platforms infrequently, at less than an hour per week, and 13.3% did not use social media at all. This finding relates to TFE Times (2017) findings which found that users aged 15 to 19 spent an average of at least three hours per day on social media, while users aged 20 to 29 spent around two hours per day doing so. Social media accounts for 28% of all media time used. Furthermore (TFE, 2017).

Relating the findings to the theoretical framework of attachment theory, the findings can be explained in terms of identification and bond-based connections, functional dependency and emotional dependence, all of which substantially impacted users' social media platform usage behaviour. According to the theory, when users receive emotional support and engagement from other users, they become attached to social media platforms and continuously spend more time using them. On the other hand, when users believe in getting pleasurable experiences and meet their expectations when using social media, this increases their emotional and functional attachment and hence increases usage where they spend more time on these platforms (Wan et al., 2017).

Further relating the findings to the motivation theory extension used in this study, the increased social media usage can be explained in terms of social engagement. In this

case, social engagement significantly improves users' feelings of affiliation with the virtual platform. Additionally, user social engagement might satisfy the users' social demands, facilitating their continued usage. Thus, people's continued usage can be explained through perceived enjoyment and social connection as intrinsic and extrinsic incentives (Lin & Lu, 2011). This implies that users' social engagement/connection and their perceived enjoyment may have contributed to their continued or increased usage of social media platforms.

### **5.3 Social media platform algorithms and their relationship with user behaviour**

The present study found that, on average, the participants feel a moderate level of pressure to showcase an idealized image on social media. At the same time, social media platforms strongly cater to their interests and preferences when displaying content. This finding agrees with those of Castillo-Abdul et al. (2022), which questioned the role of social media in influencing individuality and identity, and looked at how social media preferences affected user behaviour. In both cases, it was found that social media algorithms affected how people used the platforms. The findings further agree with Qin et al. (2022), who contend that social media websites monitor people's online behaviour and tailor their feeds only to show people stuff they are very likely to read, watch, or respond to. This is consistent with how social media platforms use algorithms to generate user-interesting and engaging content. In this case, social media becomes more addictive due to all of this, making it more difficult for the ordinary individual to disconnect (Qin et al., 2022).

### **5.4 Social media use factors and wellbeing**

The results of this study found that using social for comparing oneself with another, social support received on social media and social media privacy concerns have no impact on people's well-being. This finding disagrees with Schemer et al. (2021), which identified that a variety of users are subject to cyberbullying and deal with privacy issues, including identity theft and the exploitation of their personal data by advertising firms, which impacts negatively impact their well-being.

Similarly, the findings revealed that interaction with others on social media and the content that users consume on social media platforms do not affect people's overall well-being. On the other hand, the frequency of social media usage and the number of social media platforms that users use impact the overall well-being of users. These findings align with those of Naslund et al. (2020), who found that particular social media use factors like the nature of the content, frequency of use, and platform type affected the well-being of its users. The findings further concur with Bekalu et al. (2019), which suggest that there might be various relationships between frequent social media usage and the three health-related outcomes. The three outcomes were all positively correlated with routine use, but none of the three were positively correlated with emotional attachment to social media.

## **5.5 The relationship between social media use and wellbeing**

The present study found a positive and significant correlation coefficient between the frequency of social media use and physical well-being. This indicates that as individuals engage more frequently with social media platforms, their physical well-being tends to be positively affected. This finding is opposite from the findings of several authors, including Leong et al. (2019) and Ostic et al. (2021), who failed to observe that social media use may provide opportunities for individuals to access health-related information, engage in physical activities, or participate in online communities that promote well-being.

Furthermore, the findings showed a positive and significant correlation between social media usage frequency and psychological well-being. This suggests that individuals who spend more time on social media platforms tend to experience higher levels of psychological well-being. There are several reasons why this may be the case, as noted by Roeder (2020). Notably, social media use may offer opportunities for social connections, self-expression, and positive interactions, contributing to individuals' psychological well-being. However, as Schemer et al. (2021) cautioned, it is essential to consider the potential negative aspects of social media, such as the impact of comparison, cyberbullying, or information overload, which may also influence psychological well-being, which was not covered by the scope of this study.

Additionally, the findings showed a positive and significant correlation between social media usage frequency and emotional well-being was also tested. The implication of this is that individuals who use social media more frequently tend to have higher levels of emotional well-being compared, for instance, to those who do not use it as frequently. This is counterintuitive because several studies have theorized that increased social media use should have a significant negative correlation with emotional well-being (Akram & Kumar, 2017). Some reasons why this association may be positive include the possibility that social media platforms may provide a platform for self-expression, emotional support, and connection with others, which can positively impact individuals' emotional well-being. However, this is not often the case, and as the study by Qin et al. (2022) shows, the correlation may be harmful in some cases. This means that while social media has its advantages, it can also be a source of emotional distress, as it may expose individuals to negative or triggering content, cyberbullying, or social comparison that can adversely affect emotional well-being.

Finally, the study found a positive and significant correlation coefficient between social media usage frequency and overall well-being. This indicates a moderate positive association between the frequency of social media use and individuals' overall well-being. These findings suggest that as individuals engage more frequently with social media platforms, their overall well-being tends to be positively influenced. Regression analysis also found a standardized coefficient (beta) of 0.28, suggesting that social media usage frequency moderately impacts overall well-being.

## 6 Conclusion and Recommendations

### 6.1 Conclusion

Overall, the study has established positive correlation between social media usage and aspects of well-being, including physical, psychological and emotional well-being. From the findings, it can be deduced that there is no impact of social media use on people's relationships, physical health, and body image. On the contrary, social media use affect people's emotional well-being, productivity, and overall well-being. At the same time, the there is a fear of missing out (FOMO) due to social media use. Also,

social media use affect people's psychological well-being, self-esteem, and sleep. However, as a precaution, the relationship between social media usage and overall well-being is likely to be influenced by various online and offline factors that were not captured in this analysis. This includes factors such as individual characteristics, motivations for social media use, and the specific content and interactions experienced on social media platforms. At the same time, social media usage frequency has a significant but modest association with overall well-being. Despite these findings, as a precaution, other factors may influence well-being but were not included in the model.

## 6.2 Recommendations to consumers

Social media consumers should be mindful about their social media use by regulating the frequency and their intention or motivation to use social media. For instance, first, the findings have established a positive and significant correlation between social media usage frequency and emotional well-being was also tested. The implication of this is that individuals who use social media more frequently tend to have higher levels of emotional well-being compared to those who do not use it as frequently. Some reasons why this association may be positive include the possibility that social media platforms may provide a platform for self-expression, emotional support, and connection with others, which can positively impact individuals' emotional well-being. However, the correlation may also be harmful in some cases. This means that while social media has its advantages, it can also be a source of emotional distress, as it may expose individuals to negative or triggering content, cyberbullying, or social comparison that can adversely affect emotional well-being.

Second, the findings have established a positive and significant correlation between social media usage frequency and psychological well-being. This suggests that individuals who spend more time on social media platforms tend to experience higher levels of psychological well-being. There are several reasons why happens such as social media offering opportunities for social connections, self-expression, and positive interactions, contributing to individuals' psychological well-being. Conversely, things like comparison impact, cyberbullying, or information overload may negatively impact users' psychological well-being.

Third, the present study has established positive and significant correlation coefficient between the frequency of social media use and physical well-being. This indicates that as individuals engage more frequently with social media platforms, their physical well-being tends to be positively affected. However, it is worthy to note that being too much attached to social media can also negatively impact the physical well-being of users because too much use may make them physically inactive as they spend most times on their screens/smartphones.

Thus, overall, while using social media may provide many advantages to consumers with regard to their physical, psychological and emotional well-being, consumers should be aware of the negatives and regulate their frequency and motivations to use social media to counter the negative impacts. This control can help them manage their social engagement or social connection and their perceived enjoyment that may contribute to their continued or increased usage of social media platforms and hence the negative consequences.

### **6.3 Implications for future research**

The following recommendations are provided. First, future research should consider using other methods, such as qualitative studies through interviews, to determine the impact of social media use on the well-being of people. Using such an approach may help uncover in-depth insights into the topic, enhancing the more profound understanding. Also, future research should consider using mixed methods of qualitative and quantitative research design using interviews and surveys to collect data. This can help to determine the genuine relationship that exists between using social media and well-being, whether it is positive or negative.

### **6.4 Limitations of the study**

The study's first drawback is that the researcher used a survey as the primary research method. The drawback of questionnaires is that they are susceptible to biases brought on by participants' incorrect responses or their refusal to respond to the survey's inquiries. The research's second drawback was its utilization of a limited sample size. The situation could be more problematic since quantitative research necessitates the use of large sample sizes to reduce mistakes brought on by outliers and irrelevant, person-specific variables. The fact that data was gathered using surveys also has a

limitation. The problem with surveys is that respondents could react carelessly or without fully comprehending the questions, which reduces their validity.

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## 8 Appendices

### Appendix 1: Data entry process in SPSS

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
1	Gender					Social mev	Social mev	Social mev	Social mev	I experien	Social mev	Social mev	Social mev	Which soc	How offe	Do you fe	How mu	How offe	Do yo		
2	1	3	2	3	3	2	2	1	1	2	5	2	2	5	2	2	3	5	4	1	
3	2	1	3	2	3	2	1	1	1	2	4	2	4	2	2	4	2	4	2	3	
4	1	3	1	1	3	2	2	1	1	2	5	3	4	5	3	4	5	3	5	5	
5	1	3	2	2	6	1	2	2	2	1	1	1	4	4	1	1	2	4	1	1	
6	1	3	3	2	4	1	2	2	2	1	1	1	5	1	1	5	4	4	4	5	
7	2	3	1	1	4	1	1	2	2	2	5	2	4	2	2	4	1	5	3		
8	1	3	1	2	4	1	4	2	2	4	5	3	4	5	1	4	1	4	5	5	
9	1	3	1	1	4	1	1	2	2	2	2	1	4	1	1	1	4	4	1	1	
10	1	3	4	1	1	1	1	1	1	1	1	1	1	4	1	1	4	3	4	3	
11	2	3	2	2	2	1	4	4	4	4	2	1	4	1	1	4	5	4	2	5	
12	1	3	3	2	2	1	4	4	4	4	4	2	5	2	2	4	2	4	4	4	
13	2	3	3	2	2	1	1	1	1	1	4	2	4	5	2	2	4	3	5	1	
14	2	3	4	2	2	2	1	2	2	1	5	2	5	2	2	1	2	4	2	2	
15	2	3	3	2	2	2	1	2	2	2	2	2	2	2	1	5	4	4	4	5	
16	2	3	2	2	2	2	1	1	1	2	4	4	5	4	4	4	2	5	5	1	
17	1	3	3	2	2	2	4	3	3	4	5	4	5	5	3	4	1	4	4	2	
18	1	3	4	1	2	2	4	3	3	3	5	5	5	5	5	5	4	4	1	4	
19	2	3	3	1	2	2	4	4	4	5	5	5	5	5	5	5	4	4	1	4	
20	1	3	4	1	4	2	4	4	4	5	4	4	4	4	2	4	4	5	4	4	
21	2	3	4	1	4	2	4	4	4	4	1	1	1	1	1	1	2	1	5	3	
22	2	3	3	1	4	2	1	1	1	1	4	4	5	5	4	4	2	1	5	5	
23	1	3	1	1	4	2	5	4	4	4	1	1	4	1	1	1	4	4	2	2	
24	2	3	3	2	4	2	3	1	1	1	5	1	1	1	1	5	2	5	5	1	
25	2	3	3	2	4	2	5	5	5	4	4	4	4	4	4	4	5	4	4	2	
26	1	3	1	2	4	2	3	3	5	4	4	4	4	4	4	4	5	4	4		

## Appendix 2: Demographic variables of respondents as shown in SPSS

	gender	age	education	employment	frequency
1	M	18-25 Years	undergraduate	Own business	2 to 3 hours ...
2	F	18-25 Years	master degree	Employed	2 to 3 hours ...
3	M	40-65 Years	high school	Student	2 to 3 hours ...
4	M	40-65 Years	undergraduate	Employed	I dont use s ...
5	M	40-65 Years	master degree	Employed	more than 3 ...
6	F	18-25 Years	high school	Student	more than 3 ...
7	M	18-25 Years	high school	Employed	more than 3 ...
8	M	40-65 Years	high school	Student	more than 3 ...
9	M	18-25 Years	doctorate degree	Student	less than 1 ...
10	F	18-25 Years	undergraduate	Employed	1 to 2 hours ...
11	M	40-65 Years	master degree	Employed	1 to 2 hours ...
12	F	18-25 Years	master degree	Employed	1 to 2 hours ...
13	F	40-65 Years	doctorate degree	Employed	1 to 2 hours ...
14	F	18-25 Years	master degree	Employed	1 to 2 hours ...
15	F	40-65 Years	undergraduate	Employed	1 to 2 hours ...
16	M	18-25 Years	master degree	Employed	1 to 2 hours ...
17	M	40-65 Years	doctorate degree	Student	1 to 2 hours ...
18	F	18-25 Years	master degree	Student	1 to 2 hours ...
19	M	40-65 Years	doctorate degree	Student	more than 3 ...
20	F	40-65 Years	doctorate degree	Student	more than 3 ...
21	F	18-25 Years	master degree	Student	more than 3 ...
22	M	40-65 Years	high school	Student	more than 3 ...
23	F	40-65 Years	master degree	Employed	more than 3 ...
24	F	40-65 Years	master degree	Employed	more than 3 ...
25					

### Appendix 3: Effects of social media on well-being as shown in SPSS

physical	psycholog ical	emotional	overall	FOMO	SelfEstee m	Bodyimag e	Sleep	productiv ity	relationshi ps	platforms	
Disagree	Dis agree	Totally disag...	Totally disag...	Disagree	Totally agree	Dis agree	Dis agree	Totally agree	Dis agree	Twitter	
Disagree	Totally disag...	Totally disag...	Totally disag...	Disagree	Agree	Dis agree	Agree	Dis agree	Dis agree	TikTok	
Disagree	Dis agree	Totally disag...	Totally disag...	Disagree	Totally agree	Not sure	Agree	Totally agree	Not sure	TikTok	
Totally disag...	Dis agree	Dis agree	Dis agree	Dis agree	Totally disag...	Totally disag...	Agree	Agree	Totally disag...	Facebook	
Totally disag...	Dis agree	Dis agree	Dis agree	Dis agree	Dis agree	Totally disag...	Totally disag...	Totally agree	Totally disag...	Facebook	
Totally disag...	Totally disag...	Dis agree	Dis agree	Dis agree	Totally agree	Dis agree	Agree	Dis agree	Dis agree	Twitter	
Totally disag...	Agree	Dis agree	Dis agree	Agree	Totally agree	Not sure	Agree	Totally agree	Totally disag...	TikTok	
Totally disag...	Dis agree	Dis agree	Dis agree	Dis agree	Totally disag...	Agree	Agree	Totally disag...	Totally disag...	Facebook	
Totally disag...	Totally disag...	Totally disag...	Totally disag...	Totally disag...	Totally disag...	Totally disag...	Agree	Totally disag...	Totally disag...	Facebook	
Totally disag...	Agree	Agree	Agree	Agree	Agree	Totally disag...	Agree	Totally disag...	Totally disag...	TikTok	
Totally disag...	Agree	Agree	Agree	Agree	Agree	Agree	Agree	Totally agree	Dis agree	TikTok	
Totally disag...	Totally disag...	Totally disag...	Totally disag...	Totally disag...	Agree	Dis agree	Agree	Totally agree	Dis agree	Twitter	
Disagree	Totally disag...	Dis agree	Dis agree	Totally agree	Dis agree	Totally agree	Dis agree	Dis agree	Dis agree	Facebook	
Dis agree	Totally disag...	Dis agree	Dis agree	Totally disag...	Dis agree	Facebook					
Dis agree	Totally disag...	Totally disag...	Totally disag...	Dis agree	Agree	Agree	Totally agree	Agree	Agree	TikTok	
Dis agree	Agree	Not sure	Not sure	Agree	Totally agree	Agree	Totally agree	Totally agree	Not sure	TikTok	
Dis agree	Agree	Not sure	Not sure	Not sure	Totally agree	Other					
Dis agree	Agree	Agree	Agree	Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	TikTok	
Dis agree	Agree	Agree	Agree	Agree	Totally agree	Agree	Agree	Agree	Agree	Other	
Dis agree	Agree	Agree	Agree	Agree	Totally disag...	Facebook					
Dis agree	Totally disag...	Totally disag...	Totally disag...	Totally disag...	Totally disag...	Agree	Agree	Totally agree	Agree	TikTok	
Dis agree	Totally agree	Agree	Agree	Agree	Totally disag...	Totally disag...	Agree	Totally disag...	Totally disag...	Facebook	
Dis agree	Not sure	Totally disag...	Totally disag...	Totally disag...	Totally agree	Totally disag...	Totally disag...	Totally disag...	Totally disag...	Other	
Dis agree	Totally agree	Totally agree	Totally agree	Totally agree	Agree	Agree	Agree	Agree	Agree	TikTok	

## **Appendix 4: Questionnaire**

### Section 1: Demographic Information

1. Gender:
2. Age:
3. Educational Level:
4. Occupation:
5. How often do you use social media platforms?

### Section 2: Effects of Social Media Use on Wellbeing

Please indicate your level of agreement with the following statements on a scale of 1-5, where 1 represents "Strongly Disagree" and 5 represents "Strongly Agree."

1. Social media use affects my physical health.
2. Social media use affects my psychological well-being.
3. Social media use affects my emotional well-being.
4. Social media use affects my overall well-being.
5. I experience FOMO (Fear of Missing Out) due to social media use.
6. Social media use has a positive impact on my self-esteem.
7. Social media use has a positive impact on my body image.
8. Social media use affects my sleep patterns.
9. Social media use affects my productivity in daily activities.
10. Social media use affects my relationships with friends and family.

### Section 3: Social Media Platform Algorithms/Design and Usage Behavior

11. Which social media platforms do you use regularly?

12. How often do you find yourself spending more time on social media than you intended?
13. Do you feel that social media platforms show content tailored to your interests and preferences?
14. How much do you rely on recommendations from social media platforms when engaging with content?
15. How often do you engage with sponsored/advertisement content on social media platforms?
16. Do you feel pressure to present an idealized version of yourself on social media?

#### Section 4: Relationship between Social Media Use Factors and Wellbeing

Please indicate your level of agreement with the following statements on a scale of 1-5, where 1 represents "Strongly Disagree" and 5 represents "Strongly Agree."

17. The time spent on social media affects my overall wellbeing.
18. The number of social media platforms I use affects my overall wellbeing.
19. The frequency of my social media use affects my overall wellbeing.
20. The content I consume on social media affects my overall wellbeing.
21. The level of interaction with others on social media affects my overall wellbeing.
22. The comparison of myself with others on social media affects my overall wellbeing.
23. The privacy concerns related to social media use affect my overall wellbeing.
24. The level of social support received on social media affects my overall wellbeing.

Thank you for your participation! Your responses will be anonymous and confidential.