**The Interplay between Social Media Addiction and Psychological Needs: Exploring the Relationship & Implication Amongst Gen Z**

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**ABSTRACT**

The relationship between social media addiction and psychological demands in Generation Z (Gen Z) is examined in this thesis. In addition to focusing on social interaction, mood enhancement, and obsessive behaviours, the study aimed to explore the potential effects of social media use on psychological well-being. A review of the literature is also used to undertake secondary research. This gave psychological needs and social media addiction a theoretical foundation and contextual comprehension. The study intended to further the knowledge of the intricate connection between Gen Z's use of social media and the satisfaction of their psychological demands. 278 samples are gathered quantitatively via an online survey sent to members of the Gen Z demographic. With this method, social media usage patterns and their effects on Gen Z members' psychological requirements is examined. Collected data analysed by using SmartPLS. The results confirmed positive correlations between the duration of social media use and feelings of feeling connected, as followed with a noticeable improvement in mood after social media usage. Receiving notification triggers a compulsion check on the participants’ technological device.

*Keywords: Generation Z, Social Media Addiction, Use and Gratification Theory.*

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1. **INTRODUCTION**

In contemporary society, the integration of social media platforms into daily life drastically changed how humans connect, communicate, and consume information. Although these platforms offered a large number of opportunities for social interaction and self-expression, they also raised concerns about their potential impact on the mental health and well-being of individuals. A specific area where concern was expressed was in the phenomenon of social media addiction, which was characterized by compulsive, overindulging, and excessive usage of screen time. This behavior managed to interfere with the daily functioning of human beings (Ganguzza et al., 2019). In the following graph by Statista, the increase of users on social media was displayed. The graph also provided a forecast of how many users could be found on social media until the year 2027 (Statista, 2023).

A graph of blue bars

Description automatically generated

**Fig. 1. Number of worldwide social network users**

Source: Statista, 2023

Psychological theories such as Maslow (1943) suggested that individuals have fundamental psychological needs, such as the need for social connection, self-esteem, and autonomy, that must be fulfilled for a person to be able to have optimal psychological functioning (Garibaldi et al., 2023). However, the extent to which individuals turned to social media to fulfil their underlying psychological needs and how this behavior correlated with the development of addiction-like tendencies remained inadequately understood. Social media addiction is a phenomenon influenced by various factors, mainly individual, social, and environmental factors. At its core, addiction to social media involves a compulsive and excessive preoccupation with these platforms, often leading to negative consequences such as neglect of responsibilities, social withdrawal, and diminished well-being. Understanding the factors contributing to the development and maintenance of social media addiction was essential for mitigating its adverse effects and promoting healthier online behaviors (Wang et al., 2015).

Psychological theories, such as Maslow's hierarchy of needs and Self-Determination Theory, propose that humans had fundamentally important psychological needs that must be satisfied for optimal well-being (Vansteenkiste et al., 2020). According to both theories, the fulfilment of these psychological needs was essential for individuals' psychological growth, satisfaction, and overall functioning. However, in the digital age, individuals increasingly turned to social media platforms as a means of fulfilling these needs, thereby blurring the boundaries between online and offline interactions (Wang et al., 2015). Other researchers who contributed to the literature suggested that individuals may engage with social media platforms to fulfil other psychological needs, including the need for social connection, self-expression, validation, and escapism (Sheldon, 2011). An example could be noted when individuals used social media to remain in contact with acquaintances, friends, and family (social connection), actively sought comments and likes on their posts (validation), or scrolled through social media mindlessly with the primary goal of escaping real life (escapism) (Rehbein & Baier, 2013).

The selected topic of social media addiction presented a challenging task for measurement due to its inherent variability, which depended on each individual. Still, there was a lack of understanding of how the usage of social media influenced the behaviour of individuals, especially among different generations (Koçak et al., 2021). Therefore, the following research questions were proposed:

**RQ. 1**: How does the duration of social media usage enable individuals to experience a sense of social connection?

**RQ. 2:** How is the mood improvement following the use of social media?

**RQ. 3:** How does the individual feel compelled to check their mobile phone for notifications if they are received?

**RQ. 4:** How does the duration of screen time impact the amount of mood modification?

**RQ. 5:** How does mood modification lead to compulsive checking?

**2. LITERATURE REVIEW**

**2.1 Digitalization**

The recent years that elapsed saw a growth of technological advances, leading to this period being named "The Fourth Industrial Revolution" or "The Digital Era" (Coldwell, 2019). The creation of digital media was made with various intentions, the most relevant being instrumental and socialization. The former focused on needs from an individual's real life, including education and health. The latter was concerned with the distribution and generation of ideas, opinions, and information within online communities. Socialization media platforms cover multiple fields such as employment (e.g., LinkedIn), friendships (e.g., Instagram, Facebook), and political communities (e.g., Twitter) (Stavropoulos et al., 2022).

On the other hand, technology implemented new tools for optimization and functionality, with the most notable being Artificial Intelligence (AI) and AI algorithms. These were employed in social media platforms and businesses alike. AI was integrated into various fields, including the telecommunications sector, finance, retail, healthcare, education, and human resource departments (Digital Transformation and Psychological Assessment, 2023). Other novel technologies, such as virtual reality, smartphones, tablets, and social robots, began to be integrated into educational and organizational settings, continuously increasing the level of digitalization.

The level of digital competence available during the COVID-19 pandemic was a valuable resource, facilitating various processes but ultimately allowing online presence to substitute offline presence (Stavropoulos et al., 2022). Simultaneously, the digitalization that took place during the COVID-19 pandemic left risk factors in its wake, including overindulgence in screen time and social media usage (Niedermoser et al., 2021).

**2.2 Addiction Definitions**

Addiction was previously used to describe behavior that could not control decisions and impulses regarding alcohol, drugs, and other substances. In the past, only chemical addictions, such as alcoholism or drug addiction, were officially recognized by the American Psychology Association (APA). At the beginning of the year 2000, more attention was paid to nonchemical addictions, also known as behavioural addictions. The newly discovered types of addictions were researched by the World Health Organization and the American Psychology Association (Andreassen et al., 2013).

Research indicated that both chemical and nonchemical addictions share various similarities. Salience was the first shared component; this was a behavioural factor responsible for feelings and thoughts. In other words, a salient stimulus was attention-getting because it drew attention from the bottom up (Bordalo et al., 2022). Withdrawal was the second element that both addictions had in common; it referred to the usually negative feelings when the behavior in question was reduced or brought to a halt. An individual may experience withdrawal symptoms if they suddenly stop or reduce an activity (Varona et al., 2022). The last similarity presented was relapse, which occurred when earlier behavioral patterns were newly presented after a period of abstinence (Griffiths, 2005). In the field of psychology, addiction is defined as a chronic and relapsing psychiatric and psychological disorder that affects human beings globally (Ray, 2012). It was suggested that impaired control, as well as physiological and psychological dependence, were themes presented within the behavior of an affected individual. These behavioral patterns were more commonly observed in women, as opposed to men (Lang & Rosenberg, 2017).

**2.3 Social Media Platform Features**

Social media platforms were by-products of the evolution of the internet (Ahmed & Vaghefi, 2021). They provided a space where people, organizations, politicians, and governments could exchange information, thoughts, and services. Users of social media can also interact with each other online for various reasons, such as social, commercial, political, or educational purposes (Alalwan, 2018). However, social media applications have the power to fuel fragmentation, problematic content, and the spread of disinformation (Persily & Tucker, 2020).

Social platforms use technology that could alter and shape a user's reality, as well as redirect their attention. The primary technology employed was algorithms and artificial intelligence, often used simultaneously (Swart, 2021). The main purpose of algorithms was to provide personalization regarding users' feeds, advertisements, and recommendations while filtering unpatented, explicit, or inappropriate content (Saurwein & Spencer-Smith, 2021). Algorithms were central to constructing a social media platform system with precision, accuracy, and personalization for each individual (Milan, 2015). They achieved this by collecting and tracking users' interactions and information, facilitating social control and surveillance (Figueiredo & Bolaño, 2017).

As the popularity of social media applications increased, so did the curiosity of businesses. Companies sought ways for their products and organizations to have a larger reach. Advertisements were an innovative aspect featured on social media applications and platforms. Two main forms of communication were enabled in advertising attributable to social media platforms. Firstly, communication from the organization to the consumer in a traditional way, and secondly, it allowed for the creation of non-traditional communication between consumers (Mangold & Faulds, 2009). The latter occurred organically, opening new ways to advertise products in online communities. It led to an opportunity for consumer-to-consumer (C2C) information to contribute to marketing firms' strategies and aims (Alalwan et al., 2017). As social media platforms grew, they provided easy and simple solutions, which could be observed in the shopping sections of the platforms.

Social media took into consideration the users' preferences with the aid of algorithms and created product suggestions for the user to purchase (Zhang et al., 2017). Online stores possess many other advantages, such as the convenience and time saved when travelling to the store or waiting in line. Another positive factor was the accessibility offered at all times, as well as the abundant information about the products or services (Moshrefjavadi et al., 2012).

**2.4 Motivations for Social Media Usage**

As social media and technology advanced, their utility expanded beyond facilitating individual-to-individual communication. Today, social media serves as a multi-use platform for social connection, information dissemination, and entertainment (Noguti & Waller, 2020). Individuals who spent more time browsing social media rather than actively posting content demonstrated a heightened motivation for continued usage of these platforms (Lin et al., 2017).

The Fear of Missing Out (FOMO) phenomenon, characterized by a pervasive apprehension regarding potentially missed experiences, became increasingly prevalent in the context of social media use (Abramowitz et al., 2009). Social media platforms offered users a sense of connection and support through features such as likes and comments, which could instigate a compulsion to repeatedly check one's accounts (Fontes-Perryman & Spina, 2022). Consequently, individuals may have experienced a sense of deprivation from social information and support when disengaging from their social media presence for extended periods, thereby reinforcing their motivation for continued usage (Liu & Ma, 2020).

Psychological ownership emerged as a significant driver of social media engagement, as users invested time and effort in creating content for various platforms, including Facebook, YouTube, TikTok, Instagram, and Twitter (Karahanna et al., 2015). The sense of ownership was rooted in three primary motives: the need for a sense of belonging, the need for self-identity expression, and the need for efficacy (Pierce et al., 2003). As individuals invested themselves in crafting and curating content on social media, they developed a sense of ownership over their virtual spaces, further reinforcing their attachment and engagement with these platforms. Scholars such as Ji and Hu (2024) reported that a sense of belonging significantly correlated with social media usage, particularly for sojourners. Along the same lines, social media usage enhanced self-efficacy and reduced loneliness by providing social support through social media.

**2.5 Underlying Reasons for Social Media Usage in Gen Z**

The generational cohort theory is a system that divides the population into different segments according to their date of birth, extending to twenty-five years (Schewe & Noble, 2000). Individuals in the same generation cohort share attitudes, ideas, values, and beliefs, so the core values remain constant throughout a generation's lifespan, achieving what is known as a "generational identity" (Lissitsa & Kol, 2016). Generations that interacted with various technologies early in life are called "digital natives" or, as some scholars refer to them, the iGeneration (Horská et al., 2023).

Gen Z differs from millennials in many ways, including flexible hours, remote work opportunities, and varied job content (Fuchs et al., 2024). This demographic has not experienced a world without the internet and mobile devices. Technological advances and media have become extensions of individuals in this new generation. They are accustomed to constant input of information due to advanced devices providing access to various services. When this constant input is absent, the result is often boredom. On the other hand, individuals exposed to technologies like the internet in adulthood are called "digital immigrants" (Stavropoulos et al., 2022). Digital immigrants do not require constant input and therefore do not crave it.

The use of social media within younger generations increased drastically in the past twenty years, making it likely to impact social experiences and motivations (Armstrong-Carter et al., 2023). Recent studies showed that teenagers and young adults spent approximately three to four hours per day on social media, highlighting the addictive nature of these platforms (Ahmed & Vaghefi, 2021). This phenomenon occurred in the younger generations, particularly the Centennial generation (Gen Z), as they were in the early stages of development when technology became a part of daily life (Andreassen et al., 2013). Gen Z, typically sustainable-oriented (Krippes et al., 2024), uses social media to exchange information with peers, friends, and partners, allowing them to expand their network of social connections (Lenhart, 2015). When individuals browse social media without engaging in interactions with their peers, they are more prone to experiencing feelings of disconnectedness compared to when they actively participate in social media interactions involving their peers (Pouwels et al., 2021). This highlights the "Need to Belong" (NTB), a fundamental human motivation to create and maintain meaningful social bonds (Greenwood & Long, 2009).

**2.6 Self Determination Theory**

The Self-Determination Theory (SDT) is an approach to human motivation and personality that emphasizes the importance of personality development and behavioral regulation (Ryan et al., 1997). Three needs have been identified as essential components for facilitating social development and personal well-being (Ryan et al., 2000). Relatedness is the need to feel connected to others, satisfying the sense of belonging. Competence entails feeling capable and effective when facing difficult tasks. Lastly, autonomy focuses on feelings of self-governance as opposed to actions (Deci et al., 2002). These components, referred to as "nutrients," positively impact motivation and well-being (Mack & Wilson, 2021). Understanding how effectively an individual's psychological needs are met within a social context can describe the underlying motivational mechanisms of their behavior (Zhang et al., 2015).

The Self-Determination Theory (SDT) comprises six distinct sub-theories, each developed at different junctures (Hsu et al., 2022). The Cognitive Evaluation Theory primarily delves into intrinsic motivation, while the Organismic Integration Theory explicates extrinsic motivational factors. The Causality orientation theory delineates variations in motivational orientations. The Basic Psychological Needs Theory addresses psychological well-being, while the Goal Content Theory focuses on the formulation of individual goals and lifestyle choices. Lastly, the Relationships Motivation Theory underscores the significance of fostering high-quality interpersonal relationships. It is important to note, however, that these sub-theories collectively contributed to, but do not entirely encapsulate, the framework of the Self-Determination Theory (Ryan & Deci, 2022).

**2.7 Use and Gratification Theory**

To keep the Use and Gratification Theory (UGT) updated with technological advances, scholars focus on questions such as: "Why do individuals become involved in one specific type of mediated communication, and what gratifications do they receive from it?" (Ruggiero, 2000). UGT is defined as a perspective on communication that primarily focuses on how mass media and methods, like interpersonal communication, are used by individuals (Urista et al., 2009). This model comprises several key components. Firstly, UGT emphasizes that people are active agents who select media based on their motivations, goals, and preferences, unlike traditional media theories that view individuals as passive recipients of media (Katz et al., 1973). Additionally, UGT recognizes that individuals exhibit media usage patterns depending on their needs and gratifications, considering factors such as frequency of use, selection of content, media platforms, and duration of use (Rubin, 1983).

Lastly, the theory acknowledges the role of media consumption in shaping a person's attitudes and behaviors (McQuail, 1984). UGT helps identify the motivations driving individuals to use social media (Katz et al., 1973). It suggests that individuals engage with social media platforms based on their expectations of gratification, meaning they seek social connection, entertainment, and information about social contexts when accessing social media (Palmgreen & Rayburn, 1985). By focusing on an individual's role in choosing and employing media to fulfil specific needs and gratifications, the UGT framework is valuable for examining the complex interplay between social media addiction and psychological needs fulfilment.

**2.8 Conceptual Model & Hypothesis**

A model was created for this paper with the following variables, screentime, mood modification, and compulsive checking as independent variables and social media addiction as the dependant variable, the following hypothesis are proposed:

***H. 1:*** *Screentime influences social media addiction.*

***H. 2:*** *Mood modification associates with social media addiction.*

***H. 3****: Compulsive checking influences social media addiction.*

***H.4****: The amount of screentime associates with user’s mood modification*

***H.5:*** *Mood Modification significantly influences Compulsive Checking.*

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**Fig. 2.** Proposed Model of Social Media Use

Source: Own elaboration

**2.9 Social Media Addiction**

The relevance and impact of internet addiction have increased due to advancements in technology (Ryding & Kaye, 2018). Internet addiction is defined as an inability to regulate excessive internet use, leading to negative, self-induced outcomes. Problematic Internet Use (PIU) is another term used by experts to describe individuals who spend significant time online, cannot control their behavior, and experience impairment in their daily lives (Lee & Lim, 2021).

Social media addiction has been categorized as a type of internet addiction, along with video game addiction and online shopping addiction (Tutgun-Ünal & Deniz, 2015; Andreassen et al., 2013). The criteria used to define other behavioral and substance addictions are crucial for understanding internet addictions (Grant et al., 2010). Neuroimaging studies have shown that areas of the brain active in social media users are the same as those in individuals experiencing substance abuse (Brand et al., 2014), further legitimizing internet addiction as a recognized condition.

Social media takes various forms, such as microblogs, web applications, and networks, and its purposes vary, including staying informed about acquaintances, leisure, meeting new people, discovering news, and entertainment. These diverse uses create many opportunities for social media addiction (Aksoy, 2018). This addiction occurs when individuals constantly seek notifications and updates and spend over eight hours a week on these applications (Şahin, 2018). Social media platforms are intentionally designed to be addictive (Bhargava & Velasquez, 2021).

Consequently, many countries, including the United Kingdom, the Netherlands, China, South Korea, Japan, and the United States, have established clinics to treat internet addiction (Bhargava & Velasquez, 2021). This addiction is particularly concerning for the Centennial generation, who have grown up with technology and its content consumption. Therefore, the dependent variable in the research model is social media addiction.

**2.10 Screentime**

Screen time plays a significant role in social media addiction (Ganguzza et al., 2019). Excessive screen time is defined as spending more than 2-3 hours per day in front of a screen, including television, mobile devices, computers, and other electronic devices (Neophytou et al., 2021). Over the years, increased attention has been dedicated to evaluating and researching this topic. A 2019 study showed that between Millennials (born in the 1980s) and the Internet generation (iGen, born in the 1990s), there was an increase in psychological distress due to significant exposure to screen time (Twenge et al., 2019).

Exposure to screen time has continued to increase with each new generation. Children born after 2000 have been exposed to screen time from as early as four months old (Christakis et al., 2004). The consequences of excessive screen time include reduced orbitofrontal cortex thickness in adolescents, as observed in cases of internet gaming disorders (Hong et al., 2013). Another consequence is increased cannabis consumption among young adults (Montagni et al., 2016). Additionally, immoderate screen time negatively affects memory and learning processes in adolescents and young adults (Neophytou et al., 2021). Given its impact, screen time is a crucial factor in measuring social media addiction and serves as the first of three independent variables in the conceptual model of this research.

**2.11 Mood Modification**

Mood modification is the second independent variable in the model, chosen for its daily relevance. Individuals often use the internet to alter their moods, particularly when experiencing negative emotions, as a means of escaping from their lives (Cheak et al., 2012). Mood modification refers to a change in a person's mood while engaging in activities on social media platforms (Tutgun-Ünal & Deniz, 2015). In 2006, it was proposed that personality types influence the degree to which individuals are psychologically stimulated by social media and gaming, attributed to a sensation-seeking factor (Chappell et al., 2006).

Social media aids in the regulation of emotions (Nazlıgül et al., 2022), as observed when users share content about their environment and personal lives, receiving attention, feedback, and acceptance from other online users (Vermeulen et al., 2018). A study focusing on artificial intelligence (AI) concluded that over-reliance on technology could substitute for fulfilling human psychological needs related to communication and social connection (Serenko et al., 2006). Modern technology has enabled the creation of meaningful relationships with technology itself, rather than fostering significant relationships with other people (Epstein & Kumar, 2000).

**2.12 Compulsive Checking**

In behavioral literature, compulsive checking, also referred to as habitual checking (Du et al., 2019), is described as thoughts centered on the whereabouts of a mobile device when not in reach, along with the need to check the device and feeling irritable when unable to access it (David et al., 2015). Repeated use of social media leads to the development of affective and approach tendencies with a social media stimulus (Du et al., 2019), meaning it facilitates the routine activity of mindlessly using social media applications and scrolling through content. An example of this routine behavior is when a person checks or scrolls through social media platforms every night before going to bed (Exelmans & Scott, 2019).

Compulsive checking has been particularly prominent when individuals think about new messages or notifications they might receive (Murdock et al., 2019), leading to involuntary attention shifts (Kim, M., Kim, I., & Lee, U., 2021). These thoughts are associated with several negative outcomes, including motor vehicle crashes (Jenaro et al., 2007). Notifications play a significant role in forming compulsive checking habits (Kim et al., 2021). They are features used on various devices, primarily smartphones and applications, designed to capture a user's attention and redirect them to social media usage. Notifications employ sensory stimulation, such as sound and tactile vibrations (Mikulic, 2016), which can influence a user's decision-making, such as reacting and focusing (Kim et al., 2021). For these reasons, compulsive checking is the third independent variable included in the model of this paper.

1. **METHODOLOGY**

The study focused on the Centennial generation, also known as Gen Z, encompassing individuals born between 1997 and 2012, with participants aged twelve to twenty-seven years. This generation's unique upbringing alongside the rapid evolution of digital technologies and the internet makes them particularly susceptible to the allure and risks of social networking platforms. The survey included 278 respondents, ensuring the sample size was representative and the findings generalizable. Participants were assessed using a structured survey methodology with nineteen questions.

The survey began with demographic inquiries about age, gender, and preferred social media platforms, setting the stage for a deeper exploration of respondents' digital habits. The remaining questions, focused on the variables (Screen Time, Mood Modification, Compulsive Checking, and Social Media Addiction), utilized a five-point Likert scale (ranging from Never to Always). Open-ended questions were excluded to prioritize immediate, self-reported reflections on daily experiences, fostering spontaneous and conventional responses, thereby enhancing the conclusiveness and reliability of the collected data. The simplicity of the questions allowed respondents to engage with them in a reasoned and focused manner, minimizing cognitive load and maximizing the validity of the answers.

A cross-sectional design was employed to capture a snapshot of the population at a specific point in time. This methodology involved a single data collection point for each participant, eliminating the risk of repetitive data and streamlining the analysis process. The study's efficiency and validity were optimized by focusing on a single cross-section. Additionally, the use of validated scales for social media addiction, specifically The Social Media Addiction Scale (SMAS) by Tutgun-Ünal and Deniz (2015), ensured that the constructs were measured accurately and consistently. The items related to measurement of compulsive checking are adopted from studies such as Olufadi (2016). Nazlıgül et al. (2021) used to develop items to measure mood modification. Finally, studies such as Wartberg et al. (2023) and Tutgun-Ünal and Deniz (2015) are used to measure screen time. Apart from content validity, the research used factor loading, AVE, and Cronbach’s Alpha to check the construct validity of the questionnaire (Hair et al., 2021). The use of established scales bolstered the study's internal validity and provided a basis for comparison with existing literature. By integrating these rigorous methodological choices, the research design aimed to provide a comprehensive and refined understanding of the target phenomenon.

1. **RESULTS**

### **4.1 Assessment of the measurement model**

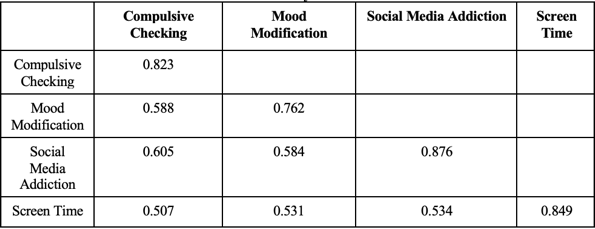
The reliability and validity tests were conducted to ensure the accuracy of the SEM findings and support the results. The tests and measurements for the accuracy assessment involved several well-established statistical tests and measures, all of which were conducted with the aid of SmartPLS-4 software, a widely recognized and powerful tool for SEM analysis.

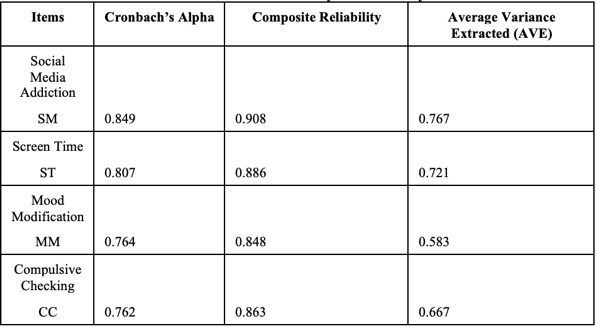
Discriminant validity was assessed using the Fornell–Larcker criterion. The discriminant validity allows to determine if different constructs are truly distinct from each other, rather than measuring overlapping concepts. For each construct — Compulsive Checking (0.823), Mood Modification (0.762), Social Media Addiction (0.876), and Screen Time (0.849), the square root of the AVE values is greater than the inter-construct correlation (Table 1) (Fornell & Larcker, 1981).

The Cronbach's Alpha is known to be the most widely used consistency tool for proofing the reliability of internal consistency. The test has also been previously used by studies that implemented the Likert scale, due to its ability to measure the closeness of the corelated items (Taherdoost, 2016). Therefore, it was deemed appropriate for this study (Table 2). A Cronbach's Alpha value of 0.6 or higher is generally considered acceptable, since it signifies a good level of internal consistency (Hair et al., 2021).

Composite reliability (CR) was another test implemented, it is used primarily to test the items withing each individual variable, to note if they can be reliable. For this study it is a further measure of internal consistency. A CR value of 0.7 or above is considered satisfactory, it indicates that all items are measuring the same constructs reliably (Hair et al., 2021).

Additionally, the Average variance extracted (AVE) was employed. This is a statistical measure used in the context of SEM. The AVE is responsible for evaluating the convergent validity of a construct, which means determining if the indicators are truly measuring the intended concept. The test of AVE must be higher than 0.5 in order to be acceptable (Hair et al., 2021). In this study it was used to assess the convergent validity (Table 2).

**Table 1. Discriminant Validity – Fornell-Lacker Criteria**

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**Table 2. Construct Reliability and Convergent Validity of Measurement Model**

In this study, hypothesis testing was conducted for direct effects using a bootstrapping approach in the SmartPLS software to evaluate the relationships between the constructs. The confidence level was set at 95%, with a t-value threshold of ≥ 1.967 indicating statistical significance and the P-value of the analysis must be > 0.05 to be considered valid. The results of the hypothesis testing can be observed in Table 5. and Figure 3.

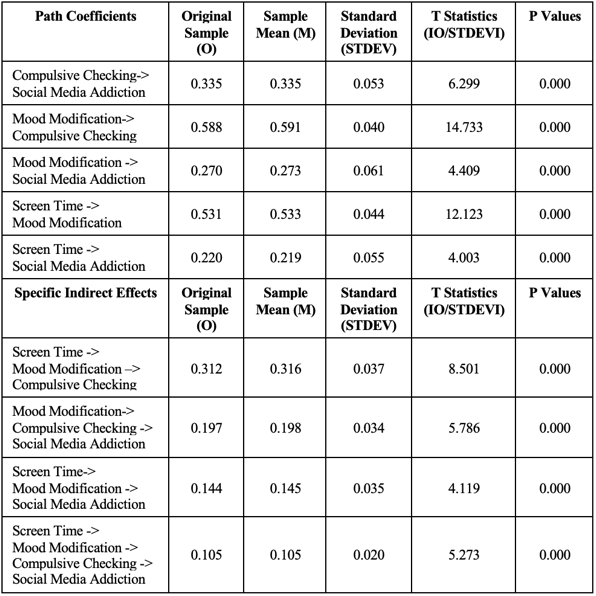
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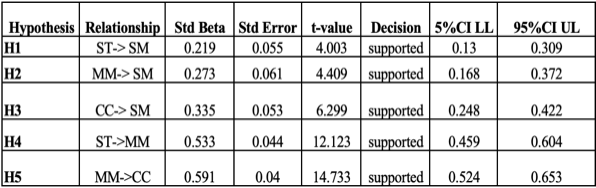
**Fig. 3. Model Hypothesis Testing for Direct Effects**

Source: Own elaboration

Simultaneously, Table 3. displays the results of the hypothesis testing for direct effects in a numerical way. This allows for a deeper and richer understanding of the testing performed. The columns on the right side of Table 3. are the confidence intervals for the sample mean that have been place between 5% (lower limit) and 95%. (upper limit). The results shown in the t-value collum for all the relationships between the variables are above the appointed threshold of 1.967, meaning that they are significant.

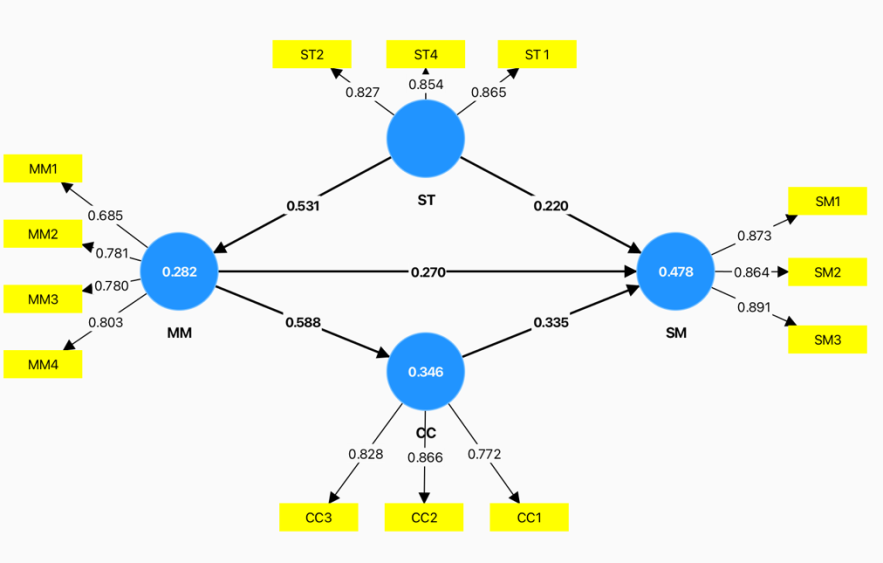
**Table 3. Hypothesis Testing for Direct Results**

***Assessment of the structural model***

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**Table 4. Structural Model Statistics**

Table 4. is divided into two sections, namely the path coefficients, that show the direct effect of one variable on another. As the table shows that the P<0.05 on all the path coefficients, it demonstrates that the variables do in fact have an effect on each other.



**Fig. 4. Structural Model with Standardized Estimates**

Source: Own elaboration

The strongest relationship in the model can be observed between mood modification and compulsive checking (0.558), indicating that mood modification is a significant predictor of compulsive checking.

On the other hand, the weakest relationship featured in the first section of the table is found between screen time and social media addiction. Although the relationship is significantly weaker than the previous relationships, it is still positive. It manages to highlight that more screen time is associated with a higher likelihood of developing social media addiction. The second part of the table is focuses on the specific indirect effects, which represent the influence of one variable on another through an intermediary variable. The table applies the same value P<0.05 in order to be considered positive.

A screenshot of a table

AI-generated content may be incorrect.

**Table 5. R-squared (R2) Test**

The data was entered into the SmartPLS software, to ensure accuracy, double data entry was performed. The results from the data verification method were equal to each other, meaning there was no error in the data entry. The SEM Model can be observed in Figure 3. the research conducted for the model is grounded in the Use and Gratification Model (Katz et al., 1973) and Self-Determination Theory (Deci & Ryan, 2002).

The outer loading must meet the expectation of 0.70≤ loading, but if removing it would cause serious problems for the content validity of the measurement model, then 40≤ is deemed appropriate to allow the outer loading to remain within the model. All the outer loadings are above the required amount (40≤) (Hair et al., 2021).

In order to test the quality of the structural model, the R2 test was performed in Table 5. This test focused on determining if a model is illustrating the variance of the independent variables. The R2 value typically ranges between 0 and 1. In scholarly research there are three thresholds for the evaluation of the values. The substantial rate is 0.75, meanwhile the moderate evaluation is 0.50, and, lastly, the weakest threshold is considered to be 0.25 (Hair et al., 2021). Based on the values shown on the tables, the following results can be drawn. The R-squared value of 47.8% means that Compulsive Checking (CC) and Mood Modification (MM) together explain 47.8% of the variance in Social Media Addiction (SM). In other words, variations in CC and MM can account for almost half of the observed changes in SM. The adjusted R-squared value, while slightly lower, still supports this interpretation. It confirms that the model, even after adjusting for the number of predictors, remains quite effective in explaining the variance in SM.

1. **DISCUSSION**

This thesis investigated the interplay between social media addiction and psychological needs among Generation Z, exploring the relationship between social media usage, mood modification, social connection, compulsive checking, and overall well-being. Through surveys and analysis of social media behaviour, this study aimed to understand how social media use influences Gen Z's psychological state and if it contributes to addictive patterns. The thesis proposed a total of five research questions accompanied by five hypotheses.

The first research question "how does the duration of social media usage enable individuals to experience a sense of social connection?" was followed by H1. The research confirmed positive correlations between the duration of social media use and feelings of feeling connected to other, suggesting that increased amounts of time spent on social media enhance the perception of social bonding. This finding is in accordance with the conclusion of Kim et al (2023) and Ji and Hu (2024) that emphasize the link between self-connection and social connection leading to information sharing. In a study by Lukindo (2016), it was found that individuals who spend time on social media are more likely to have friends in that community. In comparison, Twenge (2013) research revealed that social media led to millennials' social disconnection. These results illustrate how Gen Z behaves differently from Gen Y.

The second question posed in this paper was how does social media impact Gen Z mood. In this case, our study revealed a noticeable improvement in mood after social media usage by gen z, leading to an understanding that platforms offer a temporary emotional support and distraction through social validation and entertainment. Although it is important to note that the sustainability of the mood enhancement requires further investigation. According to Sampasa-Kanyinga et al. (2019), Canadian high school students who spend up to 2 hours (moderate use) on social media feel more connected to their peers. A Goldilocks effect was attributed to it by the researchers. Nevertheless, the same study shows that students' academic performance is negatively impacted by spending more than two hours on social media. Again, Gen Z behaves differently than older generations. The use of social media by Gen Y created shallow and weak ties, which adversely affected the mental health of some individuals, according to Twenge (2013).

This study findings supported other researchers reports such as Johannes et al. (2019) and Bartoli and Benedetto (2022) and confirms that if a notification is received by Gen Z, they will promptly check it. It seems that receiving notification triggers a compulsion check on the technological device. Some researchers linked it to “smartphone vigilance” (Johannes et al., 2018). This highlights the addictive nature of social media rewards system and disregard for the time at which the notifications are sent or regardless of immediate impact on productivity. FOMO could also explain this behaviour, where people feel anxious about what others are experiencing without them (Liu &amp; Ma, 2020).

Moreover, our study shows that the higher the amount of screentime, the more a user’s mood will be modified. The findings highlighted that screen time affects mood modification and can contribute to co-dependence and addictive patterns. Gen Z is more inclined to share with their networks and cares about how their networks react to their posts, so the more reactions, the happier they feel. As a result, their brains look for such rewards constantly (Sherman et al., 2016).

Therefore, our findings are suggested that compulsive checking is a direct result of mood modification caused.Demonstrating that emotional highs and lows that are experienced reinforce the impulse to constantly check social media for updates and add to the cycle of addiction. This could be also led to increased feelings of depression and anxiety (Elhay et al., 2017).

It important to note that this research is only estimated the relation among the change of mood and usage of social media and not how does it impact individual performance. As most of researchers show how individual and student’s performance negatively impacted by extensive use of social media (Sampasa-Kanyinga et al., 2019).

**6. CONCLUSION**

This study contributes to the field of psychology and media studies by shedding light on the intricate relationship between social media addiction and psychological needs in Generation Z. The findings have implications for mental health professionals, educators, parents, and social media platform designers. Specifically, this research suggests that while social media can fulfil certain psychological needs, excessive use and reliance on platforms for mood regulation could lead to addictive behaviours and potential negative impacts on well-being.

7. LIMITATIONS OF STUDY

Due to the complex nature of the topic of social media addiction, there were various limitations that presented themselves at different stages of the conduction of the study, while other limitations were defined at the conclusion of the study. While the paper and study focus on social media and its negative aspects, it overlooks other potential positive outcomes, such as self-expression, information seeking and social connections (Ellison et al., 2007).

The survey was developed with the aid of the secondary research that was conducted. The literature revealed that the Likert scale was an established scale, therefore it was employed for this study. Likert scales may not always be able to feature the full complexity of human opinions, thoughts and feelings. Another limitation took place with Likert scale, convenience sampling, and operationalization process of the variables. The previously mentioned tools rely mainly on self-reported data, meaning they are subjective and can be altered by respondents to appear more desirable or socially acceptable (Kelly et al., 2018). Additionally, the study dealt with complex psychological constructs that can challenge participants in regard to personal biases that could potentially lead to inaccuracies, due to recall issues.

The topic of social media and its addictions are constantly changing, because new platforms, features and trends are emerging and will continue to do so. This is also relevant for social media addiction, due to the variations on how it is defined and measured in the future. (Andreassen et al., 2016). Therefore, the findings in this study may possess a limited long-term relevance due to the constant evolving state of the topics.

8. RECOMMENDATION FOR FUTURE RESEARCH

The research presented in this paper has explored the interplay between social media addiction and psychological needs. While this study has produced valuable and acceptable results, research is an ongoing process, and there are always new avenues to explore and questions to answer. Therefore, this section outlines various potential directions for future research that could build upon the foundation laid by this study.

This study selected a survey as a primary source of research, future studies could select to conduct interviews instead. In-depth interviews can extend the exploration of Gen Z's experiences with social media, proving a larger and richer understanding of their motivations for its usage (Jain, 2021).

Future research could potentially take a cultural approach and apply a cross-cultural comparison. This can be achieved by replicating the study in different cultural contexts, in order to investigate how cultures and values influence social media patterns, as well as the possible addiction they create in relation to psychological needs (Brislin, 1976). This type of study is able to provide insight if the observed relationships are universal. On the other hand, the conduction of longitudinal studies could examine how the relationship of social media addiction and psychological needs would evolve over time, (Pelclová et al., 2021). Allowing for identification if unmet needs lead to addiction, as well potential long-term consequences for mental health and well-being.

Disclaimer (Artificial intelligence)

Author(s) hereby declare that NO generative AI technologies such as Large Language Models (ChatGPT, COPILOT, etc.) and text-to-image generators have been used during the writing or editing of this manuscript.

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