

“It’s not a matter of exposure”: Exploring the impact of differential susceptibility variables on users’ vulnerability to adverse social media effects

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Abstract:

While extensive use of social media has been consistently associated with the emergence of a wide array of adverse outcomes among users according to well established line of thought, it can not be drawn upon as the sole catalyst for these effects. Other factors like individual’s personality traits further contribute. The current work uses the differential susceptibility model of media effects as a framework to test for the impact of dispositional susceptibility variables on individuals’ use of social media and 3 subsequent distinct responses associated with these consumption patterns namely social comparison, loneliness and, life satisfaction. Findings stated that the most evident detrimental impact associated with social media consumption was social comparison that was significantly prevalent apart from individuals’ personality traits. in other terms, these virtual platforms foster upward social comparison patterns apart from individuals’ perception of self-esteem. This signifies how social media have been constituting a fertile environment for psychologically distressing upward comparison patterns.

Key words:

Big Five Personality Traits- Differential Susceptibility model of media effects- social media addiction- social comparison- loneliness- life satisfaction

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دور السمات الشخصية كمتغيرات مؤثرة على حساسية المستخدمين لتأثيرات مواقع التواصل الاجتماعي

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ملخص الدراسة :

على الرغم من ارتباط الاستخدام المكثف لوسائل التواصل الاجتماعي بظهور مجموعة مختلفة من النتائج السلبية بين المستخدمين إلا أنه لا يمكن الاعتماد عليه باعتباره المسبب الوحيد لهذه التأثيرات. فهناك عوامل أخرى متمثلة في السمات الشخصية و التي تلعب دورا محوريا في النتائج المرتبطة بالاستخدام. وقد اعتمدت الدراسة الحالي على نموذج الحساسية النسبية لجمهور وسائل الاتصال كإطار نظري لاختبار تأثير تلك متغيرات النسبية علي التأثيرات المختلفة لوسائل التواصل الاجتماعي. وبشكل عام اكدت نتائج الدراسة أن التأثير السلبي الأكثر وضوحاً والمرتبط باستخدام وسائل التواصل الاجتماعي كان متمثلا في المقارنة المجتمعية التي كانت سائدة بشكل كبير بين مفردات العينة بصرف النظر عن السمات الشخصية للأفراد. و قد توصلت الدراسة أن هذه المنصات الافتراضية تعزز أنماط المقارنة الاجتماعية التصاعدية مما يجعلها بيئة خصبة لأنماط المقارنة الاجتماعية المؤذية نفسيا.

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Introduction:

In today’s media-saturated environment, social media have become an integral component of our everyday interactions; having multiple social media accounts has become the new norm. These platforms are being progressively utilized for various purposes encompassing educational, employment, informational, and entertainment purposes in addition to their primary function of social connectivity and relationship maintenance. Individuals rely on social media to learn about current events, communicate with others, post images, and catch the current trends. As of July 2021, 4.48 billion people (57% of the current global population) use social media worldwide (Datareportal, 2021 in Ponce, 2023). Some of the most used social media sites include Facebook, Twitter, LinkedIn, Snapchat, TikTok, and Instagram. In Egypt, as of early 2023, over 46 million had a presence on social media platforms compared to 16.6 million nine years earlier (Statista, 2023). More recently published data indicated that there were 45.15 million users aged 18 and above using social media in Egypt at the start of 2024, equivalent to 64.1 percent of the total population aged 18 and above.

The enormous proliferation of social media consumption was associated with wide arrays of both positive and negative consequences. On the one hand, these platforms have provided their users with multiple positive outcomes paving the road for political participation and social activism, facilitating access to news and current events, fostering creativity and expression, and enhancing connectivity and social inclusion. Nevertheless, a well-established line of thought has consistently attributed multiple negative impacts as a direct result of regular consumption of these platforms, especially problematic consumption patterns. Such effects include dissemination of falsified information, depression, anxiety, the emergence of social comparison, lack of life satisfaction and overall well-being, fear of missing out (FoMO) in addition to deteriorated academic performance.

While the majority of research has consistently attributed the emergence of these negative effects mainly to both the patterns and

amounts of consumption among users; yet, more recent work was incapable of proving this direct linear relationship; failing to associate the emergence of such adverse impacts with sheer time spent consuming these platforms. Such findings triggered researchers to conduct further investigations suggesting that other extraneous variables existed and resulted in the emergence of these effects-amongst which are personality traits.

The Big 5 personality traits is a well-established psychological framework that has been extensively scrutinizing the role of individual differences on media consumption patterns. According to the framework, each trait has a set of distinct features that render their bearers more susceptible to both addictive social media consumption and adverse psychological impacts resulting from these patterns. Thus, while the amount of time spent consuming social media is one significant contributor to the emergence of negative outcomes, it cannot be set forth as the sole predictor of these adverse outcomes. According to the differential susceptibility model of media effects - proposed by Patti M. Valkenburg & Jochen Peter (2013), dispositional susceptibility variables such as personality traits influence individuals’ consumption of social media and the various responses associated with these patterns. This model constitutes a plausible assumption justifying that the varying outcomes of social media consumption are not direct results of exposure to these platforms per se.

Research problem:

University students -classified as members of Gen Z- are digital natives characterized by their heavy reliance on social media platforms. Both millennials and Gen Z exponentially spend an ever-escalating amount of time using these various platforms for varying purposes. While heavy consumption has been consistently associated with the emergence of negative impacts, nevertheless members of Gen Z are at a higher risk of experiencing these effects owing to their personality traits that are still in a developmental phase. Their vulnerability to such effects may have a long-lasting impact on their mental health and overall well-being.

Building upon the previous, the current work examines the interplay between individuals’ personality traits and the emergence of 3 distinct psychological impacts -particularly loneliness, social comparison, and life satisfaction- by analyzing the intervening role of social media consumption. In other words, the paper seeks to identify which personality traits set their bearer at greater risk of developing mental health problems that are fostered through problematic consumption of social media. While the total amount of time spent using social media may be a valid predictor of the development of mental health issues, nevertheless, this sheer amount of time is not the sole contributor to the emergence of these mental problems. Further, the paper will assess the transactional nature of media effects by evaluating their possible impact on future consumption patterns.

Research objectives:

1. To examine the impact of social media use on the emergence of three distinct outcomes -namely social comparison, loneliness and life satisfaction.
2. To study the impact of individuals’ personality traits on their susceptibility to social media addiction.
3. To determine the indirect relationship between personality traits and three different outcomes through the mediating effect social media.
4. To verify the differential susceptibility model of media effects as a framework to explore the transactional nature of media effects in influencing future consumption patterns.

Research significance:

- 1.This research signifies the impact of personality traits on users’ susceptibility to social media addiction and the further repercussion of different consumption patterns. It extends beyond a mere causal effect relationship between social media use and effects
- 2.The theoretical significance lies in the relative novelty of the Differential Susceptibility Model of Media effects that has not been extensively used as a comprehensive framework for the analysis of social media effects among Egyptian sample.

3.The practical significance is evident in highlighting how social media can be psychologically distressing as a result of triggering social comparison apart from individuals personality traits or their perception of self-worth and esteem.

Review of literature:

1)Social media addiction and psychological well-being:

Social media have been exponentially expanding since its onset 24 years ago and still continues to develop (Ponce, 2023). These platforms have become an integral part of daily internet usage. On average, internet users spend 151 minutes per day on social media and messaging apps, an increase of 40 minutes since 2015. As of 2024, the average daily social media usage of internet users worldwide amounted to 143 minutes per day, down from 151 minutes in the previous year (Statista, 2023). Egypt ranked number16 globally in the daily time spent on social media category, with an average of two hours and thirty-eight minutes per day. Since January 2021, the number of social media platform users in the country has overall increased (with a significant drop in the second half of 2022). As of December 2024, the number of Facebook users in Egypt reached close to 56.4 million users. YouTube had 44.70 million users in Egypt in early 2024 which was equivalent to 39.4 percent of Egypt’s total population at the start of the year. Egypt has recently been ranked 11th among the countries with the most TikTok users in the world. According to a 2023 survey by the cabinet's Information and Decision Support Centre (IDSC), TikTok came third among the most-used social media platforms, after Facebook and Instagram. TikTok had 32.94 million users aged 18 and above in Egypt in early 2024 (Statista, 2023). These various platforms have become a fundamental aspect of contemporary communication culture serving as a digital arena for individuals to connect, share information, and interact in diverse ways. It is worth stating that the steady increase in the number of active users and the overall widespread consumption of these platforms have encouraged researchers to further investigate the consequences resulting from the various modes of consumption.

On the one hand, social media use is associated with a range of positive effects including more frequent engagement in political and civic action, increased levels of involvement in extra-curricular activities in college students, higher classroom motivation, and a more positive classroom environment, fostering connectivity and social support, offering individuals opportunities to build relationships, enhancing self-expression, and access to information in addition to developing a sense of social inclusion and positive affirmation through “likes” and “comments” that eventually expand individual’s social capital. For instance, Kitiş et al. (2021) found that various levels of social media addiction were reported among 67.2% of the study sample. Researchers stated that a negative relationship existed between social media addiction and loneliness among the study sample; a finding that was attributed to the fact that the more lonely individuals experience increased communication and decreased perceived loneliness with greater social media use.

2) Detrimental effects of social media consumption:

Problematic consumption has too been correlated with several adverse consequences, particularly on mental health evident in the emergence of symptoms related to depression, anxiety, loneliness and stress, increased jealousy, upward social comparison and decreased life satisfaction, and a decline in subjective well-being; this, in addition to further investigations that associated prolonged exposure to social media and intentional self-harm (Evangelou et.al, 2024; Etemadian, 2021; Gugushvili et. Al, 2024; Gökçearslan et al., 2021; Rozgonjuk et al., 2019).

Social comparison refers to the tendency to use other people’s information as an indicator to evaluate well how we are doing in our own lives relative to others (ability comparison) and how we should behave, think, or feel (opinion comparison). Of close relevancy to social comparison, are both the targets of the comparison (upward: superior other versus downward: inferior other) and the consequence of the comparison (assimilation versus contrast). “Assimilation refers to the comparer’s self-evaluation changing towards the comparison target, eventually becoming more positive after upward comparison

and more negative after downward comparison. Conversely, contrast refers to the comparer’s self-evaluation changing away and deviating from the comparison target, becoming more negative after an upward comparison and more positive after a downward comparison”. It is worth stating that social comparison is more likely to occur when there is a similarity between the comparison dimension, the comparison target, and the comparer’s self; rendering social media platforms a fertile environment for such a process to occur owing to the redundancy of available information about comparison targets. More specifically, upward social comparison is more likely to occur because individuals are more prone to share their successful experiences on social media rather than their failures causing the comparer to be more confronted with a flowery portrayal of other individuals’ life experiences; eventually bearing a detrimental impact on the comparer’s overall well-being (Verduyn et al. 2020).

Solomon (2010) reported that social media consumption was a significant predictor of a comparative process that occurred with both known and unknown users. Respondents reported that that when viewing peer images, they often engaged in general comparisons, thus mere consumption was a predictor to social comparison with every log onto social networking sites. Further, participants were affected by what they viewed, often in negative or painful ways. When asked to describe their experience of viewing media profiles containing images of women who they believed outperformed them in some domain, participants often used words such as “jealous,” “anxious,” “left out,” and “sad.” They ended up doubting themselves and increasingly feeling insecure about themselves. This instigated negative social comparison in a negative manner endorsing feelings of envy and sadness, which are emotions that adversely influence self-esteem. This is particularly true when consumption patterns become problematic; with the use of social network sites interfering with important life domains including work, studies, and leisure (Gugushvili et al., 2024). When not used in a mindful pattern, social media can create false expectations of reality among and between users who would eventually end up comparing themselves to others (Taylor, 2023).

For instance, Ponce (2023) reported that social media addiction negatively impacted life satisfaction particularly among twitter users. According to the researcher, twitter users are inclined to use this platform as a direct result of the polarizing interaction and the controversial nature of topics they discuss. This contributes to both developing social media addiction and lower life satisfaction. It might be that constant interaction between twitter users boosts their sense of reinforcement in the form of attention from other users, which may thrive a user's desire to continue using the platform, resulting in social media addiction. Moreover, these interactions may be more negative than positive, which may negatively impact users' life satisfaction, justifying why Twitter users have lower life satisfaction than individuals using other social media platforms. Further, while social media may support developing a sense of belonging through seeking validation from others, these platforms instigate the feelings of cyber-ostracism that emerge when individuals are denied access to Facebook groups, un-friended or blocked from viewing others’ profiles on Instagram, or even denied access to following others on Twitter eventually disenfranchising individuals from specific group affiliations (Etemadian, 2021).

Ahmad et al. (2024) differentiated between two patterns of Instagram consumption -passive and active consumption. Passive use refers to simply scrolling through the platform, without any form of active engagement throughout the process of consumption. Some studies have associated passive use of Instagram with negative mental health outcomes including increased anxiety, depression and fear of missing out. On the other hand, active Instagram use has been linked to positive mental health outcomes, including increased feelings of social support, self-esteem, and positive affect. Further, social media platforms like Instagram and Facebook provide individuals endless opportunities for social comparison. Consequently, researchers examined the interplay between these modes of consumption and the emergence of FoMO, social comparison and depression symptoms among youth. The findings of the study proved that both active and passive Instagram consumption patterns were associated with adverse outcomes on mental health. Active use was correlated with both

FoMO and social comparison. Passive consumption was significantly associated with social comparison too and most importantly, social comparison resulted in depression. In other words, it was not the mode of consumption that triggered social comparison and eventually depression; even though individuals may browse Instagram content passively, the comparison process can occur subconsciously, leading to an effect on their level of depression. Thus the study added to the existing literature by providing evidence of its negative impact on mental health. Individuals comparing themselves to other Instagram users who portray their lifestyle in an idealized manner develop a sense of inadequacy in comparison. Verduyn et al. (2020) meta-analysis has similarly reported that passive social media consumption increases the probability of engagement in upward social comparison resulting in a detrimental impact on life satisfaction and overall well-being.

Marttila et al. (2021) examined the impact of problematic social media use on subjective well-being by analyzing the mediating role of loneliness. The initial study findings proved that both PSMU and loneliness were negatively correlated with life satisfaction. Further analysis stated that PSMU negatively impacted life satisfaction through the confounding effect of loneliness which largely explained this relationship. In other words, a rather indirect relationship existed between PSMU and life satisfaction through the mediating role of loneliness. Results from the analysis of the panel data validated and provided additional support for this finding over the 15-month observation period: PSMU directly predicted decreased life satisfaction between subjects, nevertheless, the effects diminished after loneliness was taken into account. To conclude, the results of both analyses indicate that loneliness constituted a crucial underlying mechanism that contributed to the relationship between PSMU and subjective well-being. Singh & Tripathi (2024) reported that exposure to social media was a significant predictor of an overall tendency to social comparison (both upward and downward social comparison) yet more importantly, inferred well-being. In other words, social media consumption was negatively associated with well-being among the study sample.

3)Personality traits and psychological well-being:

While much evidence exists supporting the positive association between the increase in the amount of time spent on social media and the emergence of mental health issues among users, yet some evidence exists proving that the emergence of mental health problems could not be confined to patterns of consumption perse; that is to say that other extraneous variables intervene in this relationship resulting in these metal health problems. These factors include person-centered characteristics and situational factors. Coyne et al (2020) examined the causal relationship between the time spent using social media and the emergence of mental health problems (anxiety and depression), using both between and within subjects analysis, over an 8-year-period of time, encompassing the transition between adolescence and emerging adulthood. In general, between-subject analyses (both at the cross-sectional and longitudinal level) revealed that a moderate correlation existed between the time spent on social media and anxiety and depression. However, the within-person, cross-lagged estimates failed to prove an association between the time spent using social media and mental health across eight years, spanning early adolescence into young adulthood. That is, individual adolescents increased use of social media than their own cross-time averages was not a predictor of increase in either depression or anxiety. Similarly, decreases in an individual adolescent’s own time spent on social media did not indicate ensuing decreases in depression or anxiety. In other words, although adolescents higher in social media time use have more mental health challenges (in general), their own, individualized fluctuations in social media use do not correlate with fluctuations in mental health. The current work will examine the negative impacts of personality traits on 3 distinct aspects of psychological well-being (social comparison, loneliness and life satisfaction).

3-A) The Big 5 personality traits and psychological well-being:

The Big 5 personality traits have become acknowledged as relevant and valid dimension of personality in various research fields ranging from influence on health to psychotherapy treatment. Some

researchers have considered the model to be the most important dimension of the “social landscape” to which humans have to adapt (De Raad, 2015). It is a classic doctrine for explaining individual differences that can be extended upon to explain various responses to media consumption and subsequent effects (Zhang et. Al, 2024). In other words, this theoretical framework has been extensively applied to clarify the impact of individuals’ psychological traits on media consumption patterns and their vulnerability to media effects.

To begin with, a trait refers to a characteristic pattern of thinking, feeling, or behaving that tends to be consistent over time and across relevant situations (Soto, C. J., 2018). As the name implies, the model comprises 5 traits -Extroversion, Agreeableness, Conscientiousness, Neuroticism, and Openness (referred to as OCEAN). These traits play a significant role in shaping how individuals perceive and interact with their surrounding environment including various media and more recently social media platforms. According to the Interaction of Person-Affect-Cognition-Execution model (I-PACE) personality traits are among the most important predisposing factors which both directly and indirectly impact problematic usage of technologies (Gugushvili et al.2024). Consequently, an increasing size of scholarly research has been interested in exploring the role of these traits in shaping the effects of social media on mental health; suggesting that these traits influence susceptibility to the effects of social media use and the overall internet consumption pattern in general (Evangelou et.al, 2024; Khorsavi et al., 2022; Ellatif & ALibrahim, 2023; Mercan et al. 2023).

Astleitner et al. (2023) examined whether the interplay between personality traits and mental health was mediated by patterns of media consumption. According to the researchers, media use and other related psychological processes mediate the relationship between personality traits and mental health. The study examined 3 psychological processes: fear of missing out, ghosting, and vague booking. Fear of missing out is defined as “a pervasive apprehension that others might be having rewarding experiences from which one is absent” and “is characterized by the desire to stay continually

connected with what others are doing” (Przybylski et al., 2013, p. 1841). Ghosting has been described as “unilaterally cutting off contact with a partner and ignoring their attempts to reach out” (Timmermans et al., 2020, p. 2). Finally, vague booking has been identified as “social media posts that contain little actual and clear information, but are worded in such a way as to solicit attention and concern from readers” (Berryman et al., 2018, p. 308). Researchers examined whether the interplay between personality traits and mental health was mediated by patterns of social media consumption and the 3 aforementioned psychological processes. Findings confirm that a direct relationship existed between social media use and mental health problems. Further, the study confirmed that social media use and related psychological processes mediated the relationship between personality traits and characteristics and the emergence of mental health issues. Increased social media use was associated with increased levels of fear of missing out, being a victim of ghosting, and vaguebooking as well as mental health problems. Having frequent, easy, and only virtual access to others could increase uncertainty about the quality of relationships with those individuals. Greater uncertainty, in turn, could lead to greater fear of missing out. Findings also confirm the increase in the probability of being a victim of ghosting through social media as social media facilitates connection with others that is, on the one hand, anonymous and, on the other, facilitates surveillance and control (Thomas & Dubar, 2021). Being anonymous and having control increases the possibility of withdrawing from social relationships. Our findings also confirm results that people who use social media more reported more experiences of vaguebooking (Berryman et al., 2019) because vaguebooking is a tool for personal marketing and privacy management (Child & Starcher, 2016). People might post about themselves deliberately mysteriously to arouse interest without revealing too much information. To sum increase in social media consumption results in mental health issues, because social media might act as a catalyst by reinforcing negative personality traits or by reducing time and effort for positive personality development.

3-B) Personality traits analysis:

Extroversion:

The first trait to be analyzed is *extroversion*. Extroversion is the outward turning of the psychic energy to the external world. Individuals high in this trait are characterized by displaying habitual outgoingness, venturing forth with careless confidence into the unknown, and being interested in people and events in the external world. Extroverts are practical, objective, and conform to external standards seeking harmony with their surroundings. They are creative, realistic, pleasure-seeking and are primarily interested in perceiving and experiencing the external world (De Raad, 2015). Further, Extroversion signifies individual differences in social engagement, assertiveness, and energy level. Highly extroverted individuals enjoy socializing with others, are comfortable expressing themselves in group situations and frequently experience positive emotions such as enthusiasm and excitement (Etemadian, 2021; Soto, C. J., 2018; Zhang et. Al, 2024). Individuals high in this trait were reported to be active users of social media compared to less extroverted individuals; a finding that was evident in the frequency of their posts on social media (Evangelou et al., 2024; Ellatif & ALibrahim, 2023). Etemadian (2021) examined the interplay between personality traits -extroversion and introversion- and the amount of time spent on Instagram in relation to the overall sense of connectedness and life satisfaction. Findings of the study proved that while no significant correlation was found between personality traits and Instagram usage, individuals who were self-identified as extroverts expressed greater social connectedness with others. As per media effects, extroverts are more susceptible to experience adverse impacts as FoMO which is a direct result of their entrenched desire to establish social connections and become part of social groups (Zhang et. Al, 2024). This trait was significantly and positively associated with FoMO. Since extroverts are sociable and attracted to stimulating environmental conditions, they are more likely to explore exciting things online which in turn fosters their apprehension about missing out interesting information and updates about their friends and peers. Further, extroverts

experiencing exclusion from social circles would actively seek social interactions to augment positive experiences thus heightening their susceptibility to FoMO (Zhang et. Al, 2024). However, it is worth stating that other line of literature provided contrary findings. Ponce (2023) stated that extroversion was negatively correlated with social media addiction; more specifically twitter users who are less extroverted are more likely to experience social media addiction. One possible justification arises from the fact that extroverts are more likely to interact with individuals in person rather than engage in social media interaction. Extroverts prefer to go out and socialize engaging more in real life rather than social media interactions; thus less vulnerable to turning into social media addicts. ***Since a lack of consistency exists regarding the relationship between trait extroversion, and social media consumption the current work will investigate this relationship.***

Agreeableness

Agreeableness has been identified as one of the big five personality traits. This dimension is the most concerned with interpersonal relationships. It is a trait that enables individuals to cope with problems associated with communal living. One of the two main dimensions of interpersonal behavior is it being dominated by “communion”, which is the condition of being part of the larger social community and solidarity with that larger community. Communion - the theoretical complement of the empirical interpersonal dimension- correlates strongly with agreeableness. Agreeableness can be conceptualized as friendly compliance and likability (De Raad, 2015). Agreeableness involves compassion, respectfulness, and acceptance of others. Agreeable individuals experience emotional concern for others’ well-being, treat others with regard for their personal rights and preferences, and hold generally positive beliefs about others; agreeable individuals tend to have more regard for others, and for social norms of politeness compared to disagreeable ones (Soto, C. J., 2018). Agreeableness is a prosocial personality trait. Individuals high in this trait are highly concerned about their surrounding environment, paying close attention to how they treat others. They exhibit politeness

and empathy which facilitates altruistic behavior (Zhang et al., 2024). Huang (2022) reported through his meta-analysis that agreeableness was negatively associated with social media addiction. This finding is attributed to the warm nature of agreeable individuals who prefer face-to-face rather than virtual interactions rendering them less vulnerable to social media addiction. Evangelou et al. (2024) examined the potential correlation between changes in physiological states before and after individuals’ exposure to negative comments on social media and their relationship to personality traits. Findings proved that individuals who self-reported a significant likelihood to discontinue social media consumption scored higher on the agreeableness scale; additionally, those individuals were highly susceptible to the adverse effects of negative comments; a finding that was evident in the longer duration required by those individuals to return to their pre-arousal states. Nevertheless, other research evidence reported different findings. Mercan et al. (2023) found that a weak positive correlation existed between trait agreeableness and social media addiction. **Given the lack of consensus among existing literature, this research will examine the relationship between trait agreeableness and the patterns of social media consumption.**

Conscientiousness

The third component of the big 5 model is the trait of **conscientiousness**. It is the trait that has been drawn upon as the primary psychological resource in situations where achievement is of an important value, especially in contexts of work, learning and education. The construct is deeply entrenched in the drive to accomplish something spanning all the necessary characteristics in such a pursuit: being organized, systematic, efficient, practical and steady (De Raad, 2015). Conscientiousness constitutes a trait with a quest for organization, productiveness, and responsibility. Highly conscientious individuals prefer order and structure, work persistently to pursue their goals, and are committed to fulfilling their duties and obligations, compared to unconscientious individuals who are comfortable with disorder and less motivated to complete tasks (Soto, 2018). Highly conscientious individuals are oriented toward more

disciplined self-control, time management strategies, and focus on tasks that need to be completed in the present. They are prone to self-regulation and potential emotional regulation abilities consequently they are less likely to experience emotion-related disorders. Oyibo et al. (2019) stated that highly conscious individuals are less susceptible to constructs of social influence with conscientiousness being a negative determinant of social learning and social proof. Researchers offered two possible justifications for the previous findings. First, individuals high in conscientiousness are more thoughtful than those low in conscientiousness, during an uncertain situation, the former will spend more time thinking about the situation and finding a possible solution to it rather than resorting to learning or imitating others as a way of social proof or validation. Second, given that highly conscientious individuals are more goal-oriented, they are more likely to be focused on achieving their personal goals than engaging in social interactions—be it online or offline. Huang (2022) reported that individuals high in this trait are less likely to be addicted to social media platforms. This finding was attributed to the fact that highly conscientious individuals are self-controlled and constrained, making conscientiousness a protective factor of social media addiction. Ellatif & ALibrahim (2023) found a positive correlation between trait conscientiousness and social media usage with highly conscience individuals having a very organized, goal-directed usage of social media with a drive of knowledge sharing and disseminating information. Further, those individuals are the least vulnerable to report problematic consumption of these platforms. In terms of media effects, these emotional regulation abilities render those individuals less vulnerable to adverse social media effects as FoMO (Zhang et. Al, 2024). In their research, Zhang et. Al (2024) reported that conscientiousness was negatively correlated with FoMO. This finding was attributed to those individuals’ self-control, prudence, and responsibility. The significant self-control abilities exhibited by those individuals render them to act more thoughtfully and prudently, leading to their behavior being more rational instead of emotional. They are very strict in terms of their decision-making choices. These personal abilities facilitate the tendency to handle social media effects

more rationally thereby circumventing the effects of FoMO and ameliorating its negative repercussions. While other research failed to support the negative relationship between social media addiction and conscientiousness, they reported that those individuals use social media in a manner that supports their goal-oriented behavior. Mercan et al. (2023) reported that a weak positive relationship existed between the two variables; yet the researchers stated that highly conscientious individuals who are characterized by being target-oriented, ambitious, organized, and controlled individuals with well-defined responsibilities use social media in a mindful manner to support these features of theirs.

Neuroticism

Neuroticism -the fourth and most widely investigated personality trait- is tightly entrenched with emotional anxiety and instability. This trait has been empirically correlated with personality disorders including passive-aggressive personality disorder and other traits reflecting distress and dissatisfaction with self (De Raad, 2015). Further, it is negatively associated with subjective well-being and psychological health. For example, highly neurotic individuals possess lower levels of overall life satisfaction, as well as lower satisfaction in some specific life aspects (e.g., job and relationship satisfaction). They are also at increased risk for various forms of psychopathology, including anxiety and mood disorders (Gugushvili et al., 2024; Huang, 2022; Soto, 2018; Rozgonjuk, 2019). Individuals who perceive themselves as neurotic lack a sense of social connectedness. They perceive themselves as socially incompetent and have persistent concerns about negative social evaluation (Etemadian, 2021), and more susceptible to upward social comparison and feelings of envy of others aggravating their mental health (Verduyn et al., 2020).

Neuroticism being a trait related to emotional instability renders highly neurotic individuals susceptible to adverse social media effects. Khosravi et al. (2022) stated that neuroticism is a significant risk factor for developing internet addiction. Since neurotic individuals are characterized by emotional instability or hyperreactivity, internet addiction can relieve the loneliness of these people that is caused by

anxiety, depression, nervousness, shyness, and low self-confidence; eventually, they turn to the internet as a social tool to regulate their emotions. The study further reported that low self-esteem -that is by and large related to the prevalence of neuroticism- was a predictor of internet addiction. The interplay between neuroticism and internet addiction was interpreted through the partial mediating role of low self-esteem between the two variables. In other terms, internet addiction might cause a toxic combination of low self-esteem and negative emotions (e.g., anxiety, psychological stress, and depression) by changing a person’s life causing individuals to spend more on the internet which adversely impacts social relationships, and increases social isolation. Similar findings were reported by Ellatif & ALibrahim (2023) with highly neurotic individuals reporting high levels of anxiety that can be released through the use of technology; this in addition to their lack of ability to accommodate to the surrounding environment and the members of the community eventually preferring virtual interaction on social media instead. Huang (2022) similarly stated that neuroticism was a risk factor for developing social media addiction because individuals high in this trait are more likely to be socially anxious and feeling more comfortable with online communication. Hiding the entrenched uneasiness in social interactions through relying on the use of social media can lead to more social media use. While Mercan et al. (2023) failed to prove a positive relationship between neuroticism and social media addiction, researchers found that individuals who lacked self-confidence -which is an entrenched characteristic of neuroticism- were more prone to experience social media addiction. On examining the interplay between loneliness and social media usage, Taylor (2023) reported that anxiety levels were significant predictors of social media consumption among users. While social media usage was positively correlated with perceived loneliness, it was not the sole predictor of loneliness. Nevertheless, trait anxiety that is entrenched in neuroticism proved to be a significant predictor of loneliness. The overall research findings state that the combined factors of social media usage and the anxiety level of the user play a role in the development of loneliness and that anxiety predicts an individual’s level of social media usage.

In other words, overall levels of anxiety predict the amount of social media consumption; and since social media usage on its own may not be fulfilling the unmet needs of users and instead, it contributes to increased rates of anxiety and loneliness particularly among individuals already identifying as anxious. The previous findings coincide with the differential susceptibility model of media effects which states that predisposition factors like personality traits play a significant role in media consumption patterns among individuals (Valkenberg & Peter, 2013). Similar findings were reported by Ponce (2023) with individuals high in neuroticism more susceptible to experiencing social media addiction. More specifically, this study found that Twitter exacerbates the relation between neuroticism and social media addiction meaning that the higher the social media addiction, the higher the neuroticism scores for Twitter users. This finding is a direct result of the nature of neurotic personality that is characterized by anger, anxiousness, insecurity, and nervousness causing highly neurotic individuals to feel insecure and nervous around others preferring to socialize and interact through virtual communities. Additionally, neurotic people prefer using Twitter because they prefer posting and sharing information and news rather than sharing pictures and videos as they do on Instagram, TikTok, Facebook, and Snapchat.

Astleitner et al. (2023) stated that individuals who have a persistent need for belonging are more susceptible to experiencing fear of missing out. Those individuals are in a tenacious fear of losing social connections with others. The study further added that individuals with higher social comparison orientation are more likely to have higher levels of social media consumption patterns, develop fear of missing out, being a victim of ghosting, and vaguebooking as well as lower levels of mental health because social comparison orientation increases social media use and, in general, negative affective balance. The study further reported that histrionic individuals (who are by and large neurotic individuals) have self-esteem that is driven from others’ evaluation. They have fear of missing out, being a victim of ghosting, and vaguebooking, because such a personality increases the desire to be liked and the need for social approval, thus potentially increasing

negative social media experiences. Gugushvili et al. (2024) reported that neuroticism is associated with problematic consumption of social media since those individuals lack self-control. Their study aimed to examine the impact of FoMO and self-control in the relationship between neuroticism and problematic social media consumption. As proposed, neuroticism was positively correlated with FoMO and negatively correlated with self-control. FoMO rather than self-control positively predicted problematic social media consumption and significantly mediated the relationship between neuroticism and problematic social media consumption. The total effect of neuroticism on problematic consumption proved significant. These findings coincide with existing research confirming a link between neuroticism and different types of problematic technology usage, including internet addiction, excessive use of smartphones, online gaming, and SNS. Neurotic users would be more vulnerable to experience FoMO (e.g., rumination, fear of exclusion) and turn to compulsive usage of SNS to compensate for lack of social relationships and relieve the stress associated with FoMO.

Etemadian (2021) stated that individuals who self-identified themselves as highly neurotic were high Instagram users who claimed to find greater social sanction and social connectedness through online interactions. Those individuals are more inclined to present their “real me” better known as their “true self,” on the internet rather than through face-to-face interactions. Further, they reported overall lower satisfaction with life and social connectedness with others. Consequently, their inherent emotional instability paired with their inclination to problematic social media consumption, renders them more vulnerable to the adverse impacts of these online platforms (see Gugushvili et al., 2024). Evangelou et al. (2024) found that individuals high in trait neuroticism were less likely to identify themselves as social media addicts. This is a direct result of those individuals’ persistent sense of stress, anxiety, and negative emotions that renders them reluctant to identify themselves as social media addicts. Acknowledging addiction would result in feelings of shame and guilt which will be challenging for highly neurotic individuals to confront. Zhang et. Al (2024) stated that neuroticism was the trait

mostly associated with FoMO. This trait is characterized by emotional states such as anxiety and insecurity, which underlie FoMO experiences. Neurotic individuals are highly worrisome, which signifies concerns about missing out on beneficial experiences. They experience anxieties in interpersonal relationships in addition to experiencing social anxieties, consequently resulting in FoMO. According to the researchers, the presence of FoMO may stem from over-sensitivity to social interactions or anxiety about the uncertainty of virtual environments in online communication.

Neuroticism is a trait characterized by the prevalence of negative affect and a lack of self-esteem (Ruiz et al., 2022) and a greater tendency to social comparison (Ryan et al., 2019). According to existing research, individuals with deteriorated self-esteem are more prone to experience adverse effects of social media consumption (i.e. FoMO and social comparison). Oyibo et al. (2019) stated that neuroticism being a trait characterized by emotional instability, anxiety, insecurity and fear renders high neurotic individuals to be more susceptible to the three constructs of social influence - namely Social Proof, Social Learning and Social Comparison. These individuals are insecure and anxious in uncertain situations and have less autonomy, thus they are prone to social influences in new situations and in the face of uncertainties. Servidio et al. (2024) examined the interplay FoMO and problematic social media consumption analyzing the mediating role social comparison and self-esteem. Findings proved problematic social media consumption significantly correlated with FoMO and social comparison. Further, researchers found that FoMO was indirectly related to PSMU through the mediating role of social comparison and self-esteem. The intriguing anxiety of missing interesting online social events can trigger a more frequent and intense inclination to social comparison. FoMO fuels the desire to conform to perceived social standards, prompting individuals to constantly evaluate and compare their own lives with those of others. This reciprocal relationship between FoMO and social comparison often leads to more frequent use of social media because individuals seek to bridge the perceived gap between their own experiences and those of others. On the other hand, self-

esteem was negatively and significantly associated with FoMO, social comparison, and problematic social media consumption. This finding implies that individuals use social media to cope with personal issues, striving to compensate for personal deficiencies, particularly low self-esteem. Consequently, it seems plausible to postulate that individuals high in neuroticism (who will be characterized by an entrenched sense of weakened self esteem and elevated tendency to social comparison) are more likely to experience FoMO and problematic social media consumption. In other terms, individuals who are in a constant worry of missing out important social events and believe they have been left out are more vulnerable to an increase in social comparisons, in which they compare themselves to the experiences posted by their friends, eventually, fueling feelings of self-inadequacy and personal discomfort. This justifies why social comparison has been shown to negatively influence individuals’ selfesteem. Additionally, individuals with low self-esteem tend to seek gratification and validation through social media interaction. Social comparison, paired with the combination of FoMO and low self-esteem, can lead to problematic social media consumption, which is characterized by increased time spent online and compulsive behaviors. Rozgonjuk et al. (2019) examined the interplay between neuroticism and facebook consumption through analyzing the mediating role of social comparison orientation. Findings stated that both neuroticism and social comparison were predictors of passive facebook usage -also known as surveillance behavior or ‘lurking’. Further, social comparison fully mediated the relationship between neuroticism and passive facebook use. Social networking sites like Facebook constitute an arena of social comparisons because of the feasibility of accessing others' personal information. Because people with higher neuroticism tend to engage more in social comparisons, it seems plausible that these individual characteristics and tendencies may be associated with more passive online behavior, providing support for the proposed relationship.

Openness

The final personality trait is *openness* to experience. This trait is mostly associated with intellectual and creative outcomes. Individuals high in this trait tend to score higher on tests of creativity and intelligence and to pursue scientific and artistic occupations. They are also more likely to hold liberal political and social attitudes (Soto, C. J., 2018). Research evidence has consistently proved positive associations between openness and social media consumption with individuals high in this trait using social media to fulfill several different purposes including communicating with family and friends as well as educational purposes. Oyibo et al. (2019) stated that individuals high in openness are less susceptible to being persuaded by social influence constructs. They are more imaginative and innovative and less likely to abide by the norm or follow the crowd. Thus, they are less vulnerable to social proof and social comparison. Individuals high in this trait are more susceptible to experiencing social media addiction too (Ellatif & ALibrahim, 2023). Similar findings were reported by Mercan et al. (2023) who stated that this positive relationship shows that social media meets the needs of those individuals for seeking various different experiences, socializing, helping, and empathizing with others who are curious, creative, and open to improvement.

Theoretical framework:

Differential Susceptibility Model to Media Effects

Valkenburg & Peter (2013)

Models that propose the conditional nature of media effects share the notion that effects of media on cognitions, emotions, attitudes, beliefs, physiology, and behavior can be enhanced or reduced by individual-difference (e.g., gender, temperament, developmental level) and social-context variables (e.g., parents, peers). These variables are moderators, in other terms, they can modify the direction and/or strength of the effect of media use on a given outcome. With the same token, the basic premise of the DMSS is that media effects are not universal since other non-media variables moderate the relationship

between media use and the various outcomes (Valkenburg & Peter, 2013).

Media effects literature typically comprises three distinct indirect media effects. *The first considers media use as a moderator between individual differences variables and outcomes of media use.* Media use is predicted by individual difference variables. Media use in turn mediate the relationship between media effects and the different outcomes of media use. The DSMM also conceptualizes this type of indirect effect.

The second type of the indirect media effects considers the mental and physiological processes that occur during media use as a mediator between media use and outcomes. For example, exposure to an arousing news content may stimulate viewers’ attention and attitudes which in turn will enhance their recall of, or attitudes towards, the news issue. The DSMM postulates that mental and psychological processes that occur during media consumption mediate the relationship between media use and media effects. These processes are referred to as media response states.

Finally, models that consider media effects as mediators consider media effects themselves to be the cause of other media effects. These effects referred to as mediating effects are the causal route to the second order media effects. The difference between mediating effects and media response states is that response states typically occur during media use. Mediating media effects can start during media use but they last beyond the media use situation. For instance, informational media use enhances interpersonal discussion (mediating media effects) which in turn enhances participatory behavior (second order media effects). The DSMM also acknowledges this type of mediating media effects.

A forth characteristic of media effects is them being transactional in nature. Transactional media effects propose that outcomes of media use can influence further media use. Transactional media-effects models consider media use and media effects as parts of a reciprocal over-time influence process, in which the media effect is also the

cause of change in media use. The DSMM also recognizes this type of transactional effect.

The DSMM consists of an integrated set of four related propositions that set forth the relations between the media and non-media variables that have been proposed in earlier media-effects theories. The DSMM recognizes and integrates all features of earlier media-effects theories that have been mentioned previously. These propositions will particularly focus on conditional media effects, indirect effects type II (media response states as mediators), and transactional media effects.

Conditional Media Effects: Three Types of Susceptibility

An important aim of several earlier media-effects theories has been to identify the various conditions under which media effects are more or less present. The DSMM conceptualizes three broad types of conditional variables, which we name differential-susceptibility variables. These differential-susceptibility variables are all pre-existing; they are assessable before the media use situation.

Proposition 1: Media effects are conditional; they depend on three types of differential-susceptibility variables: dispositional, developmental, and social.

Dispositional susceptibility refers to all personal characteristics that predispose the selection of and the responsiveness to certain media contents including gender, temperament, personality, cognitions (e.g., scripts and schemata), values, attitudes, beliefs, motivations, and moods. Some of these dimensions (e.g., personality, temperament) are more stable across time and situations than others (e.g., mood, motivations). In the DSMM, both stable and more transient person dimensions are relevant to media use and responsiveness.

Developmental susceptibility refers to the selective use and the responsiveness to media content due to cognitive, emotional and social development. Developmental level predisposes media use in all developmental stages across the life span with the influence being the strongest in childhood and early adulthood and becomes smaller in middle and older adulthood.

Social susceptibility refers to all social-context factors that can influence an individual’s selective use of and responsiveness to media contents.

The DSMM identifies three distinct media response states: cognitive, emotional, and excitative. **Proposition 2: Media effects are indirect; three media response states mediate the relationship between media use and media effects.** In the DSMM, media response states are defined as state variables that instigate from media use. Therefore, they mediate the relationship between media use and media effects.

Cognitive response state: In the DSMM, a cognitive response state is defined as the extent to which media users purposefully select and attend to certain media content and exert cognitive effort to comprehend this content. **Emotional response state:** In the DSMM, an emotional comprises all affective reactions that emerge as a result of exposure to media content. **Excitative response state.** An excitative response state refers to the experienced degree of physiological arousal (i.e., the activation of the sympathetic nervous system) that originate in response to media content.

The DMSS postulates that media effects are mostly evident and long lasting when the cognitive, or when the cognitive, emotional and excitative response states are high. According to the DMSS, media effects can be deliberately reduced. This self-induced reduction in media effects can be done through self regulation capacities of media users. For instance, when response states are high as a result of exposure to media content that is arousing, difficult, unrealistic, or inconsistent with existing beliefs, media users start to feel uncomfortable. As a result they start to deliberately regulate their response states for example by strategic attention deployment (e.g., looking away from the screen) or by employing cognitive reappraisal strategies, that is, strategies to change the meaning of a stimulus to alter its impact.

The DSMM thus argues that media use and the differential-susceptibility variables have an interactive influence on the media response states: Certain characteristics of media (e.g., content) influence media response states, but this influence depends on

dispositional, developmental, and social-context differences among media users. **Proposition 3: The differential-susceptibility variables have two roles; they act as predictors of media use and as moderators of the effect of media use on media response states.**

The DSMM assigns two different conceptual roles to the differential-susceptibility variables. First, they all predict media use. Second, they all stimulate or reduce media effects. This happens through their moderating influence of media use on media response states.

The fourth and final proposition of the DMSS framework is that media effects are transactional. **Proposition 4: Media effects are transactional; they not only influence media use, but also the media response states, and differential-susceptibility variables.**

The transaction notion states that media effects can have an influence over subsequent media usage. The DMSS extends this notion in two ways. First, it states that media effects can have an impact over response states. Second, it states that media effects influence the differential-susceptibility variables. Media effects in this regard have a reciprocal impact on media processing, media use and differential susceptibility variables.

A recent study by Kim et al. (2024) examined the interplay between social comparisons, affective experiences, depression severity, and real-world Instagram use patterns. For this purpose, researchers conducted a two-week field study with 40 Instagram users. Participants’ self-reported affective experiences and social comparisons during Instagram use on their smartphones were captured through a contextually triggered Experience Sampling Method (ESM). In addition, researchers deployed a smartphone app to automatically collect users’ Instagram use patterns, such as time, duration, and type of content consumed, to increase accuracy and reduce survey fatigue and recall bias. Findings of the study reported that participants with both mild and greater depression reported comparing themselves to others; a finding that was deduced as the process of Instagram consumption took place with some users specifically stating that their emotional state before Instagram consumption influenced their social

comparison tendencies. This finding suggests that this relationship is transactional; while Instagram use can influence users’ affective experiences, users’ prior emotional states can also impact their Instagram behavior, as evident in their propensity to engage in social comparisons. Further, participants who engaged in frequent upward social comparisons were prone to more negative affective experiences during Instagram use -a finding that coincides with existing research that perceives social comparison to be among the underlying mechanisms of deferred well-being (Verduyn et al., 2020). These findings align with both the current work assumptions and the DSMM propositions. Individuals’ predisposing states whether emotional state or personality traits will severely impact their consumption patterns and their affective states during this consumption. It is worth stating that while the study did not find any overall impact of usage time on users’ affective experiences, it was rather the nature of the content consumed -whether actively or passively- that elicited emotional responses among the study sample. This provides further support to the postulation that: examining the emotional impacts of social media use upon users should be primarily reliant on salient variations in users’ characteristics (i.e. personality traits) rather than generalized approaches.

Similarly, Liu et al. (2024) examined the relationship between social influence, social comparison, clarity of self-concept, and psychological anxiety among young women while using social networking sites. The study was conducted on a sample of 338 women whose ages ranged from 14–34 years. Research findings proved the existence of a positive relationship between passive social media use and the emergence of psychological anxiety among women suggesting that such consumption pattern is a predictor of the emergence of anxiety among women. Further regression analysis indicated that there was no direct relationship between anxiety and passive social media consumption. It was rather the mediating role of social comparison and clarity of self-concept that indirectly predicted psychological anxiety in women. This suggested that the passive consumption of social media is not the direct cause of psychological anxiety in women but is rather a risk factor for psychological anxiety through the

complex confounding role of both social comparison and clarity of self-concept. Specifically, the results show that the use of social networking sites (including active and passive use) has no significant effect on young women’s individual. However, passive use of social networking sites has a significant impact on young women, and the intensity of passive use is negatively correlated with individuals’ clarity of self-concept. Individuals with low levels of clarity of self-concept (who are by and large highly neurotic individuals) may become sensitive, insecure, and believe that they lack support and recognition from social networks, which can lead to negative emotions such as depression and loneliness and ultimately result in psychological anxiety among young women. Thus, the longer young women use social media, the lower their clarity of self-concept. Further, the study reported that the more time women spend on social media the greater their engagement in social comparisons and the lower their clarity of self-concept and eventually the higher their psychological anxiety. These findings resonated with DSMM highlighting the fact that the mere consumption of social media is not the direct predictor of the adverse psychological impacts but rather dispositional factors evident in varying individual qualities that cause these effects.

Structural model, research questions, and hypotheses:

Building upon the DSMM, the current research aims to explore the impact of dispositional susceptibility variables on individuals’ consumption of social media and the various responses associated with these consumption patterns. Further, the model will be applied to acquire a more thorough understanding of how these emerging effects will influence future consumption patterns. According to the 1st proposition, dispositional susceptibility variables will influence social media effects. That is to say, the Big 5 personality traits will impact the dissemination of three adverse psychological outcomes that have been identified as resultants of social media consumption, namely – social comparison, loneliness, and lack of life satisfaction. Further, according to the model’s 3rd proposition, dispositional susceptibility

variables predict media use. In other terms, personality traits influence patterns of social media consumption, with

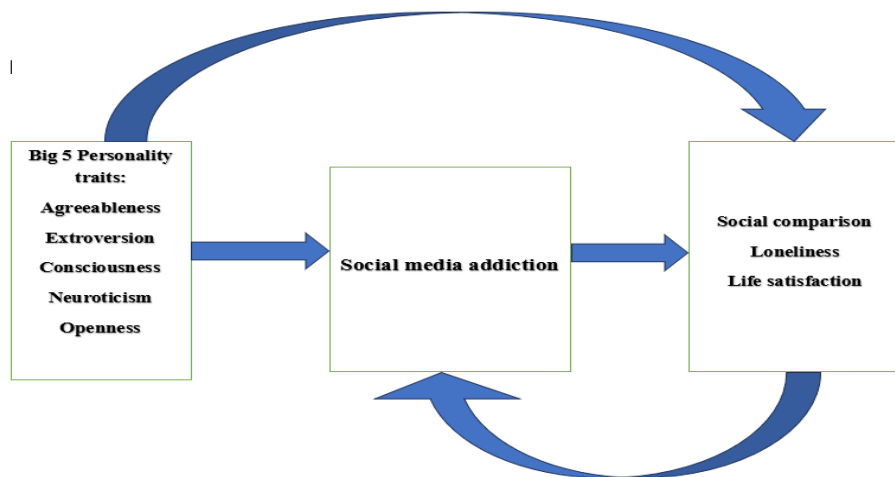


Fig. (1) Proposed structural model

certain traits rendering individuals more prone to develop social media addiction compared to others. Finally, and per the model’s 4th proposition, the emerging adverse media effects are transactional, thus influencing future consumption pattern.

Research Questions & Hypotheses:

RQ1: what is the impact of trait extroversion on social media addiction and what are the impacts of this trait on both consumption patterns and psychological well-being?

RQ2: what is the impact of trait agreeableness on social media addiction and what are the impacts of this trait on both consumption patterns and psychological well-being?

H1: Social media addiction is positively correlated with social comparison

H2: Social media addiction is positively correlated with loneliness

H3: Social media addiction is negatively correlated with life satisfaction

- H4: There is a negative correlation between trait conscientiousness and social media addiction
- H5: There is a negative correlation between trait conscientiousness and both social comparison and loneliness that is mediated by the amount of social media consumption.
- H6: There is a positive correlation between trait conscientiousness and life satisfaction that is mediated by the amount of social media consumption.
- H7: There is a positive correlation between trait neuroticism and social media addiction
- H8: There is a positive correlation between trait neuroticism and both social comparison and loneliness that is mediated by the amount of social media consumption.
- H9: There is a negative correlation between trait neuroticism and life satisfaction that is mediated by the amount of social media consumption.
- H10: There is a positive correlation between trait openness and social media addiction.
- H11: There is a negative correlation between trait openness and both social comparison and loneliness that is mediated by the amount of social media consumption.
- H12: There is a positive correlation between trait openness and life satisfaction that is mediated by the amount of social media consumption.
- H13: There is a positive correlation between social comparison, loneliness, life satisfaction and subsequent social media discontinuance.

Methodology:

Data collection and study participants:

This quantitative design applied an online survey technique to test the validity of the proposed research model. All measures applied in the

current research are adaptations of well-established measures previously used in existing literature. The study was conducted using a purposive sampling technique on sample of 200 participants, including both genders. Respondents were university students attending Egyptian universities with an age range of 18 to 21 years.

Since the Big 5 personality scale is a relatively lengthy scale comprising various facets of personality traits evaluation, a primary version was distributed among 31 respondents of the study sample in an attempt to develop a shorter version of the questionnaire while maintaining internal validity and consistency eventually boosting a higher response rate. Accordingly, a shorter final version was adopted after omitting multiple statements. Hard and soft versions of the questionnaire were disseminated among the rest of the study respondents.

Measurements:

Big 5 personality trait inventory: Developed by John and Srivastava (1999), the 44-item inventory measures an individual's Big Five personality Factors (dimensions): extroversion, agreeableness, conscientiousness, neuroticism, and openness. Each factor is then further divided into personality facets. A shorter version was adopted and disseminated after omitting 7 items of the original scale; constructing a final 37-item- inventory. Subjects’ responses were based on a five-point Likert scale where 1 =strongly disagree and 5 = strongly agree.

Self-esteem: The Rosenberg Self-Esteem scale (RSES; Rosenberg, 1965) was used to assess participants' levels of self-esteem. Sample items include “On the whole, I am satisfied with myself” and “I take a positive attitude toward myself.” The Rosenberg Self-Esteem scale is a 10-item Likert scale with items answered on a five-point scale ranging from 1 “strongly disagree” to 5 “strongly agree”.

Social media addiction: Social media addiction was measured using Bergen social media addiction scale. The original scale consists of 6 items namely salience, tolerance, mood modification, relapse, withdrawal, and conflict. Examples included —Spent a lot of time

thinking about social media or planned use of social media?; Felt an urge to use social media more and more?; Tried to cut down on the use of social media without success?. The original version of the scale included 21 items; nevertheless to guarantee a higher response rate a shorter version was developed and distributed among subjects. The final version included 15 items. Responses were based on a five-point Likert scale where 1 = strongly disagree and 5 = strongly agree.

Social media activity questionnaire: Pattern of social media use was measured using Phillip Ozimek, Julia Brailovskaia, Hans-Werner Bierhoff (2023) social media-activity questionnaire. The original scales consisted of 18 items (11 items evaluating passive activity and 8 items for active usage). A shorter version was further developed and consisted of 12 items only. Examples included: I look at the stories of my friends/ my subscriptions; I look at the profile pages of my relatives; I post photos with my family; I create groups. Subjects’ responses were evaluated on a five-point Likert scale where 1 =strongly disagree and 5 = strongly agree.

Upward and downward social comparison on social media: To assess upward and downward social comparisons on social media, the following questions were asked “When comparing yourself with others on social media, how much do you concentrate on individuals who are better off than you?” and “When comparing yourself with people on social media, to what extent do you focus on those who are worse than you?”. Items were measured on a 5-point Likert scale ranging from 1 “extremely disagree” to 5 “extremely agree”. These questions have been used in order to assess upward and downward social comparisons within the previous literature (see Cunningham, S. (2020) for review).

Social comparison scale: Social comparison was measured using an 11 item scale that was developed by Gibbons and Buunk (1999). The 11 items ask about (1) making comparisons with loved ones; (2) paying attention to one’s own and others’ accomplishments; (3) evaluating accomplishments through comparison; (4) comparing sociability; (5) denying any comparison with others (reverse coding); (6) comparing life accomplishments; (7) exchanging opinions and

experiences with others; (8) interest in similar others’ thoughts; (9) interest in similar others’ coping strategies; (10) gaining knowledge through others’ thoughts; (11) making no comparisons of personal life situation (reverse coding). Subjects respond on a five-point scale ranging from strongly disagree (1), to strongly agree (5).

Satisfaction with life: Life satisfaction was measured using Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985) scale. The 5-item scale is designed to measure global cognitive judgments of one’s life satisfaction (not a measure of either positive or negative affect). Participants indicate how much they agree or disagree with each of the 5 items using a 5-point scale that ranges from 5 strongly agree to 1 strongly disagree. Items included: In most ways, my life is close to my ideal; If I could live my life over, I would change almost nothing.

Loneliness: Developed by psychologist Daniel Russell (1996), the UCLA Loneliness Scale (Version 3) is a 20-item measure that assesses how often a person feels disconnected from others. A shorter version was further adopted and distributed among the study subjects including 15 items. Responses were evaluated on a 5-point Likert scale ranging from 1 “extremely disagree” to 5 “extremely agree”. Examples included: “I feel “in tune” with people around me; My interests and ideas are not shared by those around me; There are people I can talk to”.

Social media discontinuance: Social media discontinuance was measured using a 10-point self-compiled scale. Items were selected using Fu et.al (2020) Discontinuous usage behavior (DUB); Zhang et.al (2016) Discontinuous usage intention and Xie et.al discontinuance intension scales. Examples of statements included —I sometimes discontinue my use of social media but that does not mean that I will completely abandon my use of it; If I could I would discontinue the use of social media; In the future I will use social media far less than today. All responses were coded on a 5-point Likert scale (1 = strongly disagree and 5 = strongly agree).

Results:

First: Big Five personality traits (John & Srivastava, 1999):

The first composite of the questionnaire attempted to analyze the prevalence of different personality traits among members of the study sample. The majority of the study sample bore moderate degrees of the five traits. 73% of the respondents reported moderate levels of trait extroversion compared to 25% reporting high levels of the same trait. More than half of the respondents reported moderate levels of agreeableness compared to 44.5% reporting high degrees of the same trait with no single respondent reporting low levels of agreeableness. 63% reported moderate levels of consciousness with a relatively similar percentage of trait neuroticism (67.5% reporting moderate levels of neuroticism). As per trait openness, less than half of the sample reported moderate levels of the trait compared to 55.5% reporting high levels. The last finding can be a direct result of two main characteristics of the study sample. The majority of the study sample were females who -according to existing scientific evidence- bear an inborn tendency to agreeableness; additionally, the majority of the sample were middle-class individuals attending national Egyptian universities. Research evidence has always proved an association between socioeconomic class and the degree of agreeableness which is vastly prevalent among middle-class individuals (see Furnham & Cheng, 2015 for review).

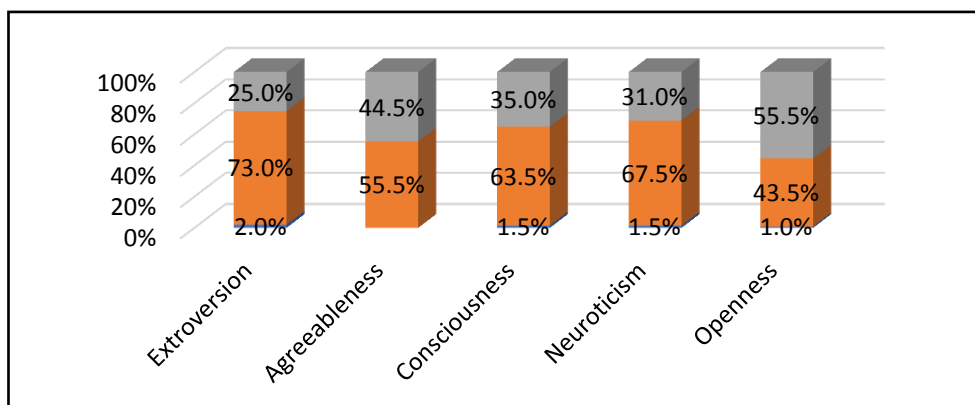


Fig. (2) Big 5 personality scale inventory (John & Srivastava, 1999)

Second: Self-esteem (The Rosenberg Self-Esteem Scale):

The Rosenberg Self-esteem scale was applied to assess the prevalence of self-esteem among respondents. More than half of the entire sample reported moderate self-esteem (56.5%), compared to 34.5% reporting high levels of self-esteem with only 9 % of the sample reporting low self-esteem. Previous research evidence successfully proved an association between personality traits and self-esteem. Amirazodi & Amirazodi (2011) reported that extraversion, agreeableness, conscientiousness, and openness were all positive predictors of self-esteem compared to neuroticism which was a significant negative predictor. Consequently, it is plausible to state that the prevalence of moderate levels of self-esteem is a repercussion of the aforementioned distribution of personality traits.

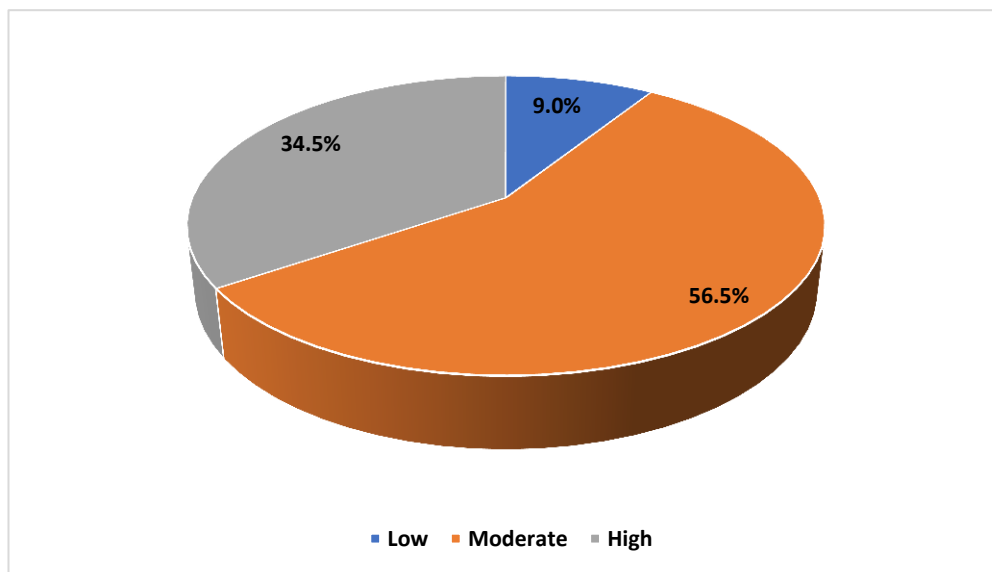


Fig. (3) RSE (The Rosenberg Self-Esteem Scale)

Third: Social media addiction:

The prevalence of social media addiction was measured using Bergen social media addiction scale. Statistical analysis reported that 69.5% of the sample used social media in moderate degrees, 23.5% were heavy social media users versus 7% only were classified as light social media users. The prevalence of moderate degrees of social

media consumption coincides with previously existing research evidence that proved a decline in social media addiction among users in recent years particularly after an era of heavy consumption in the aftermath of COVID-19. Recent reports indicated that the number of active social media users in Egypt has been steadily increasing as early as 2014 reaching its peak in 2022. Nevertheless, this steady increase was followed by a decline throughout 2023 and continued till 2024 owing to unprecedented information overload.

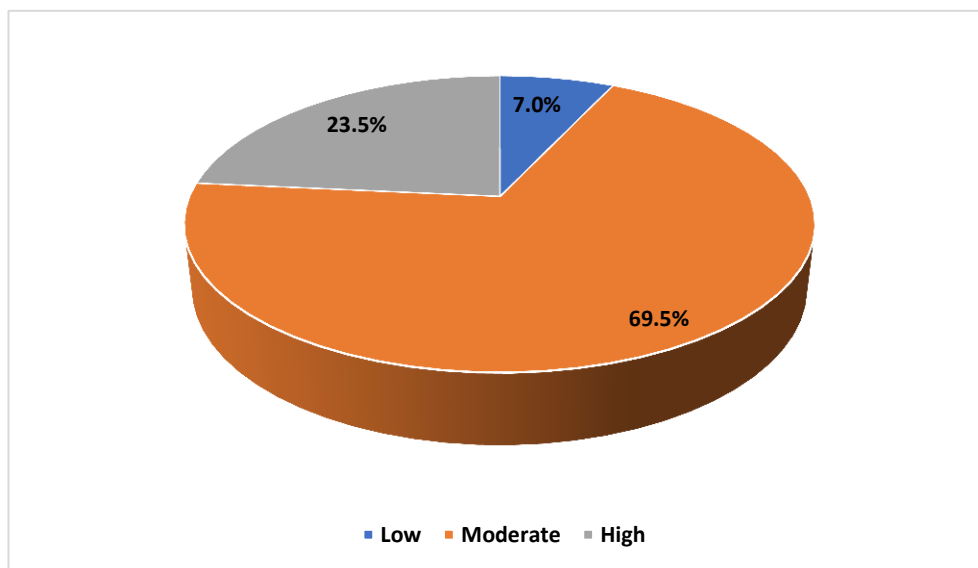


Fig. (4) Bergen social media addiction scale

Forth: Social media consumption patterns:

Social media consumption patterns were classified into two main categories, active and passive social media use. Regarding the distribution of active consumption patterns, the majority of the sample ranged from moderate to high active social media users (percentages were 54% and 39.5% for moderate and high users respectively). Regarding passive usage, respondents were divided relatively equally across the 3 categories (percentages were 29.5%, 39% and 31.5% respectively)

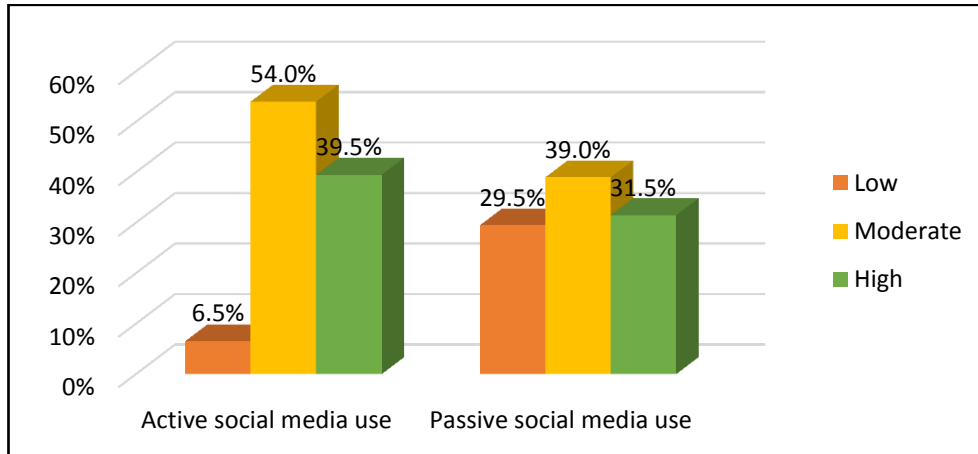


Fig. (5): Active vs. passive social media use

Consequences of social media consumption:

The paper analyzed three outcomes associated with social media consumption: social comparison, life satisfaction, and loneliness.

Social media use and social comparison patterns:

To better delve into the association between social media use and social comparison tendencies, the paper assessed both the prevalence of overall social comparison during social media consumption in addition to measuring the probability of engaging in upward versus downward social comparison. Social comparison was a common practice among social media users. Two-thirds of the entire sample engaged in moderate to high levels of social comparison; percentages were 61.5% and 5.5% respectively compared to 33% reporting low levels of social comparison. The prevalence of social comparison coincides with the fact that social media constitutes a fertile environment for comparison among users (Servidio et.al, 2024). Analyzing the prevalence of upward social comparison among the study sample, findings proved that the majority of respondents engaged in upward social comparison at both moderate and high levels. Percentages were 58.5% and 37.5% respectively. Only 4% reported low levels of social comparison. On social media platforms there is an evident publication bias where users tend to promote an idealized impression of the self, showing the best possible version of

their lives eventually inducing other users to engage in upward social comparison (Aubry et.al, 2024).

Social comparison scale

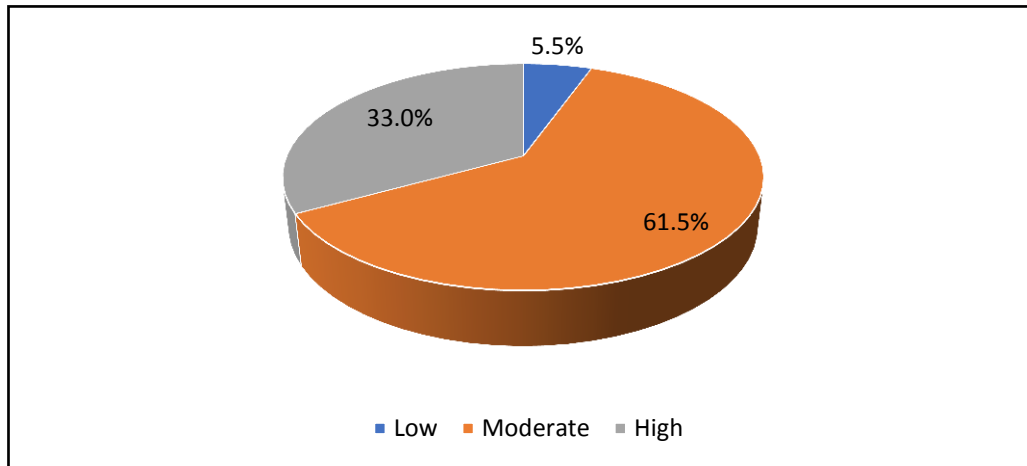


Fig. (6): Social comparison scale

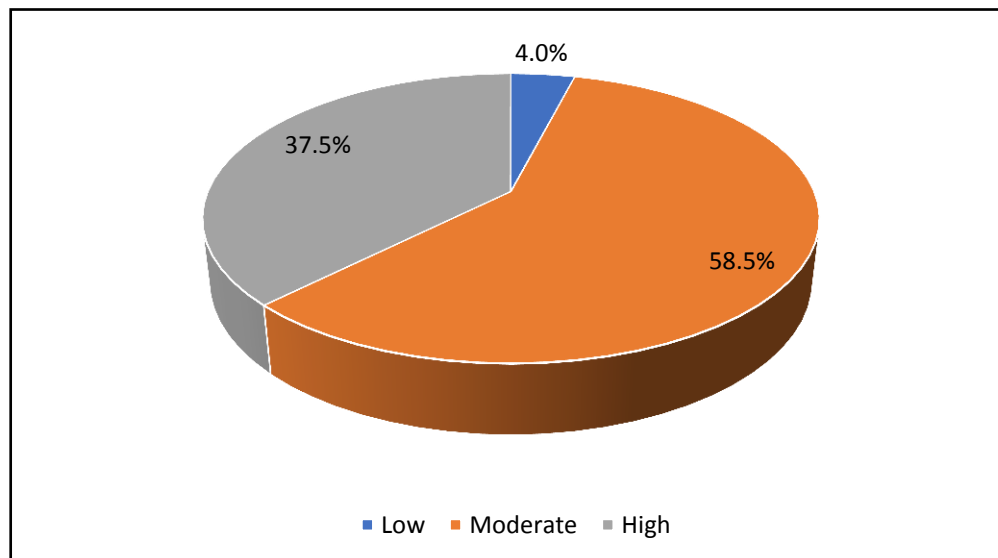


Fig. (7): Upward and downward social comparisons on social media

Loneliness:

The second investigated outcome of social media consumption was loneliness. The majority of the study sample reported moderate and low levels of loneliness. Percentages were 67% and 28.5% respectively. Only 4.5% expressed high degrees of loneliness.

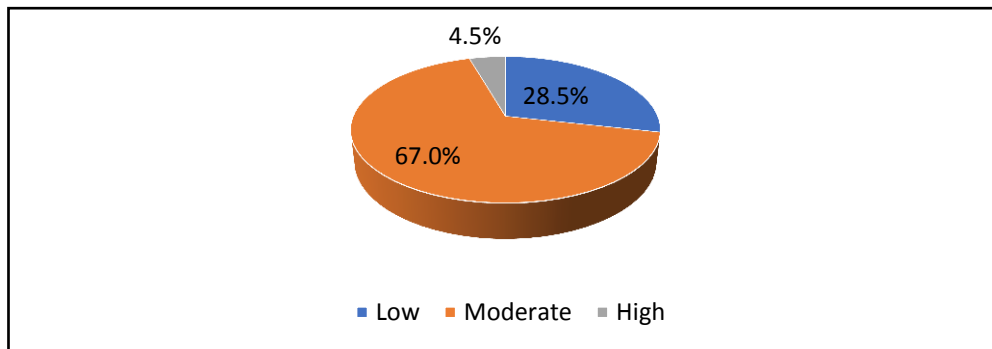


Fig. (8) Loneliness

Life satisfaction:

The third consequence associated with social media consumption was life satisfaction. A moderate degree of life satisfaction was reported by 57%, and roughly, one-third of the entire population 32% were highly satisfied with their lives. 11% of the study sample were dissatisfied with their lives.

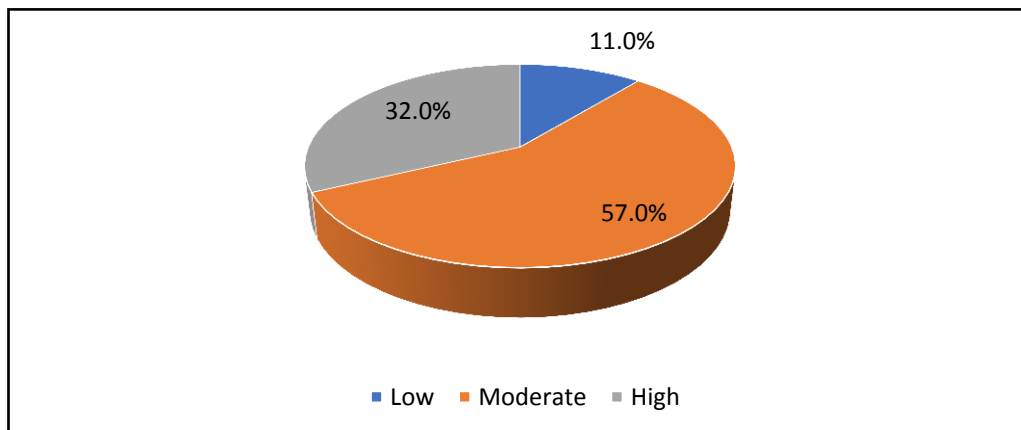


Fig. (9) Life satisfaction

Social media discontinuous:

According to Valkenburg’s Differential susceptibility model of media effects, negative outcomes of social media addiction would render users more susceptible to tailor subsequent consumption patterns in a manner that would more likely mitigate the emerging adverse outcomes. Statistical analysis revealed that the quarters of the entire study sample had moderate intentions to discontinue their social media consumption (74%) compared to 19.5% of the sample having high intentions to discontinue their social media consumption.

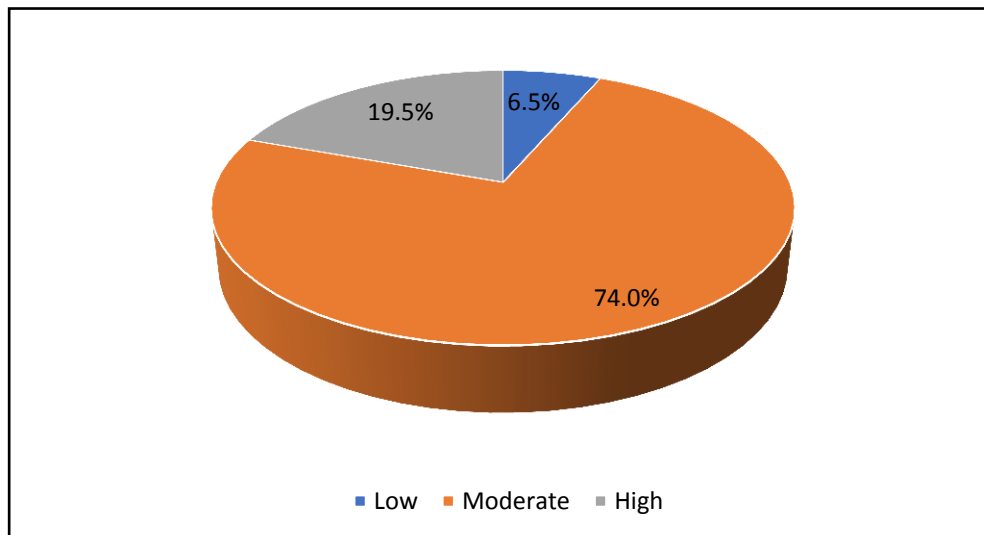


Fig. (10) Social media discontinuance

Hypothesis testing:

The first group of hypotheses was set forth to examine the direct relationship between social media addiction and 3 significant outcomes that has been associated with social media consumption namely social comparison, loneliness and life satisfaction.

H1: Social media addiction is positively correlated with social comparison

The first hypothesis postulated that a positive relationship existed between social media addiction and social comparison. Pearson correlation provided full support for the hypothesis, with social media

addition being a significant predictor of social comparison (Sig.=0.000).

Table (1) Correlation between Social Media Addiction and Social Comparison

R	Sig.
0.443**	0.000
** correlation is significant at the level 0.01	

H2: Social media addiction is positively correlated with loneliness

The second hypothesis suggested that a positive correlation existed between social media addiction and loneliness. As predicted Pearson correlation provided full support for the hypothesis; social media addiction proved to be an indicator of loneliness (Sig.=0.035)

Table (2) Correlation between Social Media Addiction and loneliness

R	Sig.
0.149*	0.035
* correlation is significant at the level 0.05	

H3: Social media addiction is negatively correlated with life satisfaction

Contrary to the proposed hypothesis concerning the negative relationship between social media addiction and life satisfaction, a significant positive relationship existed between the two variables with social media addiction being an important predictor of life satisfaction (Sig.=0.001). While this finding contradicts one line of existing literature, it can be attributed to the fact that social media platforms have a reinforcing nature. In other terms, these platforms possess the capability to provide users with social support and broaden their social capital eventually resulting in life satisfaction.

Table (3) Correlation between Social Media Addiction and life satisfaction

R	Sig.
0.237**	0.001
** correlation is significant at the level 0.01	

Second: Big 5 personality traits and social media addiction:

The second set of hypotheses was set to examine the direct relationship between the Big 5 personality traits and social media addiction, in addition to the indirect relation between those personality traits and social comparison, loneliness, and life satisfaction through examining the mediating role of social media addiction.

Extroversion:

The first personality trait to be explored in correlation with social media addiction is extroversion. In line with existing research line of research, no correlation existed between extroversion and social media addiction. Similar findings were reported by Huang (2022), Etemadian (2021), and Cordaro (2023) stating that trait extroversion could not be accounted for as a predictor for social media addiction.

Table (4) Correlation between extroversion and social media addiction

R	Sig.
0.120	0.090

When controlling for the impact of social media addiction in mediating the relationship between trait extroversion, social comparison, life satisfaction, and loneliness, partial correlations provided the following results: Sig. = 0.223, 0.000 and 0.000 for the three effects respectively. This indicates that social media addiction is a significant contributor in a positive correlation between trait extroversion and social comparison among users. Nevertheless, apart from patterns of social media consumption significant positive relationship existed between extroversion and life satisfaction, and significant negative relationship existed between extroversion and loneliness.

Table (5) Partial correlation between trait extroversion and life satisfaction/ loneliness/ and social comparison that is mediated by the amount of social media consumption

	Partial corr	Sig.
Social comparison	0.087	0.223

“It’s not a matter of exposure”: Exploring the impact of differential susceptibility variables on users’ vulnerability to adverse social media effects

	Partial corr	Sig.
Loneliness	-0.367	0.000
Life satisfaction	0.359	0.000

Agreeableness:

As per trait agreeableness, Pearson correlation proved no associations between the personality trait and subsequent social media addiction (Sig.= 0.135). It is worth stating that while no significant relationship was proven, the direction of the relationship between the two variables was negative. This finding -while not significantly proven- can be interpreted in the light of the warm nature of agreeable individuals who prefer face-to-face rather over virtual interactions making them less prone to social media addiction.

Table (6) Correlation between agreeableness and social media addiction

R	Sig.
-0.106	0.135

To test for the mediating role of social media addition in the relationship between trait agreeableness and subsequent effects of social media addiction, Partial correlations were conducted. When controlling for the mediating role of social media addiction, no correlation was found between trait agreeableness and social comparison (Sig= 0.945). On the other hand, further partial correlations proved significant positive relationship was found between trait agreeableness and life satisfaction (Sig.= 0.006) and significant negative correlation existed between agreeableness and loneliness (Sig.= 0.000).

Table (7) Partial correlation between trait agreeableness and life satisfaction/ loneliness/ and social comparison that is mediated by the amount of social media consumption

	Partial corr	Sig.
Social comparison	0.005	0.945
Loneliness	-0.309	0.000
Life satisfaction	0.196	0.006

Conscientiousness

H4: There is a negative correlation between trait conscientiousness and social media addiction

The third personality trait to be examined was trait conscientiousness. In line with the proposed assumption, a significant negative relationship existed between trait conscientiousness and social media addiction (Sig.=0.033). This finding is a direct result of individuals high in this trait being characterized by organization, productiveness, and responsibility; all of which constitute traits that render them less susceptible to social media addiction as they tend to be more goal-oriented.

Table (8) Correlation between trait conscientiousness and social media addiction

R	Sig.
-0.151*	0.033
* correlation is significant at the level 0.05	

H5: There is a negative correlation between trait conscientiousness and both social comparison and loneliness that is mediated by social media addiction.

Partial support was provided for the hypothesis mentioned above. No correlation was found between trait conscientiousness and social comparison when controlling the contribution of social media addiction (with the relationship skewed into a positive direction). This finding can be attributed to the nature of these platforms that drives social comparison among users regardless of their personality traits. On the other, and in line with the proposed assumption a significant negative relationship exists between trait conscientiousness and loneliness (Sig.= 0.001). This finding indicates that apart from the media consumption pattern, highly conscious individuals are less likely to develop a sense of loneliness again due to their lack of vulnerability to emotion-related disorders.

Table (9) Partial correlation Between Trait Conscientiousness, Social Comparison, and Loneliness through Social Media Use

	Partial corr	Sig.
Social comparison	0.058	0.414
Loneliness	-0.234**	0.001

	Partial corr	Sig.
** correlation is significant at the level 0.01		

H6: There is a positive correlation between trait conscientiousness and life satisfaction that is mediated by the amount of social media consumption.

In line with the proposed hypothesis, trait conscientiousness was a significant predictor of life satisfaction. Partial correlation analysis proved that individuals high in this trait are more prone to develop an overall sense of life satisfaction (Sig.=0.000). As stated earlier, the significant self-control abilities exhibited by those individuals render them to act more thoughtfully and prudently, leading to their behavior becoming more rational instead of emotional. These personal abilities facilitate the tendency to handle social media effects more rationally ameliorating any negative repercussions associated with social media consumption that are primarily used to support their planned goals.

Table (10) Partial correlation Between Trait Conscientiousness and life satisfaction through Social Media Use

Partial corr	Sig.
0.273	0.000
** correlation is significant at the level 0.01	

Neuroticism:

H7: There is a positive correlation between trait neuroticism and social media addiction

The fourth examined personality trait was trait neuroticism. Contrary to the proposed postulation, Pearson’s correlation failed to prove any positive association between trait neuroticism and social media addiction (Sig.= 0.294).

Table (11) Correlation between trait neuroticism and social media addiction

R	Sig.
0.075	0.294

H8: There is a positive correlation between trait neuroticism and both social comparison and loneliness that is mediated by the amount of social media consumption.

Partial correlation was to test for the relationship between trait neuroticism, social comparison, and loneliness. No support was provided for the hypothesis above. On controlling the mediating role of social media addiction, no relationship existed between neuroticism and social comparison (Sig.= 0.198). As for loneliness, a similar finding was reported between the two variables on controlling social media addiction (Sig.=0.543). This signifies that social media addiction is a substantial contributor to the relationship between neuroticism, social comparison, and loneliness.

Table (12) Partial correlation between trait neuroticism, Social Comparison, and Loneliness through Social Media Use

	Partial corr	Sig.
social comparison	0.092	0.198
Loneliness	0.043	0.543

H9: There is a negative correlation between trait neuroticism and life satisfaction that is mediated by the amount of social media consumption.

Partial correlation provided full support for the previous assumption. When controlling media addiction, a statistically significant negative relationship existed between trait neuroticism and life satisfaction (Sig.=0.000). This finding coincides with the existing line of literature confirming that highly neurotic individuals are characterized by emotional instability and tend to experience lower levels of overall life satisfaction.

Table (13) Partial correlation Between Trait neuroticism and life satisfaction through Social Media Use

Partial corr	Sig.
-0.259**	0.000
** correlation is significant at the level 0.01	

Openness:

H10: There is a positive correlation between trait openness and social media addiction.

The last tested personality trait was trait openness. In line with the proposed hypothesis, significant positive association was proven between trait openness and social media addiction (Sig= 0.006). This finding is a direct result of individuals high in this trait being inclined to consume social media to satisfy a variety of communication purposes that range from communication with family and friends to a variety of educational purposes.

Table (14) Correlation between trait openness and social media addiction

R	Sig.
0.192**	0.006
** correlation is significant at the level 0.01	

H11: There is a negative correlation between trait openness and both social comparison and loneliness that is mediated by the amount of social media consumption.

Contrary to the proposed hypothesis, Partial correlations provided no support for the relationship between trait openness, social comparison and loneliness when controlling for the mediating role of social media addiction (Sig. = 0.762 and 0.102 for social comparison and loneliness respectively). This finding signifies the impact of social media addiction for the emergence of social comparison and loneliness. In other terms, apart from the user’s degree of openness, it is rather the pattern of social media consumption that is the primary derivative of the aforementioned outcomes. It is worth noting that while no significant correlation was reported between trait openness and social comparison, the direction of the relationship between the two variables is a positive one indicating that in the presence of social media addiction, a significant positive relationship is existent between openness and social comparison.

Table (15) Partial correlation between trait openness, Social Comparison, and Loneliness through Social Media Use

	Partial corr	Sig.
social comparison	0.022	0.762
Loneliness	-0.116	0.102

H12: There is a positive correlation between trait openness and life satisfaction that is mediated by the amount of social media consumption.

Partial correlations failed to provide support for the postulated relationship between openness and life satisfaction (Sig. =0.442). When controlling for social media addiction, no correlation existed between the two variables signifying the contribution of social media addiction in the emergence of life satisfaction.

Table (16) Partial correlation Between Trait openness and life satisfaction through Social Media Use

Partial corr	Sig.
0.055	0.442
** correlation is significant at the level 0.01	

H13: There is a positive correlation between social comparison, life satisfaction and loneliness and social media discontinuance.

The final hypothesis was set forth to test for the proposed transactional nature of social media effects. In other terms, according to Valkenberg DSMM, media effects will presumably influence subsequent media consumption patterns. Pearson correlations provided full support for the postulated hypothesis with social media consumption effects -social comparison, loneliness and life satisfaction- influencing subsequent consumption patterns that was evident in users’ inclination toward social media discontinuance intentions (Sig. =0.052, 0.000 and 0.000).

Table (17) Correlation between social comparison, life satisfaction and loneliness and social media discontinuance

		Social comparison	Loneliness	Life satisfaction
Social media discontinuance	R	0.138	0.290**	0.276**
	Sig.	0.052	0.000	0.000

Discussion:

The rise in consumption of social media has triggered researchers to explore the various deleterious consequences associated with this consumption and their underlying mechanisms. A well-established line

of research has linked problematic usage with adverse consequences, nevertheless, social media consumption could not be set forth as a sole determinant of these impacts since other factors actively contributed to their emergence. Among the factors that determine users’ susceptibility to social media effects are personality traits. The purpose of the current work was to explore the effect of the Big 5 personality traits on users’ vulnerability to social media effects through the scope of the differential susceptibility model of media effects. Further, the paper examined the impact of those effects on future consumption patterns.

In line with existing research, social media addiction was positively and significantly associated with social comparison and loneliness. Social media have always been identified as a fertile environment for social comparison among users eventually triggering emotions of envy and sadness (Solomon, 2010; Taylor, 2023; Gugushvili et al., 2024; & Ahmad, 2024). As per loneliness, research evidence has consistently confirmed that a positive association exists between social media addiction and loneliness (Marttila et al., 2021; Taylor, 2023). Contrary to the proposed hypothesis, social media was a significant predictor of life satisfaction among users. While one line of thought has associated social media addiction with inferential life satisfaction, evidence exists that social media consumption is a predictor of life satisfaction. Choi (2024) reported that social media consumption was positively associated with life satisfaction in a sample of Korean adolescents. According to the researcher, social media had a significant indirect effect on life satisfaction through social support and social capital. Social media use was associated with a higher level of social support among adolescents, leading to a greater social capital and, consequently, the likelihood of elevated life satisfaction. In other words, despite the lack of a direct association between adolescent social media use and life satisfaction, there is an indirect link between the two variables through social support and social capital.

The second group of hypotheses sought to examine the impact of personality traits on the emergence of social comparison, loneliness, and life satisfaction. Regarding both traits extroversion and

agreeableness, none was a predictor of social media addiction since no correlation was found between either of the two traits and social media addiction. A lack of consensus existed regarding the correlation between traits extroversion and agreeableness on the one hand and social media addiction on the other. One line of thought found a positive correlation between extroversion and social media addiction (Evangelou et al., 2024; Ellatif & ALibrahim, 2023); while another found a negative association between them (Ponce, 2023). As per agreeableness, Huang (2022) stated that a negative correlation existed between agreeableness and social media addiction (see Evangelou et al. 2024), whereas Mercan et al. (2023) confirmed a weak positive correlation existed between trait agreeableness and social media addiction. The current finding coincides with Cordaro (2022) who found no association between personality traits and amounts of social media consumption.

When controlling for the mediating role of social media addiction, a significant positive correlation existed between trait extroversion and life satisfaction and a significant negative correlation between extroversion and loneliness. This finding can be interpreted in light of the characteristics of the extrovert personality. Individuals high in extroversion are characterized by habitual outgoingness, pleasure-seeking and being interested in people and events in the external world (De Raad, 2015). Further, extroverts are characterized by social engagement, assertiveness, and energy level. They are prone to socializing with others, are comfortable expressing themselves in group situations, and frequently experience positive emotions such as enthusiasm and excitement (Etemadian, 2021; Soto, C. J., 2018; Zhang et. Al, 2024). These characteristics result in those individuals expressing high levels of life satisfaction and inferential degrees of loneliness apart from social media consumption patterns. Nevertheless, when controlling for social media addiction, no association existed between extroversion and social comparison supporting existing research findings that confirm the impact of social media consumption on the emergence of social comparison among users.

As per trait agreeableness, when controlling for social media addiction, a significant positive relationship existed between agreeableness and life satisfaction with a significant negative relationship existing between agreeableness and loneliness. Existing literature proved significant positive associations between agreeableness and life satisfaction (Connolly & Seva, 2021). Regarding loneliness, the negative correlation between the two variables can be attributed to the characteristics of the agreeable personality. Research has proved a negative association between agreeableness and loneliness (Buecker et al., 2020; Schutter et al., 2020; Shrestha et al. 2024; Erevik et al., 2023). Erevik et al. (2023) reported that the finding that agreeableness is related to social rather than emotional loneliness may be attributed to the fact that agreeableness is a facet of compliance. Compliance necessitates maintaining a social network as it may facilitate cooperation/agreement which may be more important when several people are involved. Agreeable individuals are more likely to trust others fostering emotional closeness and eventually reducing loneliness. Furthermore, highly agreeable individuals can cope with problems associated with communal living and are highly prosocial individuals. They are highly concerned about their surrounding environment, and pay close attention to how they treat others. They exhibit politeness and empathy which facilitates altruistic behavior (Zhang et al., 2024). All these characteristics render agreeable individuals less susceptible to feelings of loneliness.

When controlling for the mediating role of social media addiction in the relationship between agreeableness and social comparison, no relationship was found between the two variables, which signifies the contribution of social media addiction in the emergence of social comparison apart from personality traits. As previously stated, these platforms trigger social comparison among users.

As predicted and in line with existing literature, individuals high in trait conscientiousness were less susceptible to social media addiction. This finding is a direct outcome of those individuals being highly organized, focused, goal-oriented, and highly committed to fulfilling

duties and obligations (De Raad, 2015; Soto, 2018). Academic evidence has consistently proven a negative relationship between conscientiousness and social media addiction (Huang, 2022; Rajesh & Rangaiah, 2022).

When controlling for the mediating role of social media addiction in the relationship between trait conscientiousness and social comparison, no significant relationship was established between the two variables; a finding that supports the impact of these virtual platforms in fostering social comparison among users regardless of the personality traits they bear. Nevertheless, a significant negative relationship was found between trait conscientiousness and loneliness and a significant positive relationship existed between the trait and life satisfaction. Academic evidence has previously reported negative associations between conscientiousness and loneliness (Erevik et al., 2023; Buecker et al., 2020; Joshanloo, 2024). This finding is a direct result of emotional regulation abilities resulting in those individuals being less prone to experience emotion-related disorders such as loneliness since they are focused on their personal goals rather than engaging in social interactions (Oyibo et al., 2019). Regarding life satisfaction, current research findings resonate with existing research that has consistently proven significant positive associations between trait conscientiousness and life satisfaction. Conscientiousness is a predictor of subjective well-being. On the one hand, individuals high in conscientiousness are more capable of regulating negative affect and less likely to experience daily stress. Their self-disciplinary, goal-directed and rule-abiding behavior and efficient and reliable performance are predictors of overall success. This can help foster their subjective well-being. Additionally, highly conscientiousness may be more successful in building stable and satisfying interpersonal relationships, which in turn may contribute to enhanced feelings of subjective well-being (Hu et al, 2022); a construct that life satisfaction is integral to.

Trait neuroticism is the one most explored trait within the academic literature. The current research found no association between neuroticism and susceptibility to social media addiction. This finding

coincides with Mercan et al. (2023) who failed to establish a positive relationship between neuroticism and social media addiction. A similar finding was reported by Green et. al (2021) who found no correlation between trait neuroticism and the intensity of social media consumption. In other terms, there is no significant evidence that people with high trait neuroticism access social media particularly frequently or for long periods of time. Individuals high in trait neuroticism worry about their usage more than their actual usage warrants as a direct result of their innate anxiety; which is an inherent repercussion of trait neuroticism.

This finding can be interpreted too in the light of the findings of Evangelou et al. (2024) who reported that highly neurotic individuals were less likely to identify themselves as social media addicts. They have a persistent sense of stress, anxiety, and negative emotions that renders them less prone to identify themselves as social media addicts. Acknowledging addiction would result in feelings of shame and guilt which will be troubling for them to admit. In other terms, they might be actual social media addicts who are too ashamed to admit it. This interpretation paves the road for subsequent findings regarding the correlation between neuroticism and social media addiction effects.

When controlling for the role of social media addiction, no correlation was found between neuroticism on the one hand and social comparison and loneliness on the other. This finding is a direct outcome of the emotional instability, anxiety, insecurity, and fear render neurotic individuals more susceptible to adverse effects of social media usage like social comparison (Oyibo et al., 2019). Further, they possess a constant fear of missing out, an intriguing sense of being a victim of ghosting, and vaguebooking because they desire to be liked and are in constant need for social approval. All these factors potentially increase negative social media experiences (Astleitner et al., 2023); particularly with the added probability of them being actual social media addicts who refuse to proclaim it. On the other hand, a significant negative relationship was found between neuroticism and life satisfaction apart from patterns of social media consumption. The lack of life satisfaction is a direct result of the

nature of the neurotic personality apart from patterns of social media addiction. This finding was consistently supported through different research evidence (Schunk & Trommsdorff, 2023; Schimmack et al., 2009; Hufer-Thamm & Riemann, 2021)

The final explored personality trait is openness. A significant positive correlation was established between openness and social media addiction. This finding coincides with previous research findings that proved a positive association between the two variables (Ellatif & ALibrahim, 2023). Contrary to the proposed assumptions and when controlling for the impact of social media addiction, no correlations were found between trait openness on the one hand and social comparison, loneliness, and life satisfaction on the other. These findings highlight the role of social media addiction for individuals high in openness to experience social comparison, loneliness and life satisfaction. One possible justification lies in the fact that those individuals are more susceptible to social media addiction and consequently more prone to experience the negative effects associated with such problematic consumption.

By and large, findings reported that the one adverse impact of social media addiction that persists apart from individuals' personality traits is social comparison. After carrying out an extensive analysis of the different personality traits and establishing relationships with the three explored social media addiction outcomes, and in accordance with existing literature, social comparison was the sole outcome that was entrenched with social media consumption patterns (Riaz et al., 2023; Solomon, 2010; Gugushvili et al., 2024; Taylor, 2023). According to Leon Festinger social comparison theory (1954), individuals determine their self-worth by comparing themselves to others. Owing to the nature of social media, people are consistently observing others and their lives, either consciously or subconsciously comparing themselves. Thus while the majority of the study sample bore moderate to high levels of self-esteem, this did not render them less susceptible to social comparison. Patterns of usage also progressively contribute to the emergence of social comparison. Active social media consumption is a catalyst for social comparison. The vast majority of

the study sample reported moderate and high levels of active social media use (percentages were 54% and 39.4% respectively). Consequently, it is plausible to deduce that the prevalence of active media consumption among the study sample is a valid justification for the pervasiveness of social comparison regardless of personality traits.

Finally, the effects of social media addiction influenced subsequent social media consumption patterns, as evident in users’ intentions to discontinue social media usage. Social comparison was a significant derivative of social media discontinuance intentions; a finding that coincides with the existing line of literature. Feng et al. (2023) meta-analysis reported that perceptions of others through social comparison were tightly entrenched with fatigue which in turn predicted users’ discontinuance intentions. Social media addiction has been negatively associated with life satisfaction (Çiftci & Yıldız, 2023). Other researchers stated that while social benefits provided by social media enhance life satisfaction, social overload experienced through social media consumption had a detrimental effect on life satisfaction (Raza et al., 2020). Consequently, the relationship between life satisfaction and social media discontinuance can be interpreted the other way through; in line with Valkeberg’s assumption, media effects are transactional influencing future media consumption patterns. According to this postulation, and paired with the currently proven positive association between social media addiction and life satisfaction, it is reasonable to proclaim that individuals with elevated levels of life satisfaction would develop elevated levels of social media discontinuance intentions based on their desire to maintain the achieved sense of life satisfaction and avoiding any probable adverse emotions resulting from social media usage particularly social comparison emerging from engaging in active social media usage that was prevalent among the study sample. The same implication can be extended regarding loneliness. Negative emotions resulting from social media use predict social media discontinuance among users (Feng et al., 2023; Ziyue, 2019). Consequently, the positive correlation between social media addiction and loneliness coincides with users’ discontinuance intention patterns.

Limitation and future recommendation:

The contributions of this study and opportunities for future research should be considered in the light of some limitations. One major shortcoming in the current research is evident in the examining multiple social media platform. Future research can focus on certain platforms that are heavily used by the study sample (i.e. Tiktok and adolescents and emerging adults). The current research also depended solely on survey as a data collection method. Future research may apply both quantitative research methods (as surveys) and qualitative research methods (as focus group discussions) to unveil the adverse emotional responses that are driven by social comparison.

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