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## SOCIAL MEDIA ADDICTION AND SELF-ESTEEM IN YOUNG ADOLESCENTS

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**Abstract:** The modern generation is growing up in a period of quickly increasing communication and information technology, allowing them to communicate with anybody, at any time, because they are accustomed to interacting and conversing in a constantly connected world via social media (Tulgan, 2013). The current ease of communication is enabled by the presence of cell phones and computers connected to the internet. The spread and the emergence of social networking sites have changed how people interact and communicate in modern life. In today's society, the Internet is an omnipresent force that has not only revolutionized the way information is accessed and disseminated, but has also changed the dynamics of human relationships and social interactions. This transformation is particularly profound among the younger population, where the Internet and SNS have become an integral part of everyday life. The present study investigated the relationship of different variables related to Internet use in an adolescent Greek population. These variables include demographics such as age, religion, and citizenship, as well as online-related ones such as hours spent on social networking sites, preferences for online platforms—with an emphasis on Instagram and Facebook—as well as psychometric indices such as self-esteem. The measure used was the Internet Addiction Test (IAT) and the Rosenberg Self-Esteem Scale. A total of  $n = 85$  participants were included in the study; 39 were male, while 46 were female. The mean age was 15.129 ( $SD = 1.334$ ). The results show that of the participants are addicted to the internet and actually prefer Instagram more than Facebook. Most participants ( $n=22$ ) reported using SNS for 3-4 hours per day. Instagram was the platform of choice for 55 of participants, while the other 30 showed preference. Many speculated factors such as gender and religion did not show a significant influence on the risk of Internet addiction. Finally, the results show that as people spend more time online, there is a greater chance of addiction and lower self-esteem. In conclusion, the new era of communication is full of challenges and all the community-based stakeholders should be vigilant and work together in order to protect our most vulnerable youth.

**Keywords:** social media, self-esteem, adolescents, addiction

### 1. INTRODUCTION

The advent of the internet and the subsequent emergence of Social Network Sites (SNS), such as Facebook and Instagram, have ushered in an era of unparalleled connectivity, communication, and information sharing. In modern society, these digital platforms have become integral components of daily life, profoundly influencing the way we interact, perceive the world, and construct our identities. This influence is particularly pronounced among the young population, who have grown up in a digital age where SNS play a central role in shaping their experiences and social relationships (Kuss, D. J., & Griffiths, M. D., 2017).

The internet, as a whole, has revolutionized the way information is accessed and shared, offering a wealth of knowledge and opportunities for online education, entertainment, and social engagement. SNS, in particular, have redefined the concept of social interaction, enabling individuals to connect with peers, share personal experiences, and participate in global conversations. However, this transformation comes with a dual nature: while offering unprecedented benefits, it also raises critical questions about the potential for internet addiction and the broader impact of SNS on well-being (Primack, B. A. et al., 2017).

The addictive potential of the internet, including the compulsive use of SNS, is a growing concern that has garnered significant attention from researchers, psychologists, and society at large. Internet addiction is characterized by excessive, often uncontrollable, internet and SNS usage that can lead to a range of negative consequences, including compromised mental health, impaired academic or professional performance, and strained personal relationships.

In parallel, the influence of SNS, such as Facebook and Instagram, on the self-esteem and self-identity of the young population is an area of intense scrutiny. These platforms offer users an avenue for self-presentation, comparison, and validation, factors that can significantly impact self-esteem. The constant exposure to carefully curated online personas can influence how individuals perceive themselves and their place in the world (Rosen, L. D. et al., 2013).

### 2. SCIENTIFIC BACKGROUND

The internet has become an integral part of students' lives. It is not only a source of information and communication but also a platform for entertainment, socialization, and self-expression. The pervasive nature of the internet's influence on students has raised concerns about potential addiction, making it a pertinent subject for research (Xiuqin et al., 2010).

Facebook, Instagram, and other social network sites have played a pivotal role in shaping modern social interactions. As the popularity and user base of these platforms have grown, so has the interest in studying their impact. Researchers have recognized that these platforms provide unique insights into the dynamics of online communication, self-presentation, and interpersonal relationships.

Numerous studies have investigated the prevalence of internet addiction among students. Research suggests that students are particularly vulnerable to internet addiction due to their heavy reliance on the internet for academic and social purposes (Kuss et al., 2014). One study found that around 10-15% of students exhibited signs of internet addiction (Mak et al., 2014).

Also, internet addiction is associated with a range of psychological consequences. Students addicted to the internet may experience symptoms of anxiety, depression, and social phobia (Alavi et al., 2011). These psychological issues can further hinder academic success and social relationships. It's important to note that the prevalence and characteristics of internet addiction may vary across cultures and regions. Studies have highlighted cultural factors that influence students' internet use patterns and the likelihood of addiction (Lam, 2015).

Understanding the nuances of internet addiction among students is crucial for educators, parents, and mental health professionals. Internet addiction, particularly in the context of social media use, has significant psychological and social implications. It can affect students' mental health, academic performance, and self-esteem. Understanding the relationship between internet addiction and specific platforms like Facebook and Instagram helps in assessing these implications (Kuss & Griffiths, 2017). The digital age has raised concerns about the well-being of students. Internet addiction can lead to negative outcomes, including decreased face-to-face social interactions, academic issues, and mental health challenges. Researchers seek to understand how students' online behaviors, especially on social media, may contribute to these concerns. The relationship between internet addiction and lower self-esteem among students has been the focus of numerous studies, shedding light on the complex interplay between excessive internet use and self-perception. Studies have consistently revealed a negative correlation between internet addiction and self-esteem among students. Internet addiction often leads to increased time spent online, which may result in neglect of real-world activities, reduced face-to-face social interactions, and a sense of detachment from offline life. This detachment can contribute to feelings of loneliness and low self-esteem (Xiuqin et al., 2010). Social network sites, in particular, can be platforms for social comparison. Students may compare their lives, achievements, and appearances to others on these platforms. Such comparisons can be detrimental to self-esteem, as students often present curated, idealized versions of themselves online. This can lead to feelings of inadequacy and diminished self-worth (Tandoc et al., 2015).

### 3. MATERIALS AND METHODS

Eighty-six students, eighty-six students from Greece, participated in this study. The sample was selected on a convenient basis in which all the respondents were SNS (Social Networking Sites) users. Sample consisted of 39 male and 46 female. The mean age was 15.129 (SD= 1.334), aged from 11 to 18. Among them, x% selected Instagram and x% Facebook as their most preferred social media application.

#### **Design and Procedure**

Internet addiction among young adolescents is defined as a condition marked by excessive and compulsive use of the internet, leading to negative consequences in various aspects of life. It is characterized by an inability to control one's internet use, preoccupation with online activities, withdrawal symptoms when offline, and negative impacts on daily functioning (Young, 1996). Internet addiction in adolescents is often driven by a desire for escapism from real-life stressors, a quest for social interaction and peer acceptance on social networking sites, the highly immersive nature of online gaming, curiosity-driven exploration, and the vast availability of online content. The impact of this addiction on young individuals includes reduced academic performance, mental health issues, physical health consequences, impaired relationships, and lowered self-esteem (Alavi et al., 2011; Tandoc et al., 2015; Xiuqin et al., 2010). Understanding the causes and consequences of internet addiction is crucial for early intervention and support to mitigate its negative impact on young adolescents.

The measure that was used was the Internet Addiction Test (IAT). The existence and severity of internet addiction are assessed using the IAT, a 20-item scale. Based on the DSM-IV criteria for the diagnosis of pathological gambling, this test was created as a research and diagnostic tool. An instrument for evaluating the symptoms of internet addiction is the IAT.

The term "internet addiction" refers to obsessive online behavior that interferes with regular social connections and adds to everyday stress as well as feelings of isolation, anxiety, and sadness. Responses on a 5-degree Likert type scale are used to determine the degree of engagement in online activities, and the test divides addictive behavior into four categories: lack of addiction, mild symptoms of addiction, moderate signs of addiction, and severe addictive behavior. Studies have shown that IAT is a valid indicator of the essential elements of pathological internet usage. In

several nations and with various demographics, the questionnaire demonstrated high dependability (Young KS, de Abreu CN, 2010).

The second measure that was used was the Rosenberg's Self-Esteem Scale.

This internet addiction correlates with self-esteem, which refers to an individual's overall evaluation of their self-worth and self-value. Excessive internet use, particularly on social media platforms, can lead to social comparison, where adolescents may compare themselves to the idealized online personas of others. This can result in feelings of inadequacy and diminished self-worth (Tandoc et al., 2015).

The Rosenberg Self-Esteem Scale was originally designed as a measure for adolescents and is the most widely used, consisting of 10 items, 5 of which are negatively worded. It was originally constructed as a Guttman-type scale (ie, items with an ordinal attribute pattern), and most researchers use a 4-point Likert-type response format ranging from strongly agree to strongly disagree. It is the standard measure, providing a short, clear and convenient method of measuring global self-esteem as a moderating variable rather than as a dependent variable. (Rosenberg, M., 1965).

As well, demographic information like gender, age, religion, SNS usage per day and also preference between Facebook and Instagram as the most attractive social media application were included in the questionnaire. Data were analysed in SPSS (ver. 29) and R studio (ver. 4.3) statistical software packages.

#### 4. RESULTS

##### Demographics

A total of  $n = 85$  participants were included in the study; 39 were male, while 46 were female. The mean age was 15.129 ( $SD = 1.334$ ), with a range of 11 – 18. 75 of the participants reported their religion as Christian, while the rest ( $n = 10$ ) reported other. Similarly, 75 had Greek citizenship, while 10 reported having another citizenship. A mean of 3.671 hours ( $SD = 1.483$ ) was reported across all participants for use of social networking sites. Most participants ( $n = 22$ ) reported using SNS for 3-4 hours per day.

Instagram was the platform of choice for 55 of participants, while the other 30 showed preference.

IAT scores were transformed into categories based on severity (e.g., mild, moderate, severe) in R Studio. Seven participants reported mild internet addiction, based on their IAT score. Most participants ( $n = 59$ ) reported moderate addiction, while 16 participants reported severe addiction. Out of the moderately addicted participants, 44 used Facebook more with the rest ( $n = 15$ ) used Instagram more. Out of the severely addicted participants, 7 reported preferences towards Facebook while the rest ( $n = 9$ ) preferred Instagram.

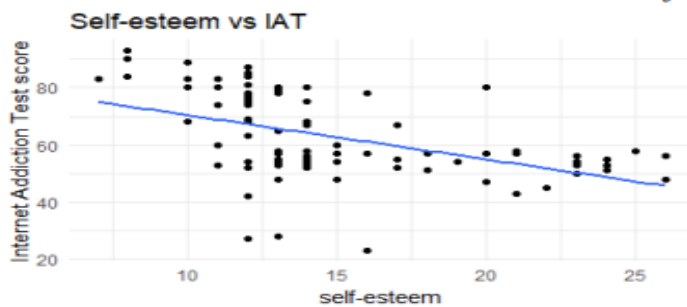
#### 5. COMPARISONS

We tested a number of mean comparisons using gender, self-esteem, and choice of social network (i.e., Instagram vs Facebook). Multiple t-tests revealed no statistically significant differences between gender on self-esteem, between gender on IAT scores, between self-esteem on IAT, and between choice of online platform (i.e., Instagram vs Facebook on IAT (all  $p > .05$ ). A one-way analysis of variance (ANOVA) showed no statistically significant differences among hours of social networking sites on self-esteem, and no statistically significant differences amongst hours of SNS on IAT scores, although it did approach significance ( $F > 1$ ,  $p = .11$ ).

#### 6. CORRELATIONS

A Pearson correlation analysis was conducted between IAT scores and self-esteem. This revealed a significant negative correlation between the two variables  $r(83) = -.486$ ,  $p < .001$ , indicating that higher IAT scores are related to lower self-esteem.

**Figure 9**  
*Correlation between Internet Addiction Test & Self-esteem (n = 85)*



Source: Author research

## 7. DISCUSSION/CONCLUSIONS

The current study examined the relationship of various variables related to Internet use in an adolescent Greek population. These variables included demographics such as age, religion, and citizenships, as well as online-related ones such as hours spent on social network sites, online platform preferences – focusing on Instagram and Facebook – as well as psychometric indices, such as self-esteem.

Most relationships showed no significance – demonstrating, in a sense, that Internet use and probable addiction, is a current global phenomenon across all individuals, irrespective of age, gender, citizenship, and religion (at least in a Greek population). However, an important finding of the current study is the negative relationship between self-esteem and internet addiction (as indexed by the IAT) – in other words, adolescents which exhibit low self-esteem also demonstrate high addiction to Internet use, and vice versa. This is not surprising – especially for our target age group – given that the proliferation of social media nowadays has drastically skewed the perception of adolescents regarding how they should look and behave. For instance, a relatively recent study has shown that general and more inclusive variants (e.g., family) of self-esteem in adolescents were negatively correlated with Internet addiction (Aydm & San, 2011). Such a finding appears to be comparable across cultures as well (Sariyska et al., 2014) – which is a notable limitation of the current study, which only investigated the above in a mostly homogeneous Greek adolescent population. These findings – which are in line with our own – can also drive poor prognosis regarding mental health (e.g., Budak et al., 2015). For example, low self-esteem plays a key role in relation to depression to lead to excessive reliance and addiction to the Internet (Bahrainian et al., 2014); it also applies to other psychopathologies, such as anxiety (Kumar & Mondal, 2018), stress, and insomnia (Younes et al., 2016).

In this case, it is important to understand the factors underlying the association between Internet addiction, psychopathology, and self-esteem (Bozoglan et al., 2013). Interestingly, another study has shown that self-esteem itself might not be such a significant predictor of internet addiction, instead placing the onus on psychopathology (e.g., depression) and loneliness (Ayas & Horzum, 2013). Other related studies incorporate parental practices as well, by showing that parental rejection and overprotection can increase the risk of Internet addiction in children; interestingly, this association appeared to be mediated by self-esteem (Yao et al., 2015).

A more relevant approach to tap into the various (and complex) associations among dysfunctional Internet use and indices of psychological well-being – such as self-esteem (Cardak, 2013; Cheung, et al., 2013; Sharma & Sharma, 2018) – might be through the use of structural equation modelling (SEM), essentially the implementation of simultaneous multiple regressions. Indeed, a number of recent studies has examined the negative contribution of Internet addiction on various aforementioned indices such as stress, depression, anxiety, and loneliness across both genders (Ostovar, et al., 2016). A more recent study in China incorporated social support within the context of Internet addiction, and through SEM, demonstrated that emotional dysregulation could be considered a risk factor for Internet addiction, with social support acting as a protective factor (Mo et al., 2018); interestingly, the same team of authors showed that excessive Internet use has negative consequences on academic aspirations (Mo et al., 2020).

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