Relationship between Social Media, General Anxiety Disorder, and Traits of Emotional Intelligence

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Abstract

Social media propagation carries the capacity for global communication and societal wellbeing, digital trading, entertainment, and the centre of engagement. The consequences of over-engagement in social media lead to depression, stress, and low performance. This study unfolds tendencies of excessive use of social media towards general anxiety and individuals' traits of emotional intelligence. The researcher adopted a questionnaire to collect data from participants (n = 340) through the Generalized Anxiety Disorder scale by Spitzer et al. (2006), Trait Emotional Intelligence Questionnaire–Short Form by Cooper & Petrides (2010), Social Media Addiction Scale by Young (2009), and Social Media Engagement Questionnaire (SMEQ) by Przybylski, Murayama, DeHaan, and Gladwell (2013). The findings demonstrated that social media addiction diffuses general anxiety disorder with positive and strong relationships. A weak association is found between obsessive use of social media applications and emotional intelligence. Though, Social media engagement lightens emotional intelligence traits of personality at a moderate level. An obsessive behaviour towards social media can predict general anxiety disorder more than emotional intelligence. While social media engagement with proper management can benefit emotional intelligence.

Keywords: Social Media Usage, Addiction, Psychological Process, Emotional Intelligence, General Anxiety Disorder

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Introduction

The rise of communication technology has facilitated better services and made life easier. This growing internet technological assistance has become a widespread product of behavioural addictions. Obsessive use of social media captivates behaviour and psychological patterns of a person. Social media usage became an important driver to spread information in every field of life. While this domain affects social interaction, emotional consequences, and psychological processes (Guazzini, et al., 2022; Rajesh & Rangaiah, 2020) resulting craving to it. Social media has an important place in our daily routine. It identifies information, status, and news sharing ona global platform. Within positive changes, this "Munchausen by Internet" have critical misinformation and disinformation influence on social media users (Guazzini, et al., 2022). Over possessive social media usage, disseminates the flow of news. Few studies investigated the social media effect on psychological diagnosis. Internet addictions like excessive online gaming, net compulsions, spreading (dis)information, gaining attention, profile consciousness, fake news abundance, cyber-sexual addiction, and cyber-relationship (Arness, & Ollis, 2022; Guazzini, et al., 2022) have their negative consequences. Correspondingly, social media obsession is considered as sub-division of excessive use of internet. The symptoms of social media addiction relate to preoccupations and excessive use with mood swinging and losing control (Abi-Jaoude et al., 2020; Kircaburun, 2018; Ryan et al., 2016). There are several social media applications now a days. The largest platform of global village is manifested through Instagram, Twitter, WhatsApp, YouTube, Facebook, and Tik-Tok. Social media addiction can be defined as over and uncontrolled engagement in using social media that impairs the state of wellbeing (Andreassen et al., 2016; Griffiths &Kuss, 2017; Rajesh & Rangaiah, 2020).

The term social media comprises social networking sites through online apps (applications) (Wartberg et al., 2020). These social media apps facilitate users to interact with each other verbally, by texting, and visually (Keles et al., 2020). At present, young people live in a technological world, where they consider social media apps as a tool of global interaction, status quo, updating their styles, entertainment, profiling, information sharing, and way of being (Griffiths &Kuss, 2017). Today, billions of users engaged in various social media applications. Some people use these apps for the sake of news, updates, information, and expression. Whereas, some people use social media platform as an obsession. This excessive and blind use of social media develop state of being to use substance with uncontrolled behaviour. This cache behavior leads to fruitful and negative attributes as well (Bányai et al., 2017; Marino et al., 2020; Ricciardelli et al., 2020). Prior studies stated that these attributes of the overarching use of social media resulted some psychological consequences (Guazzini, et al., 2022; Keles et al., 2020; Cheng & Li, 2014; Young, 2015). Howbeit, social media became the strongest means to associate social

diversity, business dealing, digital marketing, communication skill development, and entertainment. Yet, excessive engagement with social media in particular ways, makes users addicted to technologies (Keles et al., 2020). Empirical studies have demonstrated that addictive behavior is linked to psychoactive substances. The prevalence rates of social media influence the consequences of psychological disorders (Andreassen et al., 2017). Psychological issues such as anxiety, over-possession, narcissism, frustration, anger, and verbal violence are open truths (Abi-Jaoude et al., 2020; Guazzini, et al., 2022).

General anxiety disorder (GAD) has a pathological elevated level of perceived anxiety that debilitates bio-psychosocial well-being of a person (Boehlen et al., 2020). GAD is a serious form of an anxiety disorder (Lee & Kim, 2019). It is associated with an excessive, persistent, uncontrolled, exaggerated startle response, and frequent worries about daily activities (Newman et al., 2017). Among most common symptoms of GAD includes weak concentration, fatigue, irritation, restlessness, sleep disorder, and tension. In the case of an untreated individual with GAD, it develops chronic patterns of course leading to suicidality, comorbidity, psychiatric disorder, depression, and panic disorders (Lee & Kim, 2019; Maron & Nutt, 2017). GAD is the only subtype of anxiety disorder that has a lower respite rate with treatment. Numerous neuroimaging pieces of research have been performed to identify the causes of GAD. Still, these researches poorly characterized the underlying phenomena and mechanism of GAD (Chen et al., 2020). The etiological understandings and treatments of GAD are not as responsible as required. The slow onset of therapeutic actions and the identification of novel mechanisms became critical in improving outcomes of GAD behaviour (Wise et al., 2020). GAD alteration in brain network functions conveyed to aversive stimuli, which results in anxiety. The prevalence point of GAD is about 8%, which is a frequent and higher anxiety level (Jordan et al., 2017; Lee & Kim, 2019; Pierson et al., 2017). Quite a few studies explored GAD in correlation with demographics such as age, gender, and environment, etc. (Guazzini, et al., 2022; Ranney et al., 2020). People with general anxiety disorder were diagnosed with high comorbidity and somatization (Wise et al., 2020). Emotion dysregulation is one of the significant features of GAD, which leads to hyperarousal, weak understandings, maladaptation, and imbalances towards emotions. This manifests over-activation in autonomic and endocrine function (limbic) repeatedly in an individual with this disorder (Chen et al., 2020).

Emotional intelligence (EI) is standard-based intelligence in which individuals are logically measured by performance. It advocates a personality trait concerning to individual's disposition to deal with emotions and emotional state of being (Udayar et al., 2020). Emotional intelligence is conceptualized under the umbrella of 'social intelligence' theory (Gardner, 2000; Thorndike, 1920). Proponents of EI stated that it

influences individuals' physical and mental health. They argued that EI is a subset of social intelligence that monitors one's emotions. One's own emotions affect individuals' thinking processes and actions. EI involves abilities that are about empathy, motivation, self-control, and self-awareness. In a recent meta-analysis, EI is one of the valuable predictors of performance (Furnham & Taylor, 2020). There are two concepts to describe EI, one is trait EI, and the second is the ability of EI. Trait EI relates to behavioural disposition and can be measured through self-reporting. The ability of EI reflects cognitive ability which can be assessed through maximum performance tests (Furnham & Taylor, 2020; Treglown & Furnham, 2020). One popular description refers that EI as a cluster of perceived behavioural dispositions (Feher, 2019). A broadly conceived trait linked to individual differences that describe emotional variances (Petrides et al., 2018). Individual differences influence the formation of EI. There are emerging interests in the dispositional and social factors of individuals that form and evaluate social networks (Treglown & Furnham, 2020). Studies indicate that social well-being affects young students' adaptability moderated by EI (Sun and Liu, 2019). Besides this, emotional intelligence reduces the risks that young people face in social bonding, social acceptance, and self-belief (Hsieh et al., 2019). Emotional intelligence helps to eradicate negative feelings, anxiety, and instability in adjustment (Wang & Zhang, 2020). Researchers investigated that emotional intelligence is significantly correlated with resilience (Wen, Liu, & Chen, 2014; Udayar et al., 2020). Few other research studies have been done to analyse the EI, its impact and its relationship to other variables like performance, leadership, learning, mental disorders, and personality (Furnham & Taylor, 2020; Ranney et al., 2020; Treglown & Furnham, 2020; Wang & Zhang, 2020).

The Current Research

Students in higher education are an exceptional group of people with an exposure to the transition period, critical development, nourishing personality, and progress towards adulthood. In this technological era, university students frequently use social media. During this developmental phase, students face frustration, stress of competition, career, relationships, grades, and social interaction (Nesi et al., 2018; Ricciardelli et al., 2020). Adult age is keeping in touch with social media apps for various purposes. Various studies have subsequently been employed regarding social media manifests linked with stressful emotional life (Udayar et al., 2020), unstable mental state (Andreassen et al., 2016), problematic internet usage (Bányai et al., 2017; Restrepo et al., 2019; Ryan et al., 2016), internet addiction (Andreassen & Pallesen, 2014; Cheng & Li, 2014; Rajesh & Rangaiah, 2020), mental disorders in relation with internet and social media (Abi-Jaoude et al., 2020; Al-Menayes, 2015; Lee & Kim, 2019; Marino et al., 2020), academic performance (Ricciardelli et al., 2020), and anxiety (Andreassen et al., 2016, 2017; Bányai et al., 2017; Keles et al., 2020). Alarming arguments have been presented by

researchers on social media excessive engagement resulting into addiction that impaired personality development (Keles et al., 2020). In this study, the researchers focused on EI as the constellation of emotions based on self-perception. Concerning the social media influence on students' simultaneous psychological processes, the present research investigated the correlation of social media obsessive use with general anxiety disorder, and emotional intelligence. The detailed research questions of the study are as follows:

1. Is there a correlation between social media addiction and general anxiety disorder?
2. Is there a correlation between social media addiction and emotional intelligence?
3. To what extent does social media addiction impact general anxiety disorder and emotional intelligence?

Research Methodology

The present study design was quantitative in nature. The targeted population of this study comprised of graduate students of public universities in the city of Faisalabad. The researchers randomly selected 456 students of social sciences associated with three public universities in Faisalabad. Their ages ranged from 18 to 26 years. The data were gathered through questionnaires. Table 1 presents the scrutinized data based on demographical information such as age, gender, semester, CGPA, hours spent to stay online at social media applications (Instagram, WhatsApp, Twitter, TikTok, and Facebook). In sum, 456 students were randomly selected for the screening for anxiety disorder (Table 2).

Table 1

Demographic Details of Participants in Percent

Characteristics		Male	Female	Total
Social Media Applications	All of them	88.4	78.6	83.5
	WhatsApp	11.6	21.4	16.5
	Total	100	100	100
Online Status Hours	Less than 1 hour	8.2	20.4	14.3
	2 hours	18.1	19.4	18.75
	3 hours	30.6	25.5	28.05
	Above 4 hours	43.1	34.7	38.9
	Total	100	100	100
Age (years)	18 to 20	30.8	39.1	34.95
	21 to 23	61.1	53.3	57.2
	24 to 26	8.1	7.6	7.85
	Total	100	100	100
CGPA of last semester	Between 2-3 CGPA	48.6	42.7	45.65
	Between 3-4 CGPA	51.4	57.3	54.35
	Total	100	100	100

Research Instrument

The researchers adopted *Social Media Addiction Scale* (*SMAS*) to measure possession and addiction of individuals to stay online. *SMAS* was a subs-set of the *Internet Addiction Test* (Young, 2009). The *SMAS* consisted of 14 items relevant to social media usage in the corresponding *IAT* (Al-Menayes, 2015). All unidimensional items were rated on Likert scale from strongly disagree (1) to strongly agree (5). Further, the *Social Media Engagement Questionnaire* (*SMEQ*) was also included to measure participants' involvement in social media in their daily routine. *SMEQ* was developed by Przybylski, Murayama, DeHaan, and Gladwell (2013). *SMEQ* consisted of five items that quantify social media usage patterns. Likert rating scale from never (1) to seven times in a day (7) was used to collect data. *SMAS* and *SMEQ* were found reliable with Cronbach alpha values of .803 and 761 respectively.

To measure the general anxiety disorder, *the Generalized Anxiety Disorder Scale* (*GAD-7*) by Spitzer et al. (2006) was adopted. It is a self-reported screening test consisting of 7 items. *GAD-7* measures the presence of general anxiety disorder. Participants rated this scale from 0 to 3. The sum of *GAD-7* ranged from 0 to 21. The whole scale measures anxiety symptoms such as worries about family, friends, personality, work, wealth, reputation etc. (Jordan et al., 2017). The researchers tested the internal consistency of *GAD-7* through Cronbach at $\alpha = .70$. The convergent validity is found through correlation analysis (Spitzer et al., 2006).

In order to measure emotional intelligence, the researcher used the base of *Trait Emotional Intelligence Questionnaire* (*TEIQue*, 153 items) by Petrides (2009) measure emotional intelligence. It consisted of 15 facets and 4 factors. The overall internal reliability score of the original scale was .89. *TEIQue* has high consistency and psychometric basis to measure personality dimensions in terms of emotions (Petrides et al., 2018; Treglown & Furnham, 2020). In this study, a short form of *TEIQue-SF* was adopted for data collection (Cooper & Petrides, 2010; Petrides, 2009). The respondents were informed to rate the extent that they believe present themselves, and rate from 1 to 7. There were four main factors comprised of twenty-six items such as Well-Being (6 items), Self-Control (6 items), Emotionality (8 items), and Sociability (6 items). The rest of the items belong to adaptability (2 items), and self-motivation (2 items). All the 30 items were based on 15 facets, ($\alpha = .78$, $r > .5$ each facet).

Data Collection and Analysis

The data were scrutinized to identify participants with general anxiety disorder. The collected data were analyzed using *GAD-7* anxiety severity measurement. The screening of *GAD* was employed by assigning scores from 0 to 3. The sum of scores on *GAD* is 21

and the least score is 0. The general anxiety disorder of participants was circumscribed into four categories: From 0 to 5 mild, 6 to 10 moderate, 11 to 15 moderately severe anxiety, and from 15 to 21 used to state severe anxiety. After the screening, statistical techniques of mean, standard deviation, correlation, and regression were applied.

Table 2
Level of General Anxiety Disorder in Participants

	Frequency	%	M	SD
Mild	116	25	3.67	1.98
Moderate	140	30.7	3.51	2.65
Moderately severe anxiety	126	28.1	4.98	1.34
Severe anxiety	74	16.2	3.78	0.34

The participants were screened to examine the symptoms of *GAD* (table 2). Among 456 participants, it was found 25.9% participants with mild *GAD*, 27.6% participants with moderate *GAD*, 32.9% participants with moderately severe anxiety, and 13.6% participants with severe *GAD*. The mean score of participants with mild *GAD* was 3.67 (SD = 1.98), and the mean score of participants with moderate *GAD* was 3.51 (SD = 2.65). The mean score of participants with severe general anxiety was 3.78 (SD = 0.34). The participants with moderately severe anxiety were found more engaged with social media (M = 4.98, SD = 1.34). The mean scores of participants corroborated those respondents frequently engaged with social media. After screening, 116 students were discarded due to their mild level of anxiety (*GAD* = 0). The final data analysis had 340 students (Male = 144 male, Female = 196).

Table 3
Correlation of Social Media Addiction with General Anxiety Disorder*

	Social media addiction			
	Social media engagement	Social Consequences	Time Displacement	Compulsive Feeling
General Anxiety Disorder	.691	.480	.816	.586

*p < .005

A correlation was applied to identify an association between social media engagement and addiction with general anxiety disorder. Table 3 displays that there was a strong relationship between *GAD* and factor time displacement (*r* = .816, *p* = .000). The results suggested that social media engagement and general anxiety have a moderate association. While the lowest value of correlation was found between general anxiety disorder and social consequences.

Table 4

Association of Social Media Possession with Emotional Intelligence

Emotional Intelligence	Social Media Engagement	Social Media Addiction		
		Social Consequences	Time Displacement	Compulsive Feeling
Adaptability	.667**	.599*	.045	.457**
Self-motivation	.713*	.694	.180**	.660*
Emotionality	.609**	.310**	.630	.310*
Sociability	.678*	.418*	.506**	.531**
Well-being	.841*	.669**	.143**	.419**
Self-control	.711**	.676**	.410**	.585**

*$p< .01$, **$p< .05$

Table 4 demonstrates relationship of social media engagement, social media addiction, and emotional intelligence. The analysis stated a significant and strong correlations between emotional intelligence and social media engagement. Whereas, moderate to weak association can be seen between social media addiction and emotional intelligence. Only well-being ($r = .669$, $p< .05$) and self-control significantly ($r = .676$, $p< .05$) correlate with social consequences. And, self-motivation correlated with compulsive feelings significantly ($r = .660$, $p<.01$). The analysis exhibited that factors of emotional intelligence have a greater significant association with social media engagement in comparison to social media addiction.

Table 5

Relationship of Social Media Possession, General Anxiety Disorder and Emotional Intelligence

	General Anxiety Disorder		Emotional intelligence	
	r	p	r	p
Social Media Addiction	.788	.000	.468	.000
Social Media Engagement	.501	.000	.515	.000

$p<.000$

Table 5 presents the cumulative scores of associations of social media engagement, social media addiction, general anxiety disorder, and emotional intelligence. It is demonstrated that general anxiety disorder was strongly associated with social media addiction ($r = .788$), and moderately related with social media engagement ($r = .501$). However, emotional intelligence has moderate correlation with social media engagement ($r = .515$), and weak correlation with social media addiction ($r = .468$). The results indicated that the participants with social media addiction were also associated with a general anxiety order. While the participants' social media engagement significantly correlates with emotional intelligence.

Table 6

Effect of Social Media Addiction on General Anxiety Disorder and Emotional Intelligence

Variables	B	β	SE	F	t	R^2
GAD	65.435	.778	4.2412	35.222	2.99	.768
EI	10.141	.309	3.8141	9.141	.257	.276

$p<.000$, df = 338, GAD = general anxiety disorder, EI = emotional intelligence

Table 6 demonstrates that social media addiction has a significant and positive impact on participants with GAD (β = .778). Social media addiction demonstrated significant contribution to general anxiety disorder. A change in every unit of social media addiction influenced general anxiety disorder with 76% of the total variance (F = 35.222, t = 2.99). Oppositely, the result reveals that social media addiction is a weak predictor of emotional intelligence (β = .309, R^2 = .276). The prevalence of emotional intelligence can be decreased with social media addiction.

Discussion

The pervasiveness of social media usages have remarkable opportunities to communicate and spread information globally (Abi-Jaoude et al., 2020). Many internet users take advantage of social media. The social media arena had held great sway across the world. Woefully, excessive use of social media influenced not only productive manners but negative consequences as resulted. Studies investigated that unrestrained use of social media fosters psychological consequences (Guazzini, et al., 2022). Social media engagement impeded an individual's behaviour in a strong way, while addiction negatively influenced behavioural patterns (Griffiths & Kuss, 2017; Kircaburun, 2018). Keeping this scenario, this study investigates adults' social media usage in association with general anxiety disorder and emotional intelligence.

The results of this study revealed that social media obsession has significant strong association with general anxiety disorder. (Rajesh & Rangaiah, 2020; Restrepo et al., 2019; Wang & Zhang, 2020). While the results of participants' scores on social media addiction have a weak association with emotional intelligence (Kircaburun, 2018; K. Petrides et al., 2018; Süral et al., 2019). On contrary, social media engagement moderately correlated with general anxiety disorder, but strongly associated with emotional intelligence. After finding, a strong significant association of social media addiction with general anxiety disorder, the researchers performed regression test. The result indicated that the participants' social media addiction was a good predictor of a general anxiety disorder (Table 6). In sum, it is found that attribution of social media addiction significantly emerged with general anxiety disorder strongly. Similarly, prior studies reached the same conclusion that intemperate social media usage and online status consciousness resulted in anxiety, depression, stress, complexity, mistrust condition, fake

news circulation, and non-satisfaction (Abi-Jaoude et al., 2020; Andreassen et al., 2016, 2017; Andreassen & Pallesen, 2014). Social media engagement for spreading news and information can be beneficial for people. Whereas, over-possession and excessive use of social media applications consequence psychological problems (Rajesh & Rangaiah, 2020), such as fake news trust, showing off attitude, disinformation, and viral alerts that sparked tension, stress, and other emotional issues (Griffiths & Kuss, 2017; Keles et al., 2020; Kircaburun, 2018). Nonetheless, the hoarding type of behaviour triggered a storm on social media that controlled others' psychological dysfunctional outcomes. Technological development intervenes many practical solutions, yet social media influences psychological conditions deeply.

Conclusion

It is identified that social media usage is over-pathologized. Howbeit, many people believe in social media usage is problematic and complex to adjust to a daily routine. This study highlighted that obsession of staying online and unintentional possession of social media can develop uncontrolled psychological ingredients. The findings demonstrated that social media addiction appeared as a general anxiety disorder among adults. It conveyed greater psychological changes as potentially vulnerable side-effects on participants.

As well, social media addiction is a greater predictor of general anxiety disorder. While social media engagement can support emotional intelligence. The current study explained preliminary shreds of evidence of social media addiction manifested in general anxiety disorder. Additionally, a proper engagement with social media can be associated with emotional intelligence. It cannot be ignored that everyone uses social media applications for a beneficial environment. Its negative effect can be prevented by educating people who spent an indefinite amount of time on social media. A directional awareness about what to trust on social media can increase inventive impulsive control. Further, this study was limited to the selected sample, quantitative measurement, and collective effect of all social media applications. The future researcher can conceptualize beyond limitations under academic and overt participation.

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