

Trapped Behind the Screen: Unveiling the Link Between Social Media Addiction and Social Anxiety Among Students in Balochistan

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Abstract

The present study aimed to explore the relationship of social media addiction with social Anxiety. This study was derived from pilot testing of M.Phil. research work. A correlational design was employed in this cross-sectional survey of college and university students in Balochistan. A total of 149 participants were recruited from four universities and four colleges in Balochistan to complete standardised measures of the Social Media Addiction Scale – Student Form (SMA-SF; Sahin, 2018) and the Social Anxiety Questionnaire for Adults (SAQ-30; Caballo, 2013). Age of the participants ranged between 15 and 30 years. Through Pearson correlation analysis, a strong positive and statistically significant relationship was observed between social media addiction and social Anxiety. Results indicated social media addiction as a positive and important predictor of social Anxiety as the predictor variable explained a 20% variance in the outcome variable. A higher level of social media addiction was reported in male participants, and in terms of institutional differences, university students experienced greater social media addiction than college students. No significant mean difference was observed based on gender or institution of Social Anxiety. The results of the present study align with the findings reported in past research and support the assumptions of Social Cognitive Theory, which suggests that online actions can create and maintain feelings of Anxiety. The results indicate that addressing digital behaviours should be a priority in mental health programs targeting young people.

Keywords: Social Media Addiction, Social Anxiety, Balochistan, Social Cognitive Theory.

Introduction

Social media now plays a dominant role in the daily life of students, shaping the means through which they interact, connect and view themselves. Many college and university students now spend several hours each day interacting on social media, as usage rates among individuals aged 18 to 29 have reached 90% in recent years (Pew Research Centre, 2021). Even though social media provides instant connectivity and social support, overuse has been linked to numerous negative mental health impacts, one of which is social media addiction. Increasing research findings suggest a close relationship between social media addiction and higher levels of social Anxiety among university students (Vannucci et al., 2017). Excessive social media use by students can increase their sensitivity to criticism, cause them to shy away from face-to-face interactions and become overly reliant on online approbation.

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Social Media Addiction

The condition of social media addiction arises when people experience persistent and compulsive use of various social networking sites. Admitting that you have an addiction to social media only occurs when this excessive use starts to impact other important areas of your life. It shares the same features as other behavioural addictions, such as salience, changes in mood, tolerance, withdrawal, conflict, and relapse (Andreassen, 2015).

Kuss and Griffiths (2015) define social media addiction as a technological or behavioural addiction that becomes evident when people spend an excessive amount of time on social media, and this habit negatively impacts their psychological, social, academic, or occupational functioning. Understanding social media addiction as using these platforms to excess to manage emotions, fulfil needs, or avoid difficult situations. Chasing validation through 'likes' and 'shares' on social media frequently leads to compulsive usage and, in turn, increases the risk of depression, Anxiety and low self-esteem (Ryan et al., 2014).

Social Anxiety

American Psychiatric Association defines social Anxiety as having a persistent and intense worry about being criticized or judged in situations where you encounter people you do not know or are the centre of attention. People worry that their behaviour might cause disgrace or shame, which can seriously impair their ability to participate in routine activities (American Psychiatric Association, 2013).

Leary and Kowalski (1995) define social Anxiety as the experience of discomfort or worry brought on by the potential or actual scrutiny of others. Self-consciousness and avoidance tend to result from this fear of being judged in everyday situations.

Rapee and Heimberg (1997) describe social Anxiety as the worry that others will criticise or ridicule a person in social or evaluative situations, with individuals tending to overestimate the likelihood of such consequences occurring more frequently than is the case. These and other thoughts usually lead to increased physical discomfort and a desire to escape from such situations.

Objectives

- To assess the level of social media addiction and social Anxiety among students.
- To explore the group differences in social media addiction and social Anxiety among students.
- To examine social media addiction as a predictor of social Anxiety among students.

Literature Review

A study by Elhai et al. (2016) found that individuals who are addicted to social media may develop higher social Anxiety and, hence, result in issues of emotional regulation. The studies concluded that individuals suffering from social Anxiety often resort to social media to escape social situations. However, continued overuse of these platforms can lead to stronger dependence and heightened levels of Anxiety.

A study by Keles et al. (2020) explored how social media impacts the mental well-being of adolescents and young adults in areas such as depression, Anxiety, and other distress-related conditions. The study concluded that frequent and excessive use of social media could lead to higher levels of depression and Anxiety among adolescents and young adults. Griffiths' study in 2013 summarized the available psychological research on online social networking and addiction. Evidence revealed that compulsive use of social media contributes to unhealthy patterns of behaviour as well as elevated risks of psychological disorders such as Anxiety and depression.

Another Study by Shensa et al. (2018) showed that people with social Anxiety were more prone to adverse effects of passive social media use. They concluded that frequent worry about measuring up to others on social media tends to lead to compulsive usage, which feeds into addictive patterns and encourages separating from actual social settings.

The study by Marino et al. (2018) reported that young female users tend to show higher levels of social media addiction alongside higher social Anxiety. A study investigated how addiction to social networks influences anxiety levels among university students. Results indicated that students who were more addicted to social media also experienced higher levels of Anxiety within an educational setting.

Conversely, other research suggests that males tend to engage more frequently in online activities, possibly due to socialization and access patterns (Kaura et al., 2020; Smith & McDonald, 2020). Despite these differences in usage, gender differences in social Anxiety are less consistently observed, with some studies reporting negligible variation between males and females (Marino et al., 2018; Shensa et al., 2018).

Social media addiction has become a significant issue among college students worldwide, and the situation is particularly alarming in Balochistan, one of Pakistan's most underserved provinces. The addiction is characterized by spending excessive time on social media and neglecting other important activities in favour of it (Kuss & Griffiths, 2017). The presence of distinct social and cultural variables heightened the issues faced by individuals in Balochistan. The province of Balochistan, one of Pakistan's most deprived provinces, lacked mental health support and put immense stress on its youth (Soomro et al., 2020). Students in Balochistan turned to social media to manage stress and loneliness or to seek social affirmation (Yousaf et al., 2021). However, excessive usage heightened their social Anxiety (Vannucci et al., 2017). Excessive social media usage raised feelings of Anxiety, further leading to even more time spent online. Research shows the link between social media addiction and mental health issues globally, yet studies on its effects in Balochistan are rare. The study aimed to investigate how social media addiction affects the social Anxiety of students in Balochistan to help fill the research void and guide further interventions.

Methodology

This study was based on a pilot study that employed a Cross-sectional, Correlational survey research method. A sample of 149 male and female participants was recruited through a non-probability sampling technique from four universities and four colleges in Balochistan. The participant's age ranged from 15 to 30 years. The study was approved by the Board of Advanced Studies and Research University of Balochistan. After obtaining informed consent, data were collected through structured online questionnaires to ensure that confidentiality and anonymity were maintained, by APA ethical guidelines. The data were analyzed using SPSS version 21.

Hypotheses

H1: There are significant gender differences in social media addiction and social Anxiety.

H2: Social media addiction is a significant predictor of Social Anxiety

Assessment Measures

The demographic sheet included age, gender, education, marital status, family type, amount of time spent on social media, types of social media platforms, and the setting of social media usage. The 29 items Social media addiction Social Media Addiction Scale (SMA-SF) developed by Sahin

(2018) was used to measure social media addiction in participation on a 5-point Likert scale with alpha reliability of ($\alpha = .90$). The 30 items Social Anxiety Questionnaire for Adults with a 5-point Likert scale (SAQ), developed by Caballo et al. (2010), was used to measure Anxiety in participants which has alpha reliability ($\alpha = .91$).

Descriptive Statistics of Demographic Characteristics

The sample consisted of 68.5% males and 31.5% females, with 51.7% from nuclear families. Participants were enrolled across various educational levels, ranging from intermediate to PhD, with 53.3% attending college and 47.7% attending university. The mean time spent on social media was 2.67 hours per day ($SD = 1.28$), with 32.9% spending 4–6 hours daily. TikTok (24.8%) and Instagram (22.1%) were the most frequently used platforms. Most participants used social media in the evening (25.5%) or at night (36.3%). Additionally, 62.4% reported using social media alone, with a mean social media usage context score of 4.18 ($SD = 1.30$).

Results

In this study, four statistical analyses were performed. To assess the scales' internal consistency, a reliability investigation was first conducted. Then, to examine gender differences, an independent samples t-test was employed. The Pearson correlation analysis was used to explore the relationship between social media addiction and social Anxiety. Lastly, simple linear regression analysis was conducted to establish how well Social Media Addiction predicted the level of Social Anxiety.

Table 1: Descriptive Statistics, Reliability Coefficients, and Pearson Product Moment Correlation for Study Variables (N=149)

S.No	Variable	N	M	SD	Range		α	Skewness	I	2
					Min	Max				
1	SMA	29	74.18	28.93	29	145	.92	.834 (.199)	-	.45**
2	SA	30	58.10	15.90	28	115	.91	1.183 (.199)	-	-

Note: SMA = Social Media Addiction; SA = Social Anxiety; SD = Standard Deviation; α = Cronbach's Alpha (reliability coefficient), r = Product Moment Correlation.

The above table shows the mean score of SMA and SA along with excellent alpha reliability ranged between ($\alpha = .92$) and ($\alpha = .91$). The Skewness values were (SMA=.834) and (SA=1.183) indicated that both variables had relatively symmetrical score distributions. Pearson correlation analysis revealed significant positive correlation between social media addiction and social anxiety ($r = .45$, $p < .001$), indicating that higher level of social media addiction leads to greater social anxiety.

Table 2: Independent Samples t-Test Results of group differences by Gender (N = 149)

Variable	Male (n=102)		Female (n=47)		t(147)	P	95% CI		Cohen's d
	M	SD	M	SD			LL	UL	
SMA	79.07	29.97	63.55	23.50	3.42	.001	6.54	24.50	0.55
SA	58.68	15.03	56.82	17.76	.66.1	.510	-3.69	7.41	0.12

Note: CI=Confidence interval, LL: Lower limit, UL: Upper limit, * $p < .01$, ** $p < .001$

An independent sample t-test was run on the data to examine gender differences on social media addiction and social anxiety. Males reported significantly higher social media addiction than females' $t(147) = 3.42$, $p = .001$. Cohen's d value (0.55) indicated medium effect. No significant

gender differences were found for social anxiety, $t(147) = 0.66$, $p = .510$, Cohen's $d = 0.12$, reflecting a negligible effect.

Table 3: Independent Samples t-Test Results of group differences by types of Institutes

Variable	College ($n=78$)		University ($n=71$)		$t(147)$	P	95% CI		Cohen's d
	M	SD	M	SD			LL	UL	
SMA	65.29	16.03	83.94	36.09	-4.00	.000	27.88	-9.41	-0.68
SA	59.96	16.49	59.05	15.09	.150	.098	-1.23	9.04	0.06

Note: CI=Confidence interval, LL: Lower limit, UL: Upper limit, * $p < .01$, ** $p < .001$

An independent samples t-test compared college and university students on social media addiction and social anxiety. University students reported significantly higher social media addiction ($M = 83.94$, $SD = 36.09$) than college students ($M = 65.29$, $SD = 16.03$), $t(147) = -4.00$, $p < .001$, Cohen's $d = 0.68$, indicating a medium effect size. No significant difference was found in social anxiety, $t(147) = 0.15$, $p = .098$, Cohen's $d = 0.06$, indicating a negligible effect.

Table 4: Simple linear Regression analysis on Social Media Addiction as Predictor of Social Anxiety (N=149)

Variable	B	SE	β	95% CI		P
				LL	UL	
Constant	39.89	3.230		33.55	46.22	.000
SMA	0.25	0.041	.45	.16	.33	.000
R^2	.20					
F	37.55					

Note: $N=149$. *** $p < .001$

The regression analysis indicated that Social Media Addiction (SMA) significantly predicted Social Anxiety, explaining 20% of the variance ($R^2 = 0.20$) in the outcome variable. The model was statistically significant, $F(147) = 37.55$, $p < .001$. The positively standardized coefficient ($\beta = 0.45$, $p < .001$) suggested that higher levels of social media addiction were associated with increased social anxiety among participants.

Discussion

This study explored the relationship between social media addiction and social anxiety among students in Balochistan. The findings indicate a strong association between higher levels of social media addiction and increased social anxiety, consistent with prior research (Elhai et al., 2016; Vannucci et al., 2017).

The study confirmed the first hypothesis which was about gender differences in social media addiction and social anxiety. This study showed that male students had higher levels of social media addiction, as found by Kaura et al. (2020) and Smith and McDonald (2020). In contrast, Marino et al. (2018) reported that experienced more addiction and anxiety. Regional or cultural influences could be the reason behind these differences which is why it's necessary to understand the context when studying digital behaviors and mental health of male and female

The second hypothesis was strongly supported by the data since it found social media addiction has a large influence on social anxiety. The results of regression analysis pointed out that much of the variation in social anxiety was explained by social media addiction, in line with both Keles et

al. (2020) and Shensa et al. (2018). The results of this research are in line with the theory of Social Cognition (Bandura, 1986), which argues the behaviors such as social media addiction are reinforced by environmental feedbacks. Social media in this case can alleviate anxiety temporarily due to positive reward (likes and comments) but eventually worsen it. Likewise, Social Anxiety Theory (Leary & Kowalski, 1995) illustrates that students with social anxiety can use social media as the coping strategy to escape face-to-face interaction but eventually, it can lead them to become more socially anxious than previously."

Moreover, Research also found that university students reported higher addiction to social media, compared to college students. Fernández-Martínez et al. (2023) support this result by arguing that because university life offers more freedom, students tend to use social media more frequently. Yet, there were no major distinctions in social anxiety between college and university students which suggests that both groups are affected in the same manner by social media.

Furthermore, the research results show that we should pay attention to social media addiction and its effect on mental health, especially in Balochistan which lacks proper mental health care. The results suggest that interventions should be provided to help people form good online habits and gain knowledge about mental health. More studies should look into how culture, society and institutions play a role in linking social media addiction to social anxiety.

Conclusion

This study points out that excessive use of social media has an adverse impact on causing social anxiety among students in Balochistan. According to the results, problems with social media addiction can trigger even more social anxiety, proving that too much screen time leads to more mental health issues. Since students are spending more time on social media, it is evident they need help in handling their digital activities. The main focus in the future should be on adding digital literacy and mental health education to school programs, mainly where educational resources are scant such as in Balochistan. Practicing healthier ways to use the internet can help young people deal with the challenging effects digital technology has on mental health.

Implications

The study points out that social media addiction needs to be addressed since it can affect social anxiety. Digital literacy programs should be part of the regular curriculum in schools to encourage healthy Internet usage. Encouraging students to talk about social media and mental health can help them handle their anxiety and improve their well-being.

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