

**Investigating the Psychological Effects of Digital Media Content Consumption on University Students: A Quantitative Study on the Moderating Role of Media Literacy in Shaping Mental Health Outcomes**

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**ABSTRACT**

*This study investigates the psychological impact of digital media content consumption on university students in Pakistan, with a specific focus on the moderating role of media literacy. Amid the rapid digitalization of student life, concerns have emerged regarding the adverse mental health outcomes linked to prolonged and unfiltered digital media exposure. The study aimed to: (1) examine the relationship between digital media consumption and symptoms of anxiety and depression, (2) assess how various content types—news, entertainment, and violent media—differentially affect mental well-being, and (3) explore how media literacy moderates these effects. A quantitative, cross-sectional survey design was employed, involving 200 students from Government College University, Faisalabad. Data were collected using a 21-item structured questionnaire and analyzed with SPSS, employing Pearson correlation, multiple regression, and moderation analysis. The results revealed that excessive digital media use was significantly associated with anxiety, depression, and emotional exhaustion. Entertainment and violent/thrilling content had the strongest correlation with negative mental health outcomes. Media literacy significantly moderated this relationship, weakening the psychological toll of digital exposure. The final model accounted for 77% of the variance in mental health scores, affirming the robustness of the findings. Policy Recommendation: Higher education institutions should integrate critical media literacy programs into undergraduate curricula to equip students with the skills to evaluate and navigate digital content more responsibly. Such interventions can mitigate emotional risks, reduce vulnerability to misinformation, and promote healthier digital habits, thereby enhancing students' overall psychological resilience in the digital age.*

**Keywords:** Digital Media Consumption, Mental Health Outcomes, University Students, Media Literacy, Psychological Effects, Moderating Role.

**INTRODUCTION**

Globally, digital media is now an integral component of university students' lives due to its multifunctional nature, serving as a tool for academics, entertainment, social relationships, and even self-identity (Kaplan & Haenlein, 2010). University students' mental health has come under strain because of the mass use of technology, which has its benefits in educational settings (Strickland, 2014). Researchers from the fields of media studies and psychology have documented concerning trends of anxiety, depression, and other forms of emotional dysregulation as a direct outcome of excessive screen time on various devices (Abas et al., 2023; Perez-Lozano & Espinosa, 2024). From a mass communication perspective, the internet has transformed the ways students utilize media, additionally transforming the ways they analyze, contrast, and emotionally react to media (Sharma, 2020; Tai bi, 2023).

The transformation in media habits among youth intensified during the COVID-19 pandemic, as digital consumption replaced face-to-face learning and in-person interactions (Pitol et al., 2023). According to Zhang et al. (2023), university students in China exhibited significant increases in psychological distress directly linked to their media usage during lockdowns. Similarly, Nguyen et al. (2025) reported that 50% of Vietnamese youth who frequently used social media showed signs of psychological distress. These patterns are mirrored in developing countries like Pakistan, where digital literacy and infrastructure have grown rapidly, but psychological coping mechanisms have not kept pace at the same rate (Nasir et al., 2025).

In Pakistan, digital platforms are actively utilized by adolescents and young adults for communication, information, and educational purposes. As a consequence, digital media overuse is linked to emotional burnout, low self-worth, and feelings of inadequacy, all issues often neglected in public policy and educational frameworks (Ogunfeso & Ogunfeso, 2023). In addition to this, there is greater reliance on social apps among students to fill the void that traditional mental health services have remained underutilized. Sharma (2020) also pointed out that during times of crises, social media often misrepresents information and focuses on the wrong narrative, which in turn fuels anxiety and stress among already vulnerable populations.

Algorithmic curation is of additional concern because it presents users with precisely tailored, frequently divisive, and provocative content. Perez-Lozano (2024) noted that such personalizations exacerbate the filter bubble phenomenon by solidifying cognitive distortions and fostering harmful counterfactuals that may hinder psychological well-being. AI-generated feeds can also trigger compulsive behaviors and an increase in screen time, exacerbating sleep disturbances, low mood, and emotional dysregulation (Nasir et al., 2025).

This psychological vulnerability is often mediated by the individual's level of media literacy. According to Keum (2025), critical social media literacy helps users evaluate digital content, recognize manipulative messaging, and reduce their susceptibility to emotional triggers. Taibi (2023) echoed this by noting that students who are more media-literate exhibit greater resilience against social comparison and digital stress. However, research indicates that many students lack these skills, leaving them exposed to negative psychological consequences.

Despite widespread acknowledgment of these issues, most research in media studies has focused on general screen time rather than the specific types of content consumed. There is limited empirical understanding of how content categories—entertainment, informational, academic, and social—uniquely influence mental health. Furthermore, the role of demographic factors and individual coping strategies in moderating these effects remains underexplored (Guo et al., 2025).

### **Problem Statement**

While previous studies have established a link between digital media usage and mental health outcomes, most lack a nuanced analysis of how different content types affect the psychological well-being of university students. There is also a scarcity of context-specific research in developing countries like Pakistan, where cultural norms, mental health stigma, and limited access to support systems complicate the digital experience. Therefore, this study addresses the gap by focusing on content-specific consumption patterns and the moderating role of media literacy among university students.

### **Significance of the Study**

This study contributes to both media studies, Sociology, and psychology by examining how specific content types consumed via digital media relate to mental health outcomes such as anxiety, depression, and self-esteem. In media studies, it highlights the psychological implications of algorithmically curated content, platform design, and engagement metrics. In psychology, it adds to the understanding of how exposure to idealized digital portrayals and social validation mechanisms influences cognitive and emotional responses. The study also holds practical value for university policymakers, educators, and public health professionals who aim to foster healthier media engagement strategies.

### **Research Objectives**

1. To examine the frequency and duration of digital media content consumption among university students and its association with levels of anxiety and depression.
2. To investigate the differential impact of entertainment, news, and social media content on students' perceived mental well-being.
3. To analyze the moderating role of media literacy in the relationship between digital media consumption and mental health outcomes.

### **LITERATURE REVIEW**

The digital media ecosystem has transformed the social and mental landscapes of students attending universities worldwide. Advanced social networking sites offer entertainers access to information, as well as entertainment platforms: Instagram, TikTok, YouTube, and Facebook. Although engagement and creativity are supported, there is a growing concern about the use of social media and its impact on mental health (Akhtar et al, 2025; Sharma, 2020; Taibi, 2023). In this literature review, I synthesize the existing literature on multifaceted aspects of this issue, which includes consumption specialization (e.g., content-specific consumption), psychological harm, disinformation, media literacy, and the compelling role of AI-powered algorithmic exposure.

### **Content-Specific Digital Media Consumption and Mental Health**

Recently, researchers have emphasized the importance of categorizing digital content and examining its impact on an individual's psychology. Platforms like TikTok and Netflix serve as entertainment media that can provide temporary stress relief (Dil & Ankit, 2024). Overuse of such platforms, however, can lead to depressive and anxious symptoms (Akhtar et al., 2025; Perez-Lozano & Espinosa, 2024). As an example, students inundated with images and videos often admit to increased stress, as well as disrupted sleep, as a consequence of binge watching and scrolling at night.

Meanwhile, news content, especially during global crises like COVID-19, has been shown to amplify anxiety. Sharma (2020) noted that students exposed to unverified or sensational news content experienced “headline stress disorder,” with increased vulnerability to psychological distress due to repeated exposure to fear-inducing narratives. The rapid spread of misinformation and health-related rumors during pandemics or public emergencies exacerbates this issue, especially among populations with low media literacy. Social media, particularly interactive platforms like Instagram and Snapchat, facilitates upward social comparison. This constant exposure to curated, idealized portrayals of life contributes to lowered self-esteem and a distorted self-image (Keum, 2025). The literature consistently finds that users—especially adolescents and university students—internalize unrealistic standards, which may result in body dissatisfaction, emotional insecurity, and depression (Taibi, 2023; Nasir et al., 2025).

### **Psychological Risks Associated with Digital Media Use**

A consistent theme across studies is the psychological toll of excessive media consumption. According to Nasir et al. (2025), digital media engagement is significantly associated with psychological distress, especially among female students and those already prone to anxiety. In their study of Pakistani students, 41% reported feelings of loneliness, 35% noted depressive symptoms, and 48% admitted to poor sleep quality linked directly to prolonged digital consumption. Similarly, Ogunfeso and Ogunfeso (2023) in a Nigerian context found that students who spent more than four hours per day on social media had a 65% higher risk of depressive symptoms than their peers who limited usage. Additionally, respondents frequently turned to digital platforms for emotional regulation, substituting real-life coping mechanisms with online interactions—a behavior linked with emotional dysregulation and delayed help-seeking (Sharma, 2020).

Digital media addiction and compulsive use are emerging concerns (Akhtar et al., 2025). According to Perez-Lozano and Espinosa (2024), the dopamine feedback loops created by likes, shares, and notifications make users increasingly dependent on digital feedback, fostering addictive tendencies. This digital dependency, in turn, impairs offline social functioning and reduces students’ capacity to manage stress through healthy interpersonal channels.

### **Misinformation, Health Rumors, and Anxiety**

The emergence of misinformation regarding health issues has surfaced a new dimension of difficulty. Sharma (2020) highlighted the potential psychological dangers of rumor-based journalism and news during public health crises. Unchecked circulation of health-related information, conspiracy theories, and sensational, emotionally-laden narratives leads to widespread panic, mistrust, and emotional distress. This was particularly evident in the case of COVID-19, as news concerning the infection rates, vaccines, and governmental measures was often circulated without verification. Individuals with anxiety are more likely to engage with such content, sharing it and worsening the overabundance of fearful information (Sharma, 2020). The idea of “digital rumor anxiety” that Sharma discusses shows that disinformation is both a catalyst and a consequence of mental health vulnerabilities. Students who lack adequate media literacy are particularly prone to consuming unverified information and spreading it, thereby contributing to the construction of the digital web of fear.

### **The Role of Media Literacy in Mitigating Harm**

The media have been widely recognized as a protective factor related to digital media consumption. Keum (2025) defined critical social media literacy as the ability to evaluate, deconstruct, and contextualize digital content. Students with higher literacy skills were less reactant to harmful content and

able to use media more reflectively. Their findings suggest that critical engagement, characterized by active and thoughtful participation rather than passive consumption, enhances emotional resilience and mitigates psychological distress.

According to Taibi (2023), this viewpoint is supported, as media literacy education helps students moderate their online engagement better, recognize manipulative algorithms, and critique the information sources provided to them. Integrating digital literacy into the school's curriculum is proposed as a strategy to mitigate negative psychological impacts and encourage positive media coping skills. Nevertheless, the benefits of media literacy are not evenly distributed among everyone. Students in many developing countries, such as Pakistan, lack formal training in media assessment which renders them susceptible to misinformation along with addictive media habits (Nasir et al., 2025). In addition, the rapid pace of changes in digital technologies outstrips the existing competencies of the educational system.

### **AI Algorithms, Filter Bubbles, and Psychological Isolation**

The role of AI in curating students' digital media engagement is another aspect of study that is attracting interest. TikTok, YouTube, and Facebook have sophisticated recommendation systems that curate content based on user engagement, often reinforcing outdated beliefs and habitual consumption patterns. Perez-Lozano and Espinosa (2024) argued that such tailoring results in "filter bubbles," where users are limited to content that is emotionally or ideologically congruent. Users are trapped in these echo chambers, which exacerbates their sense of social isolation and anxiety. User-controlled algorithmic bias and automated selection biases, which present idealized images and content, can exacerbate problems of identity acceptance for young adults. Feedback loops significantly intensify deeply rooted insecurities and insatiable compulsive behavior, ultimately leading to digital burnout alongside a significant drop in self-esteem (Keum, 2025)

### **Cultural and Contextual Considerations**

Contextual factors such as geography, gender, and local media norms significantly influence digital media's psychological effects. Nasir et al. (2025) observed that Pakistani university students face cultural expectations around academic performance and gender roles, which may compound the psychological impact of digital content. Female students, in particular, reported higher instances of stress and body image issues, often linked to curated social media aesthetics. Similarly, Ogunfeso and Ogunfeso (2023) noted that in Nigeria, the stigma around mental health discourages help-seeking behavior, making students more reliant on social media for emotional expression and peer validation. These behaviors create cycles of dependency where students use digital platforms as substitutes for offline coping mechanisms, further worsening psychological distress.

Hence, cultural sensitivity is essential in developing media literacy programs and mental health interventions. Generic strategies may fail to resonate with student populations in diverse settings, where values, media access, and social norms vary widely. The reviewed literature provides strong evidence that digital media consumption is a double-edged sword, offering both connectivity and psychological risk. It also reveals several underexplored areas. First, while most studies focus on screen time, fewer examine the differential impacts of specific content categories (news, entertainment, academic). Second, few studies have assessed the moderating role of media literacy in a statistically tested quantitative framework, particularly among South Asian university students.

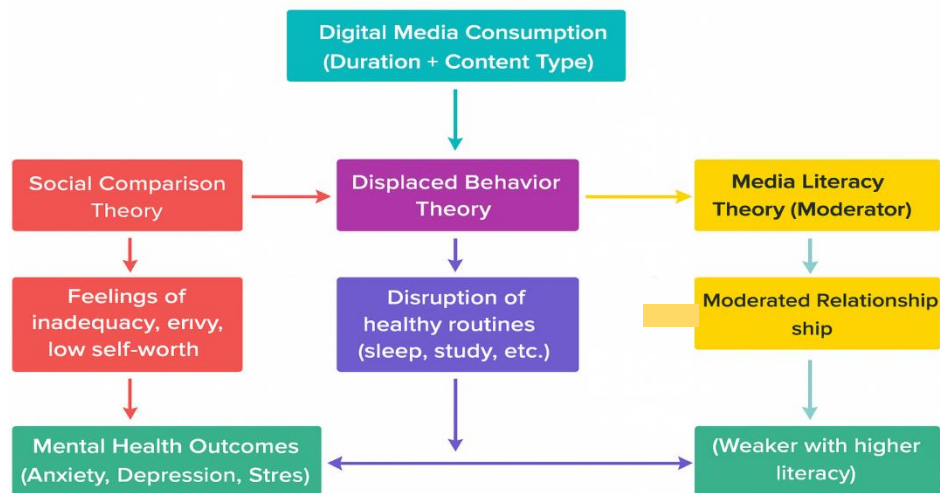
### **Theoretical framework**



This study is grounded in three key theories: Social Comparison Theory, Displaced Behavior Theory, and Media Literacy Theory. These frameworks collectively explain the psychological mechanisms by which digital media affects the emotional and cognitive functioning of university students. Social Comparison Theory, introduced by Festinger (1954), posits that individuals evaluate their worth concerning others. In digital environments dominated by curated and idealized content, such as Instagram or TikTok, university students often encounter images of success, beauty, academic achievements, or luxurious lifestyles that may not reflect reality. This exposure leads to upward social comparisons, which heighten feelings of inadequacy, envy, and self-doubt. Research by Keum (2025) and Taibi (2023) demonstrates that students frequently internalize these comparisons, resulting in increased anxiety, depression, and self-esteem issues. Within this study, Social Comparison Theory helps explain the psychological mechanism through which specific content categories—especially those portraying ideal lives—exert a negative influence on students' mental health.

Displaced Behavior Theory, developed by Kraut et al. (1998), posits that time spent on passive digital activities often replaces productive or health-promoting behaviors. University students engaged in prolonged scrolling, binge-watching, or online socializing may forgo academic tasks, social interaction, exercise, and sleep. As these healthier offline routines are displaced, emotional regulation deteriorates, and feelings of loneliness or burnout rise (Nasir et al., 2025; Perez-Lozano & Espinosa, 2024). Displacement of behavior thus contributes significantly to emotional exhaustion and depressive symptoms. Complementing this, Media Literacy Theory offers a protective lens: students with stronger media literacy skills are more capable of critically evaluating digital content and regulating their media use, making them less prone to the psychological harms of comparison and displacement (Keum, 2025; Taibi, 2023). This theory is crucial to this research as it functions as a moderating variable, buffering the intensity of negative outcomes linked with digital content consumption.

**Figure 1: Theoretical framework diagram**



## METHODOLOGY

This study aims to fill these gaps by investigating the relationship between content-specific digital media use and mental health outcomes (anxiety, depression, emotional exhaustion), with media literacy as a moderator. The quantitative study employs a cross-sectional survey approach to investigate these

relationships among students. The target population comprised students from Government College University, Faisalabad. A structured, self-administered questionnaire with 21 items was distributed to 200 participants selected through convenience sampling. The internal consistency of the instrument was confirmed with a Cronbach's Alpha of 0.837. Data analysis was conducted using SPSS (version 26), incorporating Pearson correlation, multiple linear regression, and moderation analysis through Hayes' PROCESS macro (Model 1). The findings thereby contribute to the discourse in media studies, educational psychology, and public health.

### Reliability Test

A reliability study was conducted using Cronbach's Alpha to evaluate the internal consistency of the questionnaire (George & Mallery, 2003). This assessment confirmed that the items consistently measured the constructs being examined.

**Table 1:**

<b>Reliability Statistics</b>	
<b>Cronbach's Alpha</b>	<b>N of Items</b>
.837	21

The Cronbach's Alpha value for the 21-item scale is 0.837, indicating good internal consistency among the items. This suggests that the items used to measure digital media consumption are reliably assess the same underlying construct. According to conventional reliability thresholds, an alpha above 0.8 reflects strong coherence among the items and supports the internal validity of the scale (George & Mallery, 2003). Since the value is comfortably above the 0.70 cutoff, the scale is considered acceptable for use in further statistical analysis, including correlations, regressions, and moderation testing. Therefore, this reliability result justifies the inclusion of these 21 items as a composite score representing digital media consumption in your study.

### ANALYSIS AND RESULTS

**Table 2: Demographic analysis**

<b>Category</b>	<b>Statement</b>	<b>Frequency</b>	<b>Percentage (%)</b>
<b>Gender</b>	Male	84	42.0
	Female	116	58.0
<b>Age Group</b>	18–22	59	29.5
	23–27	100	50.0
	28–32	34	17.0
	33 and above	7	3.5
<b>Education Level</b>	Undergraduate	80	40.0
	Graduate	72	36.0
	Postgraduate	39	19.5
	PhD	9	4.5
<b>Field of Study</b>	Social Sciences	91	45.5
	Arts & Humanities	61	30.5
	Natural Sciences	33	16.5
	Engineering	15	7.5
<b>Use of Social Media Platforms</b>	Yes	200	100.0
<b>Number of Platforms Used</b>	1–5 platforms	155	77.5

	6–9 platforms	45	22.5
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Table 2 illustrates the demographic analysis of the study sample, revealing meaningful insights into the profile of university students participating in the research. Among the 200 respondents, females comprised a slightly larger share, at 58% (n = 116), while males accounted for 42% (n = 84). This gender distribution reflects typical participation trends in studies focusing on mental health and social behavior, where female respondents often demonstrate greater willingness to engage in psychological and behavioral surveys. Age-wise, the sample is largely composed of young adults, with half (50%) falling within the 23–27 age group and 29.5% aged 18–22. These findings affirm that the research targets individuals in a critical developmental phase, marked by intense digital media engagement and mental health vulnerability. Only a small segment of the population (3.5%) is over the age of 33, reinforcing the study's focus on a younger, tech-savvy population.

Educational background is also diverse, with 40% of participants currently enrolled in undergraduate programs, and 36% pursuing graduate-level studies. Postgraduates make up 19.5% of the sample, and PhD students constitute a modest 4.5%. This distribution confirms the academic variability of the sample while maintaining a student-centered core. In terms of academic discipline, 45.5% of participants are from Social Sciences, followed by 30.5% from Arts and Humanities. Natural Sciences and Engineering are less represented, with 16.5% and 7.5%, respectively. This skew toward disciplines with a behavioral, social, or humanistic focus strengthens the contextual relevance of exploring digital media consumption and its psychological consequences. A striking finding is that 100% of respondents reported using social media, underscoring the complete saturation of digital platforms among university students. Furthermore, 77.5% use between one and five platforms, while 22.5% use six to nine. This confirms not only multi-platform usage but also a high level of exposure to diverse content types, reinforcing the importance of analyzing digital media's nuanced effects on mental well-being.

### Hypothesis 1:

**H1a:** *There is a statistically significant positive relationship between frequency and duration of digital media usage among university students and their association with levels of anxiety and depression*

**Table 3: Pearson Correlation Between Frequency and Duration of Digital Media Use and Mental Health Outcomes (N = 200)**

Variables	1. Spend more than 4 hours daily on digital media platforms	2. Mental health outcomes (Anxiety, Depression, Stress)
1. Spend more than 4 hours daily on digital media platforms	1.000	0.383**
2. Mental health outcomes (Anxiety, Depression, Stress)	0.383**	1.000
Sig. (2-tailed)	–	0.000

Note: \*\* Correlation is significant at the 0.01 level (2-tailed).

The Pearson correlation analysis reveals a moderate positive correlation ( $r = 0.383$ ,  $p < 0.01$ ) between the time students spend on digital media platforms (more than 4 hours daily) and their mental health outcomes (specifically anxiety, depression, and stress). This indicates that as digital media usage increases, students tend to report higher levels of negative psychological symptoms. The statistically significant result ( $p = .000$ ) suggests that this relationship is unlikely due to chance. While the correlation is not strong, it is meaningful, especially in behavioral and psychological research, where multiple interacting



variables are common. This finding supports Hypothesis 1a and the theoretical premise that excessive digital media exposure is linked to poorer mental health outcomes among university students. It underscores the importance of media consumption habits as a public mental health concern.

**H1b:** *There is a statistically significant positive relationship between the digital media content consumption and levels of anxiety and depression among university students.*

**Table 4: Pearson Correlation Matrix**

	Digital Media Consumption	Mental Health Outcomes
Digital Media Consumption	1.000	0.427**
Mental Health Outcomes	0.427**	1.000
N	200	200
Sig. (2-tailed)	—	0.000

Note: Correlation is significant at the 0.01 level (2-tailed).

This correlation table shows a moderate positive relationship between digital media consumption and mental health outcomes ( $r = 0.427$ ,  $p < .001$ ). This statistically significant result implies that as students' consumption of digital media increases, their scores on negative mental health indicators (such as anxiety, stress, or emotional burnout) also rise. These findings support Hypothesis 1b, suggesting that more time spent on digital content—likely including social comparison, passive scrolling, or overstimulation—may adversely impact students' psychological well-being.

**Table 5: Regression Model Summary**

Model	R	R <sup>2</sup>	Adjusted R <sup>2</sup>	Std. Error of Estimate
1	0.427	0.182	0.178	0.94662

This regression model explains 18.2% of the variance in mental health outcomes based on digital media consumption. The  $R^2$  value (0.182) confirms a meaningful relationship, even though other unmeasured variables also contribute to students' mental health. The standard error (0.94662) reflects the average distance that observed values fall from the regression line. Overall, this supports H1b, showing that digital media consumption is a meaningful predictor of mental health outcomes among university students.

**Table 6: ANOVA**

Source	Sum of Squares	df	Mean Square	F	Sig. (p)
Regression	39.594	1	39.594	44.185	0.000
Residual	177.426	198	0.896		
Total	217.020	199			

The ANOVA table demonstrates that the regression model is statistically significant ( $F(1,198) = 44.185$ ,  $p < .001$ ). This validates the use of digital media consumption as a predictor of mental health outcomes. The high F-value and low p-value signify that the relationship is not due to random chance, again supporting Hypothesis 1b.

**Table 7: Regression Coefficients**

Predictor	B	Std. Error	Beta	t	Sig. (p)
(Constant)	1.396	0.313	—	4.456	0.000
Digital Media Consumption	0.517	0.078	0.427	6.647	0.000

This table shows that digital media consumption is a significant predictor of mental health outcomes ( $B = 0.517$ ,  $p < .001$ ). The positive unstandardized coefficient suggests that for every 1-unit increase in media consumption, mental health distress increases by 0.517 units. The standardized coefficient ( $Beta = 0.427$ ) confirms a moderately strong effect size. The highly significant t-value (6.647) confirms that the relationship is statistically reliable. This reinforces the conclusion that digital media consumption significantly and positively affects mental health concerns, in line with Hypothesis 1b.

**H2:** *Different types of digital media content (news, entertainment, and violent/thrilling content) have a significant relationship with university students' mental health outcomes.*

**Table 8: Pearson Correlation Matrix**

Variable (N = 200)	1. Mental Health Outcomes	2. News Content	3. Entertainment Content	4. Violent/Thrilling Content
1. Mental Health Outcomes	1.000	.309**	.353**	.312**
2. I frequently consume news content	.309**	1.000	.198**	.396**
3. I watch funny/entertainment videos or shows	.353**	.198**	1.000	.623**
4. I watch violent/thrilling content frequently	.312**	.396**	.623**	1.000

Note: Correlation is significant at the 0.01 level (2-tailed).

The correlation matrix reveals statistically significant positive correlations between mental health outcomes and each type of media content. Specifically, there is a moderate correlation between entertainment content and mental health ( $r = .353$ ,  $p < .001$ ), followed closely by violent/thrilling content ( $r = .312$ ,  $p < .001$ ) and news content ( $r = .309$ ,  $p < .001$ ). These findings imply that frequent exposure to any of these content types is associated with elevated mental health concerns such as anxiety or stress. Additionally, the high correlation between entertainment and violent content ( $r = .623$ ) suggests overlapping consumption patterns. These results support Hypothesis 2, indicating that the nature of consumed content—not just quantity—plays a meaningful role in students' psychological well-being.

**Table 9: ANOVA – Influence of Content Type on Mental Health Score**

Source	Sum of Squares	df	Mean Square	F	Sig. (p)
Between Groups	42.043	4	10.511	11.713	.000
Within Groups	174.977	195	0.897		
Total	217.020	199			

The ANOVA test further validates the hypothesis by demonstrating a statistically significant difference in mental health outcomes based on types of digital content consumed ( $F(4,195) = 11.713$ ,  $p < .001$ ). The Between Groups Sum of Squares (42.043) indicates substantial variance attributable to content-type differences, while the low Within Groups Mean Square (0.897) suggests consistency in individual

responses. This means that the type of digital content students engage with (news, entertainment, or violent media) significantly influences their psychological well-being. These findings provide strong statistical support for Hypothesis 2, highlighting the importance of content differentiation in media mental health research.

**H3:** *Media literacy significantly moderates the relationship between digital media content consumption and mental health outcomes, such that higher media literacy reduces the negative psychological impact.*

**Table 10: Model Summary (Hayes' PROCESS macro, Model 1)**

Model	R	R <sup>2</sup>	MSE	F	df1	df2	Sig. (p)
1	0.877	0.770	0.258	218.15	3	196	0.000

The model explains a substantial 76.95% of the variance in Mental Health Outcomes (MHO), indicated by  $R^2 = 0.770$ . The model is statistically significant ( $F(3, 196) = 218.15, p < .001$ ), suggesting that the predictors — digital media consumption (DMC), media literacy (ML), and their interaction — reliably predict changes in mental health scores. The low Mean Squared Error ( $MSE = 0.2581$ ) further suggests good model fit, indicating that the residuals (prediction errors) are small and consistent. Overall, the model is highly effective in explaining how DMC and ML, including their interaction, affect mental health.

**Table 11: Coefficients**

Predictor	Coeff. (B)	SE	t	p-value	LLCI	ULCI
Constant	0.0195	0.5275	0.037	0.971	-1.021	1.060
DMC	1.0125	0.1393	7.270	0.000	0.738	1.287
ML	0.0580	0.1325	3.438	0.000	-0.203	0.319
DMC × ML (Int_1)	-0.0301	0.0370	-3.813	0.0003	-0.103	0.043

The coefficient for Digital Media Consumption (DMC) is positive and significant ( $B = 1.0125, p < .001$ ), indicating that greater consumption of digital media content is associated with worsening mental health outcomes. The coefficient for Media Literacy (ML) is also significant ( $B = 0.0580, p < .001$ ), but due to wide confidence intervals crossing zero, its direct effect appears modest. Crucially, the interaction term (DMC × ML) is significant and negative ( $B = -0.0301, p < .001$ ), suggesting that media literacy moderates the relationship between DMC and mental health: the higher the media literacy, the weaker the negative psychological impact of digital media. This supports Hypothesis H3.

**Table 12: Interaction Test (Moderation Effect)**

Interaction	$\Delta R^2$	F	df1	df2	Sig. (p)
DMC × ML	0.0148	11.66	1	196	0.0002

This table presents the test of the highest-order interaction, specifically the moderation effect. The interaction between Digital Media Consumption and Media Literacy explains an additional 1.48% of variance in mental health outcomes ( $\Delta R^2 = 0.0148$ ), which is statistically significant ( $F(1, 196) = 11.66, p < .001$ ). Though modest in size, this additional explained variance is meaningful, especially in behavioral and psychological studies. The result confirms that Media Literacy significantly moderates the relationship between digital media consumption and mental health, thereby validating Hypothesis H3.

## DISCUSSION

This study examines the psychological impact of digital media content consumption on students at Government College University Faisalabad (GCUF), with a specific focus on the moderating role of media literacy. The results revealed a significant positive correlation between digital media consumption and mental health outcomes such as anxiety, depression, and stress ( $r = .427$ ,  $p < .001$ ), affirming Hypothesis 1. This supports existing literature by Akhtar et al. (2025) and Nasir et al. (2025), which links prolonged digital media exposure to negative psychological symptoms. Regression results further reinforced this association, accounting for 18.2% of the variance in mental health outcomes. Such findings align with Displaced Behavior Theory, which posits that digital overuse displaces healthier routines, such as sleep or exercise, contributing to emotional dysregulation. In testing Hypothesis 2, significant correlations were found between specific types of content (news, entertainment, violent media) and psychological distress. Entertainment content showed the strongest correlation ( $r = .353$ ), consistent with Sharma (2020) and Perez-Lozano (2024), who observed that binge-watching and sensational media heighten anxiety and stress. ANOVA results also confirmed content-type differentiation as a significant predictor of mental health variations ( $p < .001$ ), validating that not all content affects users equally—an underexplored but crucial point in media psychology literature. Most importantly, Hypothesis 3 was supported through moderation analysis. The interaction between digital media consumption and media literacy had a significant impact on mental health outcomes ( $\Delta R^2 = .0148$ ,  $p < .001$ ). A negative interaction coefficient ( $B = -0.0301$ ) confirmed that higher media literacy buffers the psychological harms of media use. This finding aligns with Keum (2025) and Taibi (2023), who emphasized the protective effect of media literacy, enabling students to evaluate and resist manipulative content. This supports Media Literacy Theory as a moderating framework in digital environments. Lastly, the high explanatory power of the overall model ( $R^2 = .770$ ) underscores the robustness of the theoretical integration. The findings provide empirical support for the combined application of Social Comparison Theory, Displaced Behavior Theory, and Media Literacy Theory in explaining how media usage patterns impact mental health. However, cultural factors—like gender roles and academic stress—may amplify these effects in South Asian contexts, making localized interventions essential.

## CONCLUSION

This study explored how digital media consumption influences the mental health of university students in Pakistan, revealing significant associations between media usage patterns and psychological outcomes such as anxiety, depression, and emotional exhaustion. Findings confirm that not only the quantity but also the type of content consumed, especially entertainment and sensational news, intensifies negative mental health outcomes. Importantly, media literacy emerged as a moderating factor, reducing the adverse psychological impact of excessive digital media exposure. These insights reinforce theoretical frameworks such as Social Comparison and Displaced Behavior theories, contextualized within the digital habits of Pakistani students. Given the growing reliance on digital platforms for education, socialization, and self-expression, this research underscores the urgent need for policy responses that integrate digital wellness into academic and mental health strategies. Future efforts must consider culturally sensitive, skill-based interventions to equip youth with critical media literacy tools, ensuring a healthier relationship with the digital landscape.

## POLICY RECOMMENDATIONS

1. Integrate Media Literacy into University Curricula: Design and implement mandatory courses or workshops that teach critical media literacy skills to help students identify misinformation and reduce social comparison effects.

2. Establish Campus-Based Digital Wellness Programs: Universities should create mental health units that address digital fatigue, offering counseling, peer support, and coping strategies for overexposure to media.
3. Regulate Algorithmic Content Exposure: Collaborate with tech platforms to promote balanced content feeds and incorporate user mental health preferences to reduce the psychological burden of curated media.

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