

# Annual Methodological Archive Research Review

<http://amresearchreview.com/index.php/Journal/about>

Volume 3, Issue 4 (2025)

## The Psychological Impact of Digital Media Consumption on Mental Health, A Case Study of Undergraduate Students in Pakistan

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### Article Details

### ABSTRACT

**Keywords:** Digital Media, Mental Health, Psychological Impact, Media Consumption

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The 21<sup>st</sup> century saw digital media taking a central part in the life of youth, including university students in Pakistan, affecting their cognitive and social interaction and also emotional well-being. The psychological influence of viewing digital media on mental well-being in undergraduate students across major Pakistani cities is examined herein. The aim is to investigate patterns of use, measure mental health impacts (e.g., depression, anxiety, stress, and self-esteem), and examine the students' own attitude and coping processes for the use of digital media. Using a mixed-methods approach, the study married quantitative questionnaires (n=300) with qualitative in-depth interviews (n=30-40) and stratified random sampling of Islamabad, Lahore, and Karachi universities. Standardized mental health questionnaires and semi-structured interviews were administered to gain comprehensive knowledge about the scenario. Outcomes indicate high positive correlation between overuse of digital media and elevated symptoms of depression, anxiety, stress, and reduced self-esteem. The research concludes that although digital media provides the advantage of enhanced connectivity and access to information, overuse adversely impacts students' mental well-being. It suggests university-level digital literacy education, enhanced campus mental health services, and greater parental and educational engagement in an effort to encourage healthier digital habits among students.

### Introduction

In the 21st century, digital media has become an important part of daily life, especially among the young people. With the sharp spread of smartphones, high-speed internet, and social media, the ways of communicating, gathering information, and interacting with the world have been radically changed. For students in universities, digital media is not just a learning aid and entertainment channel but also a means of self-expression, social interaction, and identity formation.

While digital media offers many benefits—such as greater connectivity, exposure to global knowledge, and rooms for imagination—it also raises severe questions about its psychological effect. Numerous studies worldwide have linked overuse or inappropriate use of digital media to numerous mental illness issues, such as anxiety, depression, sleep disturbances, lack of attention, and low self-esteem. The psychological impact is particularly evident among young adults, who are at the stage of their development marked by emotional sensitivity, identity exploration, and increased vulnerability to peer pressure.

In Pakistan, where the digital space is rapidly expanding and youth population is increasing, there is an urgent need to understand how the use of digital media is impacting the mental health of university students. Although there has been increasing concern about mental health in academic and policy circles, very little research has been conducted to explore the relationship between digital media use and psychological well-being in the Pakistani context.

This study aims to fill the gap by examining the psychological impact of digital media consumption among Pakistani undergraduate students. In the course of this case study, the study will examine patterns of digital media use, students' emotional responses, and potential associations between digital activity and mental health outcomes. The findings of the research will not just contribute to literature but also provide actionable results for policymakers, teachers, and parents who seek to promote healthier digital practices among youth.

## Problem Statement

The rapid expansion of digital media in Pakistan has transformed the way young people interact, learn, and interact with the world. Amongst university students, digital media is now a constituent part of their academic, social, and personal life. With all the benefits of instant communication and access to information, however, more concerns have been voiced regarding the psychological effects of excessive consumption of digital media.

International evidence from varied contexts indicates there is a strong relationship between digital media exposure and mental health problems such as depression, anxiety, loneliness, and lower self-esteem. Within this global agreement, however, little or no research at the local context level in Pakistan has been done to analyze how these psychological impacts are felt by undergraduate students, who make up a significant portion of Pakistan's digitally engaged populace.

The dearth of localized research impedes comprehension of the unique patterns of digital media use by Pakistani youth, the social and cultural determinants that influence their experiences, and the mental health consequences they may face. Absent such an understanding, schools, mental health clinicians, and policymakers remain ill-equipped to create effective interventions or promote responsible digital media usage. This study plugs this hole by analyzing the impact of digital media consumption on Pakistani undergraduate students' mental well-being with the objective of establishing habits, emotional ramifications, and likelihood of excessive consumption of digital media.

## Research Gap

While the global corpus of literature has extensively researched the relationship between exposure to digital media and mental health, most of it focuses on developed countries with differing socio-cultural and technological environments. United States, European, and East Asian research has determined that excessive use of digital media can lead to issues such as anxiety, depression, cyberbullies, and social isolation. However, these findings may not be automatically transferable to developing countries like Pakistan, where the consumption of digital media is shaped by opposing cultural norms, economic realities, and educational frameworks.

In Pakistan, access to digital media has grown significantly in the past decade, especially among university students. There has been significant growth notwithstanding this expansion, with very little empirical evidence investigated into the effect of the heightened consumption upon the psychological health of students.

Most of the earlier research in Pakistan has investigated total internet usage, grades, or social media addiction but seldom picked up on the more subtle mental health results that are linked with emotional and cognitive well-being.

Besides, there is minimal data on the specific usage patterns of digital media by undergraduate Pakistani students—i.e., amount of time spent, type of content consumed, emotional cues, and coping mechanisms—that are crucial to understand the overall psychological impact. There is also minimal qualitative insight into how students themselves perceive the impact of digital media on their mental health.

This research aims to fill this gap by reporting country-specific evidence on the psychological impact of digital media use among Pakistani undergraduate students. By analyzing their behaviors, experiences, and affective responses, the research strives to contribute to the limited but growing literature in this field and offer policy implications for education sectors, mental health professionals, and digital policies in Pakistan.

## Research Objectives

1. To explore the trends of use of digital media among undergraduate students in Pakistan, including the duration of use, mediums employed, and types of content consumed.
2. To ascertain the psychological impact of consumption of digital media on the mental health of undergraduate students, with special reference to measures such as anxiety, depression, stress, and self-esteem.
3. To research the relationship between the frequency/intensity of use of digital media and specific mental health outcomes in students.
4. To learn students' opinions and experiences concerning how digital media affect their psychological and emotional health.
5. To examine strategies for coping and behavioural responses initiated by students in order to handle the psychological effects of digital media.
6. To provide recommendations to students, educators, and policymakers to promote healthier and better use of digital media among Pakistani university students.

## Research Questions

1. What are the common patterns of digital media use for undergraduate students in Pakistan?
2. What are the psychological effects (e.g., anxiety, depression, stress, low self-esteem) of digital media use among them?
3. Is there an association between the nature and extent of digital media consumption and some mental health outcomes for undergraduate students?
4. How do students perceive the impact of digital media on their emotional and psychological lives?
5. What are the coping strategies that students deploy in managing the negative psychological effects of the consumption of digital media?
6. What should be followed by policymakers, mental health specialists, and universities to encourage students to have beneficial usage of digital media?

## Significance of the Study

This study has high importance both intellectually as well as practically since it addresses a forthcoming and critical concern at the conjunction of digital media usage and mental health among Pakistan's youth.

Firstly, it contributes to the existing academic literature by filling a crucial gap in research regarding the impact of consumption of digital media on the mental well-being of university students within the context of a developing nation like Pakistan. Even though cross-national analyses have broached this relationship in some depth as yet, indigenous research within Pakistan is limited. The study offers a context-specific observation that can enrich international discourse and act as a take-off point for more South Asian research.

Secondly, the study provides practical suggestions to schools, in this case universities, on how to better appreciate students' mental health challenges throughout the era of the digital world. By exploring usage patterns and their psychological implications, the study is able to advise university administrators, guidance counselors, and instructors on how to create awareness campaigns, offer services, and campaign for healthier online behavior.

Third, the research can help mental health practitioners create targeted interventions and treatment protocols according to students' online behavior and experiences. Having an understanding of the emotional and cognitive impacts of digital media will enable better intervention for those who are experiencing stress, anxiety, or low self-esteem due to their online activities.

Lastly, the research is policy-relevant in the sense that it offers directions to policymakers and proponents of digital literacy. With increased internet penetration and smartphone penetration in Pakistan, there is a need to ensure responsible digital engagement and develop mental health policies with consideration for the psychological effects of digital media.

In essence, this research not only contributes to academic literature but also aims at promoting the mental well-being and digital wellness of undergraduate students across Pakistan.

## Hypotheses

H1: Among Pakistani undergraduate students, higher levels of anxiety, depression, and psychological distress are positively correlated with increased digital media consumption.

H2: Undergraduate students' mental health, including self-esteem, sleep quality, and general psychological well-being, is greatly impacted by the emotional engagement and type of digital media usage.

## Delimitations

Delimitations of this study are boundaries defined by the researcher in order to focus the research, making it manageable and within bounds. The scope and boundaries of the research are defined by the following factors:

1. **Target Population:** This study targets undergraduate students in universities of major urban cities in Pakistan. Rural students and students enrolled in non-degree programs are excluded, thus minimizing the degree of generalization of the results to the student population in Pakistan overall.
2. **Digital Media Platforms:** The research focuses on the most commonly used digital media platforms by students, namely social media (Facebook, Instagram, Twitter, TikTok) and messaging apps (WhatsApp), but not on other forms of digital media like video streaming sites, news websites, or online games. The research is aimed at platforms that are most commonly used by young people.
3. **Time Frame:** The research is conducted in the year 2025, providing a snapshot of the psychological effect of digital media at a specific moment. Changes in technology or media usage patterns over time may not be captured in the research.
4. **Psychological Outcomes Measured:** The research specializes in anxiety, depression, self-esteem, and stress as the main mental health outcomes of digital media use. There might be some psychological outcomes, like loneliness or body image concerns, not discussed in detail.
5. **Data Collection Method:** The research employs self-reported questionnaires and surveys as the primary data collection method. This may result in biases regarding students' willingness to report their digital media use and mental health accurately.
6. **Geographic Scope:** The study is confined to some universities in major cities like Islamabad, Lahore, and Karachi and therefore may not be representative of the experiences of students from small towns or rural areas.

## Literature Review

Examples of pertinent sociability notions are social facts, social interactions and social action, cooperative labor, and community. Media are techno-social systems that involve intricate relationships between social interactions, human activity, and technical structures. The media and their social interactions are shaped by power structures. One should give examples and be clear about the level of investigation while examining social media. Fuchs (2017). From the Stone Age to the present, humans have survived the test of the fittest. In just a few short years, the fifth generation of human technology has already changed the way that life is on Earth. Mobile devices are smarter and more sophisticated now than they were in the past. They are often referred to as humanoids. With the widespread use of technology today, everyone has access to a wide range of opportunities. It would allow "items to pretend to be fresh" while preserving "continuity and promising a simple transition from what came before" (Deen & Hendricks, 2012) if versions were updated often.

The following are the elements that make up social media. Social media has a broad influence on society as a platform for fostering unity and protecting important information during a crisis. There will undoubtedly be more inventions as the Internet grows. The problem of mass media monitoring and censorship has become more difficult since the introduction of the Internet. Entertainment content is freely available to people worldwide. People can learn from the media in both positive and harmful ways. Social media services are available to students of all ages, castes, creeds, and religions. The media is today considered the fourth pillar of life in all civilizations since it facilitates growth, disseminates knowledge, and affects change. The media has a unique quality and plays a crucial role in advancing knowledge and fostering an inclusive community. The main purposes of educational media are instruction and learning. The word "media" itself describes a form of communication. Depending on its type, educational media provides the perfect blend of media that works differently and incorporates different attentive skills, including hearing, seeing, noticing, and paying attention (Bashir & Bhat, 2017).

Understanding the media from the standpoint of contemporary societal demands is essential due to its substantial influence in initially changing society. Therefore, in this context, it can be broadly categorized as social media platforms like Facebook and WhatsApp, as well as the amount of time high school students spend utilizing a variety of media, including news channels, literature festivals, and educational and entertainment media. Even if entertainment media has a timeless and international appeal, there are also serious drawbacks. It negatively affects children's and early teens' intellectual abilities, including critical thinking, writing, homework, verbal communication, and attention span. Teens' sexual education and orientation are negatively impacted by it. It affects people's attitudes, perceptions, and emotions, which in turn affects how they develop socially. It is a source of violent stories and images that show antisocial behavior, which in turn causes children to act aggressively, hitting and fighting. It is critical to acknowledge that violence can be either overt or covert, such as when combating science or the prejudices against women in our society (Al-Menayes, 2018).

Because it may change the perceptions of a vast number of people, information-based media has the power to change the face of any nation. The media promotes sound governance. In order to bring about change, it concerns the interactions between people, public institutions, and leaders. To make decisions about their place in the state and civil society, people need information. A sufficient level of knowledge empowers people to make wise choices and follow the most beneficial path (Kirschner & Karpinski, 2010).

Social media has a variety of effects on society since it offers a platform for crisis assistance and the safeguarding of important data. One reliable way to communicate during emergencies is through social media. Facebook is putting more effort into facilitating the sharing of non-Facebook content within the network rather than requesting users to leave the site. Twitter was created to let people with weak connections communicate with each other, but it is currently being used more and more to chat with friends. These links don't show great or meaningful relationships that will be useful in real life. On the other hand, they could influence change in a



number of ways, including consumer preferences (Blachnio et al., 2016).

Even though social networks provide many advantages, researchers have shown that there are also substantial disadvantages and complications. The Social Media Association has caused a major decline in interpersonal relationships and social involvement. Youngsters, teens, and young adults lack the time necessary to interact with their peers in person and lose out on chances to develop the social skills necessary for success. People have experienced inappropriate contact or harassment as a result of using social media. Misuse of social media puts users at risk for fraud and identity theft. Research over several decades has shown that while fewer connections are linked to higher morbidity, more social engagement is linked to lower morbidity. According to the Internet Paradox, higher levels of loneliness and depression were linked to lower social circle size, less interaction between family members living in the same home, and increasing Internet use. The usage of social media sites and platforms has increased dramatically during the past ten years. In modern culture, social media sites like Facebook and Twitter are growing in popularity. Students depend more on information and data that are easily accessible online and on social media platforms (Kuss & Griffiths, 2011).

Social media is, by definition, a technology that facilitates the exchange of ideas, sentiments, and information. These forums, which include Facebook, Instagram, TikTok, Snapchat, WhatsApp, and Instagram that facilitate connections with individuals worldwide. (Dollarhide 2021). Guofano (2022) clarified that WhatsApp is a well-known social networking platform which Jan Koum and Brian Acton discovered in 2004. According to Hall (2022), Mark Zuckerberg and Eduardo Zuckerberg founded the American social media platform Facebook in 2004. According to Britannica (2022), a tweet is a brief message of no more than 280 characters that is primarily utilized by politicians and is popular among them. In March 2006, Jack Dorsey created it.

According to D'Souza (2022), TikTok is a social media platform that was launched in 2016 by the Chinese tech company ByteDance and allows users to share videos that are between 15 and 60 seconds long. According to Bates (2021), Snapchat was introduced in 2011 as a way for friends to exchange photos and quick messages. According to Stegner (2021), Instagram was first released for iPhone in October 2010 but later made available for sharing images, videos, and messages on other Android devices in 2012.

According to Prajapati (2020), social media has had a significant impact on people's lives. Connectivity, education, information updates, knowledge, sharing, community building, using apps for good actions, brand reputation, promotion, and brand recognition are just a few of the many benefits of social media use. In addition to its benefits, social media has many drawbacks, including impairing quick thinking, causing emotional distress, mental neglect, a lack of comprehension and consideration, a lack of quality family time, cyberbullying, indolence, infidelity, relationship problems, and addiction.

According to Kemp (2020), there are 76.38 million internet users worldwide, with 37.00 million of those users being in Pakistan. Of these, 61.34 million utilize the internet, and 46.00 million of them use various social media apps. According to Zayed (2022), social media addiction is a serious problem that can lead to a variety of psychological problems, including procrastination, loneliness, stress, anxiety, and sadness.

Alsunni and Latif (2021) and Sherrell (2021) emphasized that social media use has become a necessary component of our life and is contributing to an increase in depression. Social media has significantly altered human behavior and contributed to psychological issues including depression, according to Catalado et al. (2021) and Dailey et al. (2020).

## Research Design

The research design outlines the procedure, methodology, and process to be used in collecting, analyzing, and interpreting data to provide answers to the research questions and hypotheses. Considering the nature of the study, a quantitative research design would best suit the purposes, supplemented with qualitative research features.

## Type of Research

This study will be descriptive and correlational in nature. It will attempt to describe the trends of digital media usage among undergraduate students and its psychological effect on their mental well-being. The study will also establish the relationship between the intensity and frequency of digital media usage and mental health outcomes such as anxiety, depression, self-esteem, and stress.

## Population and Sample

- **Population:** The population of concern for this study is undergraduate students who are studying in universities in major urban centers of Pakistan, i.e., Islamabad, Lahore, and Karachi.
- **Sample Size:** It will be a stratified random sampling method that will give coverage across various disciplines and classes. The sample will consist of approximately 300 students (100 each from the three selected cities).
- **Inclusion Criteria:** Undergraduate students aged between 18 and 25 years and who are regular users of digital media.
- **Exclusion Criteria:** Non-regular users of digital media or those who do not provide consent to participate.

## Research Approach

This study uses a mixed-methods approach that combines quantitative and qualitative methods. Quantitative data will be mainly used to assess the correlation between the consumption of digital media and mental health outcomes, supported by qualitative data to give insight into individual experiences and perceptions of students.

## Population and Sample

- **Population:** University undergraduate students in major cities of Pakistan (Islamabad, Lahore, Karachi).
- **Sample Size:** 300 students for the quantitative survey, and 30-40 students for qualitative interviews or focus groups.
- **Sampling Method:** Stratified random sampling to ensure representation from various disciplines and demographics.

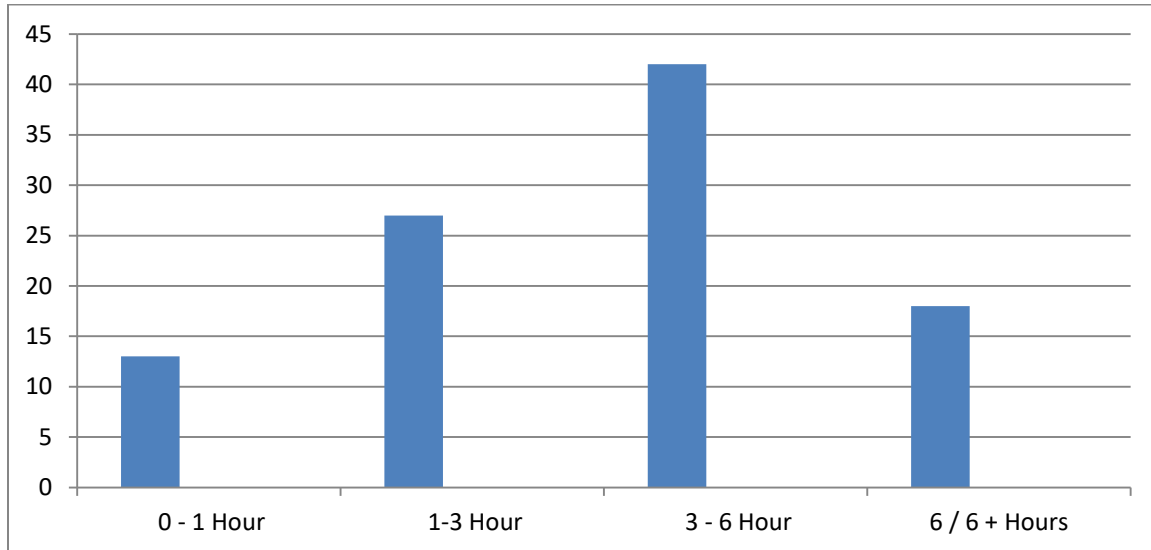
## Data Collection Methods

- **Quantitative:** Pre-tested survey questionnaire to study the pattern of use of digital media and outcomes of mental health (anxiety, depression, self-esteem, stress) via standardized scales.
- **Qualitative:** Semi-structured interviews/focus groups with a sub-sample of participants to ascertain their experiences and coping strategies.

## Data Analysis

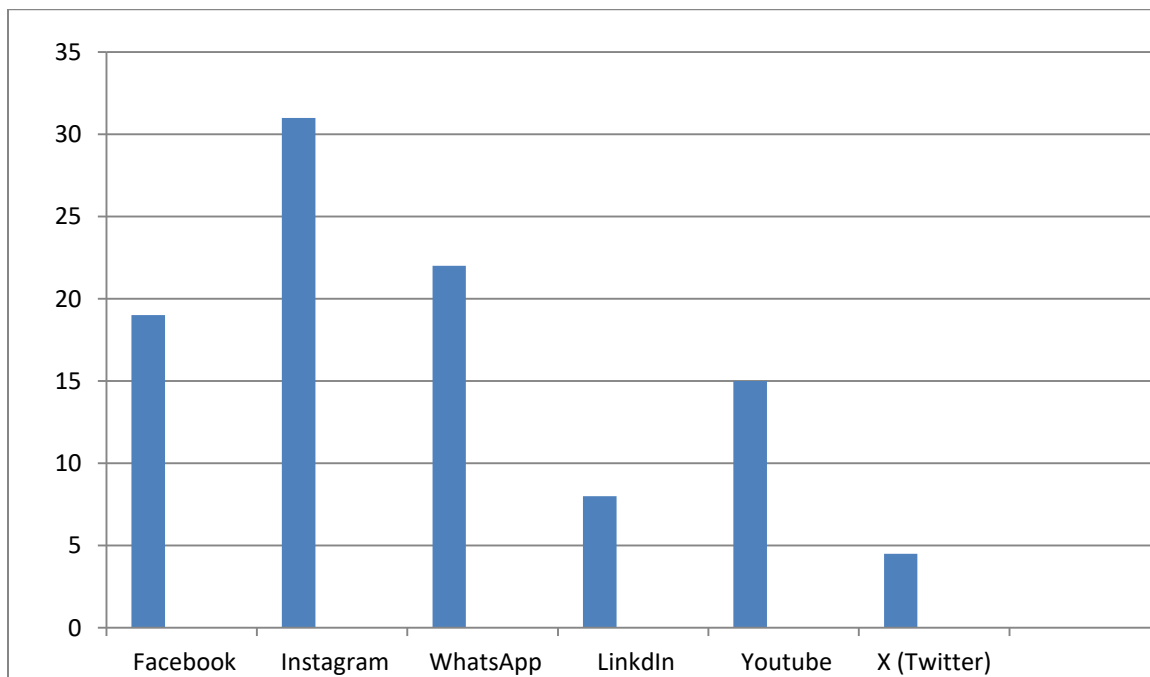
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**Digital Media Usage Per Day**

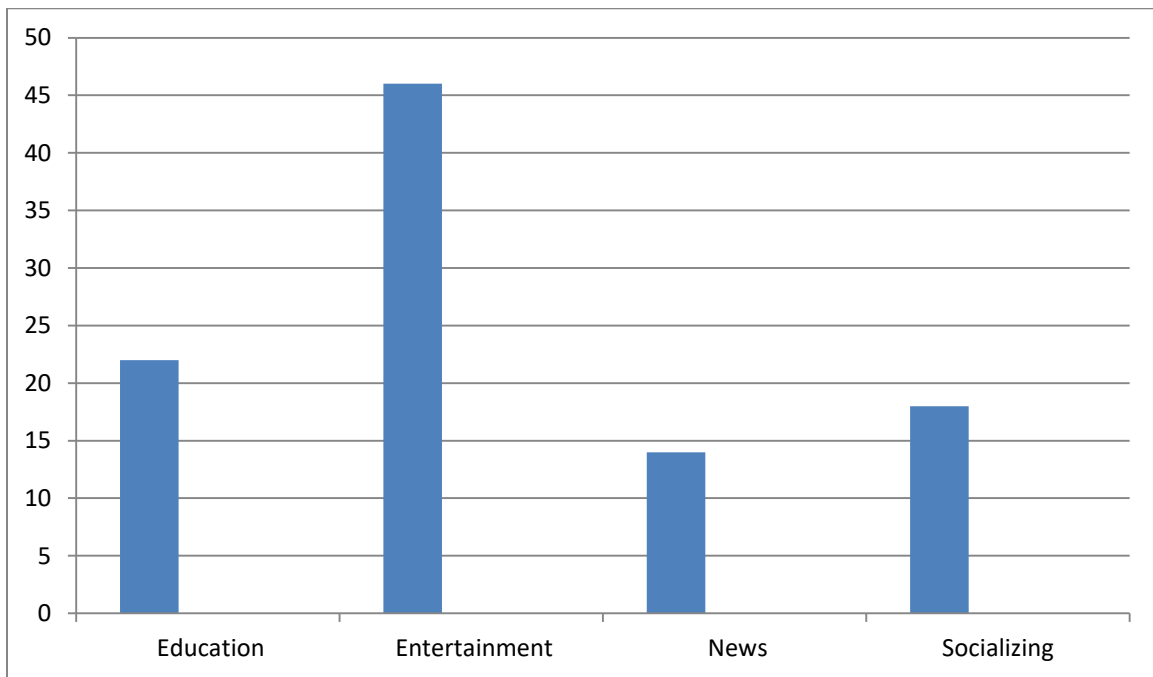
**Discussion:** Majority of undergraduate student's uses social media more than 40% each day which is a huge number that is impacting their mental health. Some of the pupils also use digital media more than six hours which leads to anxiety, depression, tension and bad habits.



**Platform usage statistical Inquiry**

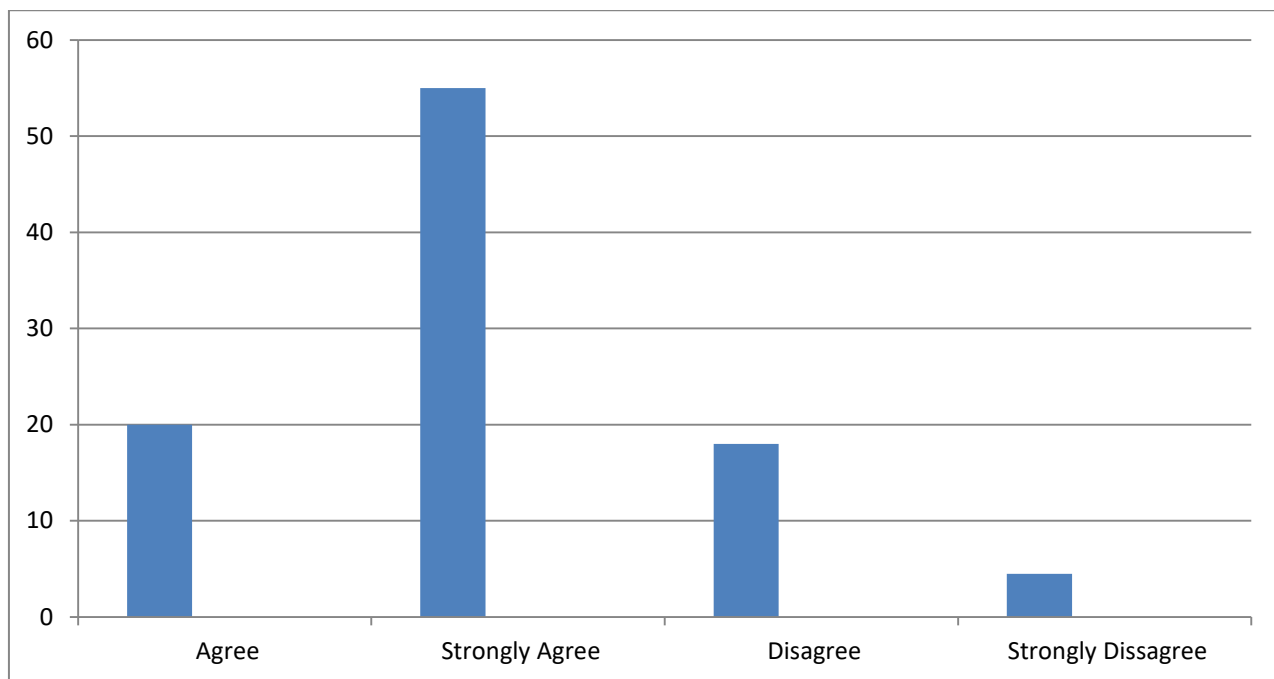
**Discussion:** Instagram powered by meta is found to be the most popular platform among undergrad students in Pakistan while LinkedIn that is considered to be the most authentic platform for professional networking, opportunities grabbing still lacks popularity among pupils.





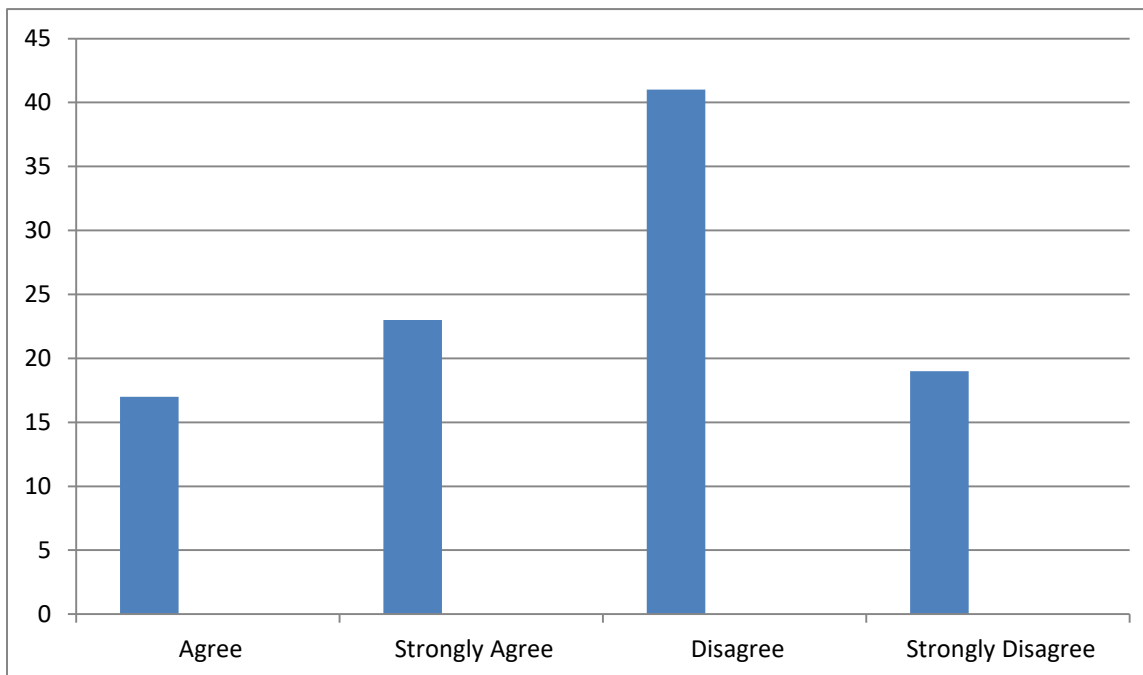
## Purpose of Usage Statistical Inquiry

**Discussion:** E-Sports, live sports, E-gaming and other entertainment is found among undergraduate students to be the prior motive behind digital media use while other options given in the questionnaire is found in the study to be least popular platforms.



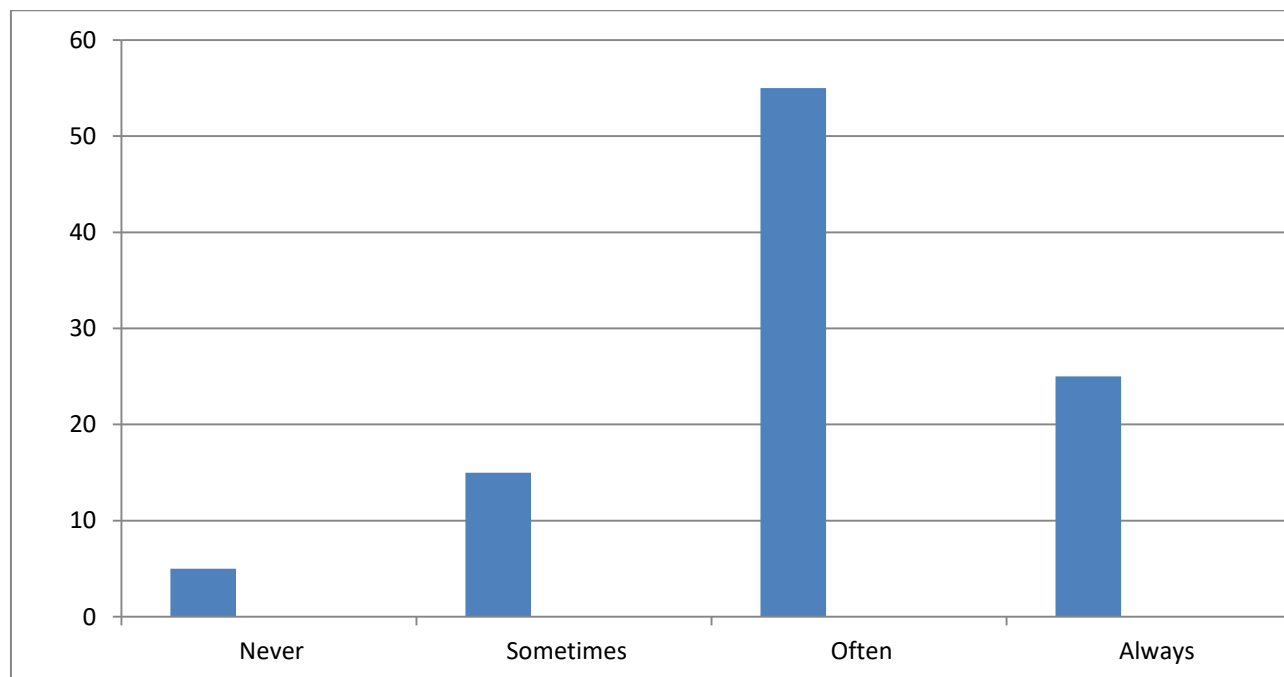
## Personnel life Comparison to others on Social Media Discussion

More than half of the students population strongly agree upon the notion of personal life comparison comparison which unconsciously destroy a person from inner leading to several cognitive issues.



**I feel anxious when I'm unable to check my social media.**

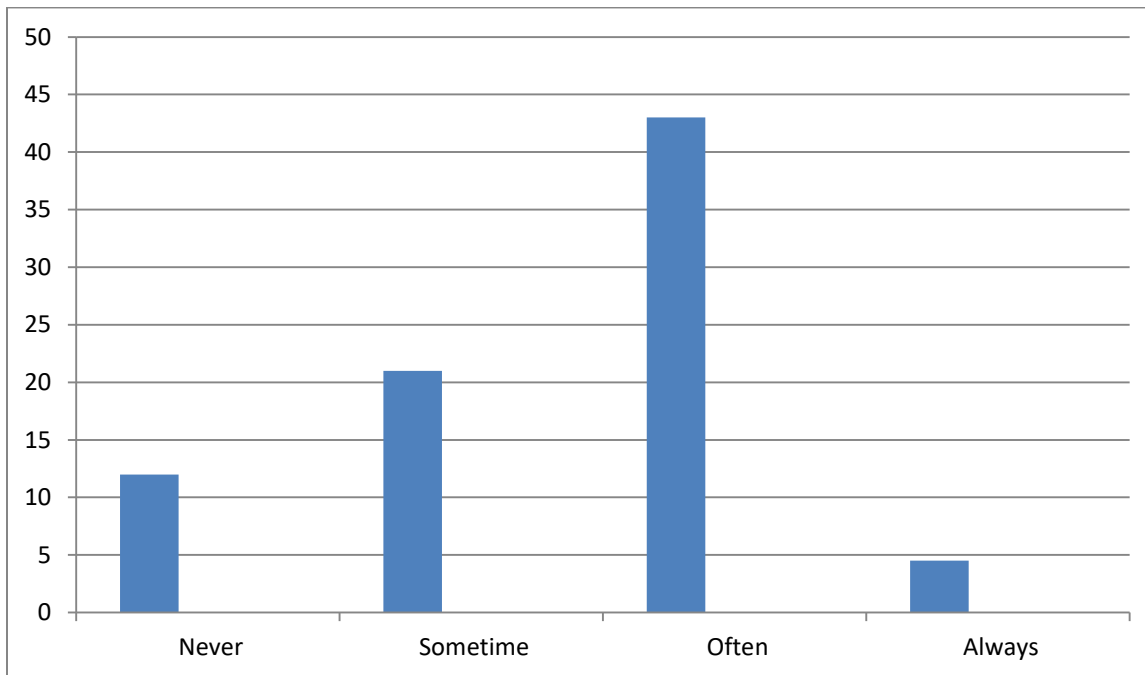
**Discussion:** This questionnaire of above statement was strongly rejected by the majority that they feel anxious when then are unable to check their social media platforms.



**I sleep late because I use digital media at night.**

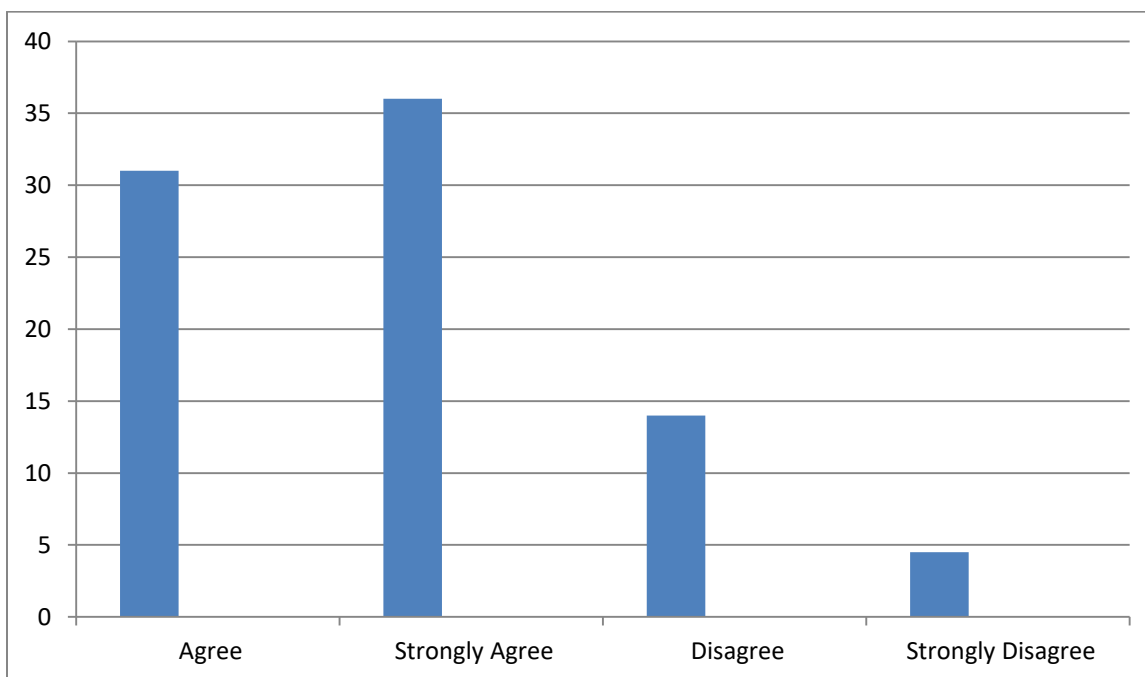
**Discussion**

Undergraduate students often sleep late because they use digital media apps and sites at night time that destroy the natural law i.e., everything in a nature working in a specific pattern. At the end they bear a lots of negative consequences.



## I feel low or depressed after using social media for a long time.

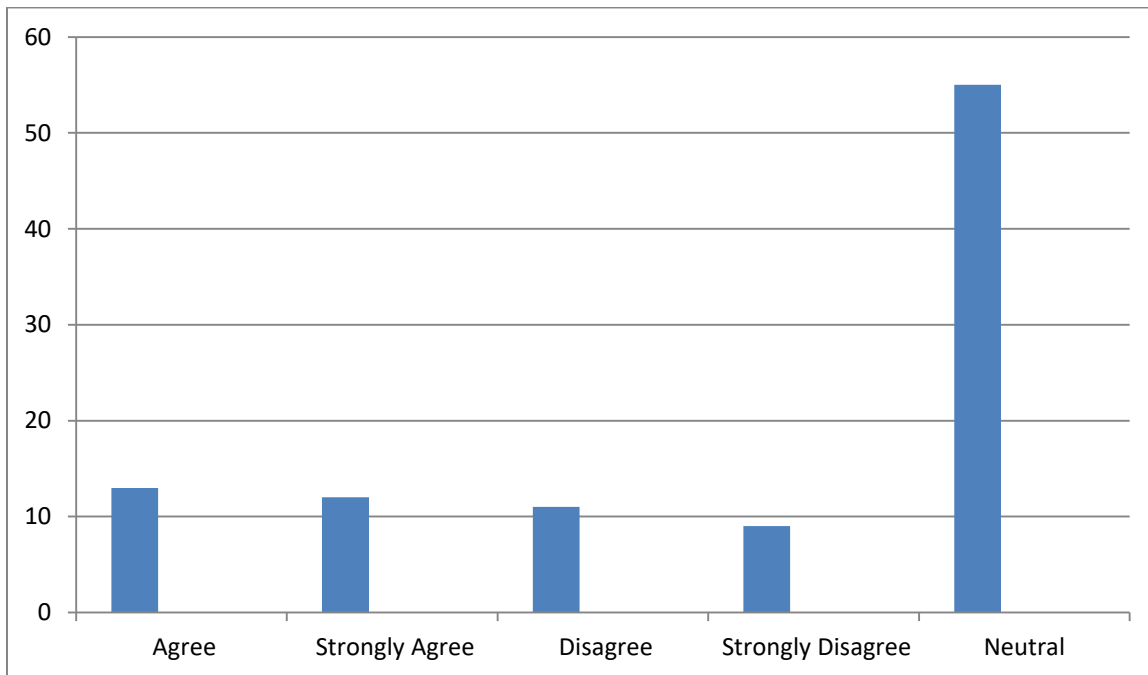
**Discussion** More than 40% of the students population feel low or depressed after using social media that is why some of the research scholars says that social media is a social ill.



## I feel confident and satisfied with myself.

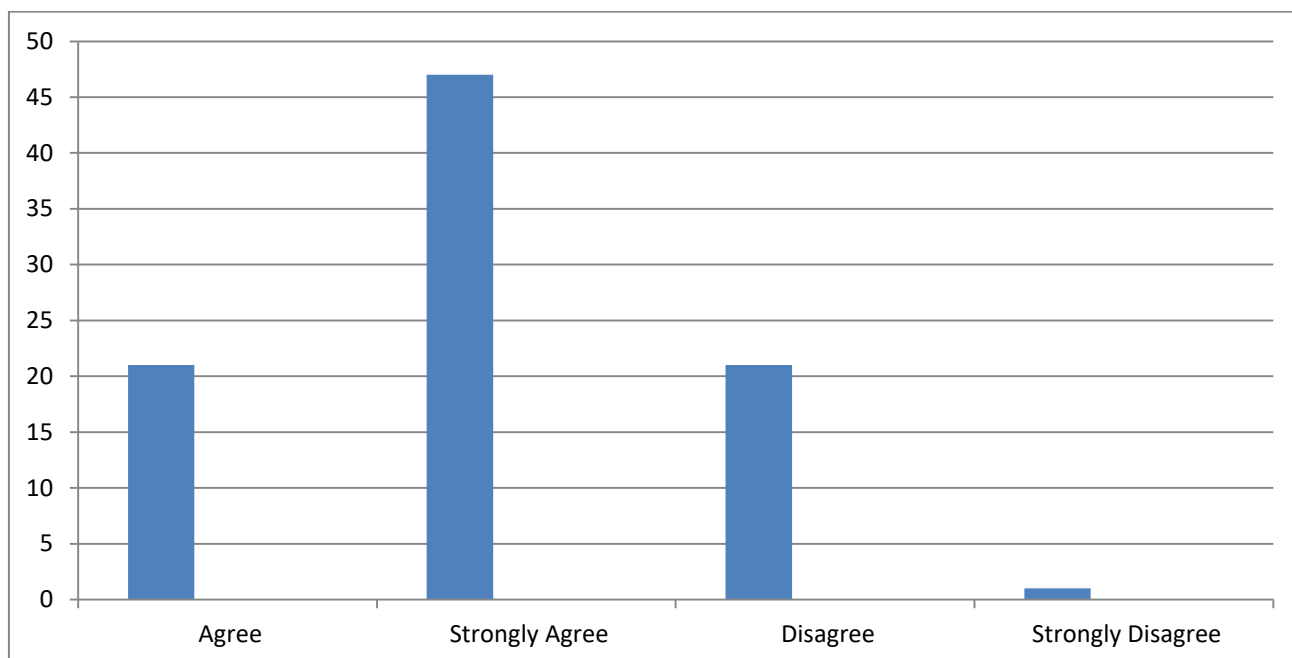
### Discussion

This study found that the Majority of the students feel confident and satisfied with them self during using social media.



## I use social media to cope with stress or negative emotions.

**Discussion** A neutral response is found in the study regarding undergraduate students using social media to cope with stress or negative emotions.



## Do you think digital media has affected your mental health?

### Discussion

Pupils strongly agree that digital media has affected their mental health and they are bearing negative consequences in the forms of anxiety, depression, tension, and other cognitive issues.

### Conclusion

The study points to the complex interaction between consumption of digital media and the psychological well-being of Pakistani undergraduate students. Though digital media is endowed with numerous benefits such as increased social connection and access to information, excessive usage, particularly on social networking sites, has been discovered to have a notable role in mental problems such as anxiety, depression, and decreased self-esteem.

A few of the key findings and conclusions of the study are:

1. **Excessive Digital Media Use:** There is a well-established relationship between the overuse of digital media and negative psychological outcomes, especially among students who engage in social comparison or use digital media in the late night.
2. **Emotional Impact of Social Media:** The visually orientated social media platforms, particularly Instagram, have a greater impact on students' self-esteem, which means that the material consumed has a direct effect on them on an emotional and psychological basis.
3. **Coping Mechanisms:** While some students utilize digital media for emotional support, others indulge in unhealthy coping mechanisms such as social withdrawal or excessive consumption of content that can exacerbate stress and anxiety.
4. **Need for Digital Literacy:** Interactive results highlight the need for educational intervention promoting digital literacy, where students are educated about the psychological effects of digital media and taught healthy, balanced use of such sites.

### Recommendations

1. **University Awareness Programs:** Universities should implement programs that educate students regarding the potential mental health repercussions of excessive usage of digital media and promote responsible usage habits.
2. **Mental Health Support Services:** Establish stronger mental health support services on campus, empowering students with tools to handle stress, anxiety, and other psychological problems related to digital media.
3. **Parental and Educational Involvement:** Parents and educators need to be involved in counselling students about proper use of digital media and potential implications for their wellbeing.
4. **Further Research:** Future research must explore the long-term effects of digital media consumption on mental health and evaluate the effectiveness of intervention programs in preventing undesirable outcomes.

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