



# EFFECTS OF FACEBOOK ON EXAM PERFORMANCE OF SOCIAL SCIENCES STUDENTS: A CASE STUDY OF THE UNIVERSITY OF MALAKAND

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## Abstract

**Purpose of the Study:** As various researchers found, Facebook is one of the most popular social media platforms among students. The purpose of this study was to assess the effect of Facebook on students' exam performance.

**Methodology:** For this Study, data was collected from the regular students of BS social sciences at the University of Malakand. The researcher used quantitative methodology to obtain fruitful results. A questionnaire was designed to assess the effect of Facebook usage on students, and data was collected from 182 students' by simple random sampling technique. The analysis of the results was carried out through Statistical Package for Social Sciences (SPSS).

**Main Findings:** The Study found that the Usage of Facebook affects students' exam performance in Malakand. The study's results supported the hypothesis that the more the students used Facebook, their exam performance would be poor.

**Application of the Study:** This Study is essential to encourage students, parents and teachers to use Facebook for educational and learning purposes because most students use it for leisure time and relaxation. This study will help the students to manage Facebook usage time during exam days and to use it for refreshing and revealing boredom. It will help aware teachers and parents about the adverse effects of Facebook. The study will contribute a little to the existing literature gap on understanding the hurdle and blessing opportunities of Facebook in the exam environment.

**The study's novelty:** This is an exciting study involving university students and will discover the effects of Facebook on exam performance. The study will be helpful by bringing awareness among university students that Facebook Usage affects their exam performance. The study will also find out the relationship between Facebook usage and achievements in the exam. The students will come to know how spending more time on Facebook during exam days will affect their studies.

**Keywords:** Facebook, Students, Exam Performance, Universities, Case Study.

## INTRODUCTION

The innovations of technologies and the Internet have both adversaries and blessings opportunities in any country's socioeconomic and political life. It plays a significant and crucial role in our daily life. The Internet constantly assesses and evaluates users' personal, social and vocational roles. It provides vast and extensive information and entertains its users (Qazi and Faiz 2011). The invention of any technology is a hot debatable topic for researchers, and the same is the case with social networking sites. Various researchers conducted studies to determine the advantages and disadvantages of these social networking sites and their effects on users. The findings have suggested both light and dark aspects. Hence, most countries gained open access to the Internet due to the advancement of technologies, especially in the last two decades (Kuppuswamy & Narayan 2010). World Wide Web (WWW) was first created to manage US military forces in 1990. After the invention of the World Wide Web (WWW), the invention and development of social networking sites (SNS) have been started, among which Facebook is the most popular.

Social networking sites or services (SNS) or social media is an online platform through which people share their views, ideas, thoughts, posts, pictures, and videos and update their status. Social networking sites are part of a web application suite, also called social media (Ahn, 2011). SNS connects people with family, relatives, friends, and others. Students also use social networking sites to connect with their classmates, batch mates and family members for a long time (Haneefa & Sumitha, 2011).

Social networking services vary in formats and features. These services can be used using various gadgets such as mobile phones, smartphones, desktops, laptops, tablets, etc. Social networking services involve both individual and community services. In individual services, individuals may share their ideas, pictures, and videos with others, while the community includes some people. These social networking services communicate across the world and thus help improve the social and professional aspects of an individual or a community as a whole. Social networking services enable people to connect with others living in the same location or different areas, ranging from a city to the overall world. Social networking services include Facebook, Instagram, Twitter, Whatsapp, v-chat, LinkedIn, TikTok, etc. As a lot of SNS are in use



throughout the world, the network is very massively used across the globe. Facebook engages 1.4 billion and 2.1 billion daily and monthly ([Facebook Newsroom, April 12, 2018](#)).

Facebook is an American Social media and technology company based in Menlo Park, California. It was founded by 19 years old Harvard university student "Mark Zuckerberg" along with fellow Harvard university students and roommates Eduardo Saverin, Andrew Mc Collum, Dustin Moskovitz and Chris Hughes ([Grossman 2010](#)). Facebook was initially for Harvard university students to communicate or connect. Later on, this site was extended to connect people from all corners of the world to sign up and make their profiles. At the same time, university students are one of the most critical populations using Facebook, with features such as photos, wall posts, and status updates that have become prevalent to those who want to connect with their friends ([Gold, 2011](#)).

Facebook is a massive and most popular social networking site in the world nowadays, during the fourth quarter of 2019; Facebook reported almost 1.66 billion daily active users accounted for 66% of monthly active users, with over 2.5 billion monthly active users.

Many users use Facebook nowadays, but "university students" are still its biggest fans. Facebook has become essential to almost every university student's daily life. Students benefit from the Usage of Facebook by sharing information for educational purposes, making friends and other activities. And Hurt found that at major public universities, the ratio of undergraduate students with Facebook accounts reached 98% ([Hurt, 2012](#)).

### **Effects of Facebook on Academic Performance**

The invention of every technology has both adverse and positive effects on its users. That one of the social networking sites, Facebook, also has both effects. That may affect their users positively or negatively. Few people use Facebook for connecting with their friends and family, few for making new friends, and others for learning purposes. This site changes people's social and academic lives and provides facilities for people to communicate with each other everywhere and whenever they want to communicate.

#### **Positive Effects of Facebook on Academic Performance**

Nowadays, the Usage of Facebook is widespread in all age groups, from children to older adults. Still, it is observed that the Usage of Facebook is very much among students, including children, teenagers, and adults. Facebook is a platform where students freely express their ideas, views, thoughts and what they want to do they can. They can create their profile, create content, comment on anything they wish to do, connect and chat with their friends and family members, and make new friends from all over the world. Students may use Facebook for educational purposes. They remain connected with their teachers, professors, fellows or classmates if they face any problem or issue during their studies, and may help students to connect with them in a new way providing flexibility in learning. According to [Apeanti and Danso \(2014\)](#), Students felt that their results would be better if they easily contacted their professors through social media while facing problems in their studies.

Students can join various educational pages and groups related to their field of Study on Facebook and easily find access to all important information shared by other group members. They can also share that information on their timeline, which will help in boosting their confidence. Sharing information also helps in the learning process. Professors can make a group on Facebook to connect with students to share important information or instructions for the class and related material. Students can also share their views, innovative ideas and thoughts in the group. They can also ask questions about their study when facing any problem. And such types of discussions can help students to participate actively, which will help them to improve their knowledge. [Spongmay\(2018\)](#) found that students use Facebook for information and educational purposes. Facebook positively affects students' academic performance because they use this social media platform for information, communication with each other, interaction with peers, study notes, and sharing information about research resources. Professors may ask their students to send homework or assignment through Facebook. All of this will save a lot of time and effort, which can be utilised for the study. Some students are doing their educational projects in groups which may collaborate through Facebook. This social networking site can help them to communicate and exchange information for the project easily, which saves their time and energy that can be utilised for the project work. According to [Deng and Tavares \(2013\)](#), Social media helps students to think clearly, which also help them to take wise decision in their day-to-day lives. Another researcher found that social media usage can enhance students' vocabulary and writing skills, [Younus and Salehi \(2012\)](#).

#### **Negative Effects of Facebook on Academic Performance**

Like other social networks, Facebook also has negative effects on its users. This site affects its users psychologically, socially, and emotionally. The Study of [Larry \(2011\)](#), an American professor of psychology, found that teens using Facebook frequently are narcissistic (excessive self-love), display psychological disorders, anti-social behavior, mania and aggressive tendencies. Facebook affects not only students psychologically but educationally as well. Students who are using Facebook or other social media immensely are obtaining low-grade marks compared to those who are not using frequently. When students start using Facebook or other social media excessively, their overall academic performance will be affected. The Study by [Kirschner and Karpinski \(2010\)](#) found that the average GPA of students using Facebook is lower than those who are not using Facebook.

Nowadays, most teenagers and students are using Facebook only for chatting or posting their pictures and just wasting their time. Therefore they cannot complete their homework, assignment, projects and other academic work on time. It affects their study badly, and they cannot complete their exam preparation. Therefore, Facebook is the biggest obstacle to obtaining a good GPA. Students also check their Facebook and other social media accounts notifications and update during study time, which distracts them from studying and causes them to lose concentration. It can also affect their academic performance. It is observed that few students use their Facebook during class. They ignore their lecture and what their teachers or professors tell them. Hence, they might miss important information, material, or assignments. Also, Facebook may affect students' writing skills because they use the short form of the word, for example, 'k' for 'okay', 'coz', or 'cuz' for because and so on. This short form of writing is unsuitable for exams or assignments, which may negatively affect their academic performance. [McKenna and Bergh \(2000\)](#) reported that those people, especially students who use social media frequently and excessively, reduce the time for other activities, such as academic and physical activities and other social hobbies, which need face-to-face communication.

### **Facebook and Exam Performance**

Facebook is very popular among students, especially university students. Most of them use it before and during exam days, which affects their exam preparation and may lead to poor exam performance. The average self-reported GPA of university students is lower than non-Facebook users ([Kirschner and Karpinski, 2010](#)). Few students are heavy users of Facebook, and this heavy usage subjected them to Facebook addiction. Due to this addiction to Facebook, they cannot leave this social media platform during exam preparation. And excessive Usage of Facebook wastes or willing significant time for students during exam preparation and exam days, which is the biggest hindrance to achieving high performance or GPA in the exam. [Bedassa \(2014\)](#) found that usage or time spent on Facebook significantly leads to addiction to this social media platform and negatively affects the student's academic performance. However, nowadays, most students use Facebook for chatting and entertainment purposes rather than studying for exams. Therefore, in this study, the researcher wants to find out the effects of Facebook usage on the exam performance of university students.

### **AIM OF THE STUDY**

The purpose of this study is to find out and examine the effects of Facebook usage on the exam performance of social sciences students at the University Of Malakand Khyber Pakhtunkhwa Pakistan.

### **Statement of the Problem**

Nowadays, the majority of students using social media, and most of them are university students. In the middle of the first decade of this century, social media became popular among the students of the school, college and university and their popularity is increasing daily. According to ([Tammppuu and Masso, 2019](#)), the number of internet users World Wide Web in 2019 was 4.388 billion, up 9.1% year-on-year, while social media users were 3.484 billion, up 9% year on year.

Currently, Facebook is used by many people to connect with their friends and relatives around the globe ([Brydolf, 2007](#)). Like that Facebook is very much popular among university students. Mostly, they use it for information, entertainment and chat. A study of three thousand university students found that 90% used Facebook ([Dahlstrom et al., 2011](#)). Most university students give a lot of time on Facebook. Most of them completely forget about their study, which affects their exam performance. Sometimes students use social media for study but a notification or message diverts them, and they spend a few hours using Facebook and don't realise how much time they have wasted. Therefore, it is difficult to ignore the fact that there may be a correlation between Facebook usage and the exam performance of university-level students. Since the problem is new and still, no research has been conducted on this topic at the university level.

### **Objectives of the Study**

The following objectives of this study are:

- To find out the Usage of Facebook among the students of the University of Malakand.
- To examine the effects of Facebook on the exam performance of students of the University of Malakand.
- To investigate Facebook usage differences among male and female students of Malakand University.
- To investigate the drawbacks in exam time among the students.

### **Research Question**

On the premises of the above objectives, the following questions are found to guide this study;

**RQ1:** Is there any relationship between Facebook usage and exam performance?

### **Hypotheses**

The following are a few hypotheses of this study.

**H1:** The more the students use or are exposed to Facebook, the more their exam performance will be poor.



**H2:** It is more likely that Facebook usage affected students more before an exam than during exam days.

**H3:** It is assumed that the students of the University of Malakand are using Facebook for entertainment rather than educational purposes.

## LITERATURE REVIEW

Social media is very much popular among university students. Some researchers reported that social media platforms or Social-Networking-Sites and Facebook are an integral part of student's life ([Thuseethan and Kuhanesan, 2014](#)). The age group of 18- 29 are vast consumers of social media. According to [Jones et al. \(2009\)](#), the age group from 18-29 is known as digital natives and a generation which have never known the world without the Internet. And the age group of 18-29 had known as millennial, avant-garde, or traditional college-aged adults. The youth or university students are using social media to share pictures, videos, or audio content, update their status, watch movies, videos, and audio songs, follow their favourite celebrities, actors or actresses and use for chatting and communication purposes. Today, the majority of youth are engaged in conversation on social media. According to a study by the [Harvard Institute of Politics \(2011\)](#) explored, over 90% of college students have a Facebook profile.

Some students use social media for a few hours daily, which badly affects their studies. The Chinese researchers revealed that students use social media for self-pleasure, educational purposes, and economic activities, and a few use it for cybercrime. Still, some students are addicted; those social media, hamper their academic activities ([Frederick, 2019](#)). The usage of social media is increasing daily among students, and many of them rely on its usage for interaction and communication. Due to the extreme usage of social media university, students forget about their psychological, mental and physical well-being. Social media or Social-Networking-Sites are essential to students' lives and are often accessed multiple times a day ([Junco, 2012](#)).

Facebook is one of the most popular Social media platforms or Social-Networking-Site created by Harvard university student Mark Zuckerberg with his roommates and fellow Eduardo Saverin, Andrew McCollum, Dustin Moskovitz and Chris Hughes on February 4 2004. Initially, only Harvard university students could access and use Facebook and then allowed other university students. Later, see the response that Facebook received from its users; after that, the services of the site were made global to anyone from everywhere above the age of 13. But later, in January 2008, Facebook became the most popular and most visited website, with 34 million unique visitors, and was the 13<sup>th</sup> most popular website worldwide ([Khan et al., 2020](#)). In March 2008, Facebook reported that this website has 67 million active users; half are daily active users, spending an average of 20 minutes on websites daily, and half are monthly active users ([Facebook, 2008](#)). Like other Social-Networking-Sites Facebook also provide a formatted web page on which every consumer or prosumer can enter their personal information such as; name, gender, birthday, hometown, marital status, activities, interests, hobbies, favourite books, movies and songs, physical address, e-mail address, political and religious views, educational background and a personnel picture. In 2010, Zuckerberg reported that Facebook users reached 500 million ([Mark, 2010](#)). Later, In 2012, the monthly active users reached one billion ([Fowler, 2012](#)). In 2018 Facebook launched Facebook dating, which was only available on Android and iOS.

Facebook's use encompasses both simple and excessive use of this social media platform. Its usage includes the presence of individuals on this platform, time spent on it, frequent visits and the nature of activities performed on this social website. People from all over the world of various age groups interact and share information, videos, audio, and pictures, chat with each other, play games and publish advertisements. [Spomgay \(2018\)](#) found that university students also use Facebook for political purposes. And Facebook is also a tool of communication ([Murat, 2014](#)). Youth, especially students, are vast and active users of this social media platform, using many hours a day and suffering from it. Some researchers found that those students who are giant users of Facebook and spend a lot of time on it are distracted from academic activities ([Bu et al., 2010](#)).

### Facebook Effects on Exam Performance

Facebook not only affects the social life of students but also affects their academic performance, especially exam performance. When students face any problem during their study or see new terms in their notes or books, they try to solve the problem through the Internet. When they go online, then notification comes from Facebook or another Social-Networking-Sites, and they open these sites to check the notification and spend a few hours. That's why these sites vested their time, and students give less time to their school, college, or university work which distracts them from their studies, which negatively and badly affects their exam study. Therefore the Usage of Facebook and other social networking sites before an exam affects their exam performance. [Kubey et al. \(2001\)](#) found that leisure Internet usage strongly relates to weak academic performance. The researcher also found that substantial Internet users have schoolwork problems, and 10% to 15% of student participants reported that their internet usage is out of control ([Kubey et al., 2001](#)). [Boogart \(2006\)](#) revealed that those students who excessively use Facebook reported lower GPAs.

Nowadays, the majority of students are using Facebook for pleasure and entertainment. Students use Facebook to interact with their friends, family members and classmates. Some people are using Facebook for dating and chatting. Students are using Facebook to connect with those whose contact they have lost and to make new friends worldwide. However, it is observed that students are involved in the hedonic Usage of Facebook, mostly those who exchange or share content. But

researchers observed that this kind of Usage of Facebook reduces study time, which results in a bad score or lower grade on the exam.

Furthermore, Facebook interrupts students from visiting their profiles; when they go online, they spend a few hours forgetting about their studies, which causes distraction. Due to excessive use of social media, especially Facebook, a severe concern is found among administration, teachers and parents that students spend too much time on non-academic activities on the internet and social media platforms. Many articles in newspapers, periodicals, magazines and blogs raise the same issue ([Ingram, 2011](#)). Therefore, the most silent concern among educators and scholars is the effects of social media usage, such as Facebook, on the study before the exam and during exam days and its effects on the student's exam performance.

### **Cultivation Theory**

Professor George Garbner first proposed cultivation theory in 1960. Later in 1967, Garbner and Larry Gross advanced this theory, which deals with television viewers and their perceptions of the real world. Cultivation theory focuses on the impact of television on its viewers, mainly on how exposure to violence through television affects viewers ([Settle and Quisto, 2018](#)). This theory states that the more people watch television, the more they believe in the social reality created by television ([Riddle, 2009](#)). Television heavily affects and influences the perception of the audience about the real world. According to [Michael and James \(2010\)](#), the more people consume or are exposed to media, the more their perceptions change. The media contribute to and create assumptions of heavy viewers regarding the real world.

### **Facebook and Cultivation Theory**

It is a known fact that television cultivates the perception of its viewers., Facebook is also considered one of the persuasive mediums, which cultivates the perception of their heavy users. The researcher reported that those who watch more television cultivate their perception changes their behaviors, attitudes, thoughts, and feelings regarding real words ([Tsay et al., 2012](#)). The users of Facebook log on to contact their friends, relatives, and family members and also seek online information besides information from their surroundings. That's why they perceive the real world the same as online communities.

Facebook also changes their heavy users' behaviors, attitudes, thoughts patterns, feelings, emotions and perceptions. Excessive Usage of Facebook negatively affects their users' behaviour and attitude and creates Facebook addiction among them. According to [Hough, \(2011\)](#), social media usage creates addiction; in some cases, that addiction is comparable to drug addiction. Today, most university students are heavy users of Facebook, and using this social media platform affects their study for the exam and their exam performance.

Cultivation theory is one of the most relevant, applicable, and valuable theories for this study. This theory helps the researcher know how Facebook cultivates university students' perception towards Studying for the exam. This theory is also helpful in analysing and evaluating the uses of Facebook and its effects on students. Students who spend much time on Facebook may affect mentally, physically, and psychologically and divert them from exam preparation. Some students are heavy users of Facebook, which affects their grades and exam performance.

### **RESEARCH METHODOLOGY**

In this study, the researcher applied the quantitative methodology to gain the study's objectives. This method is helpful for the researcher to understand the particular phenomena under investigation. The researcher selects the survey design which is most suitable for this study.

#### **Population**

In this research, the study's target population was the regular BS students of the main campus of the University of Malakand. The researcher set criteria and studied those social sciences students who have a Facebook account and use Facebook before and during the exam and also regular students of the main campus. These criteria help the researcher make the study manageable and distinguish morning students from the evening and non-regular students. It was very difficult for the researcher to examine the non-regular students because they did not come regularly to university and were difficult to contact. And they were also different from university students because most of them were older than university students, had jobs or professions, and were settled in their life.

#### **Sampling**

In this research, the researcher used the multistage sampling method. In contrast, the university was divided into different strata, including the Faculty of social sciences, Faculty of Science, Faculty of arts and humanities, Faculty of Education, and Faculty of Biological Sciences. In the second stage of BS, social sciences students from different departments, i.e. Journalism, Law, Social Work, Tourism and Hotel Management, Sociology, Political Science, and Archeology, were selected. In the third stage, the data was collected from the selected department BS students through a simple random sampling method. In this research, the researcher used a questionnaire as a data collection tool consisting of 23 close-ended questions.

Data Analysis: Data was collected through a self-developed questionnaire, while data was analysed in a descriptive method by Statistical Package for Social Sciences software because the study is exploratory.

## FINDINGS AND DISCUSSION

**Table 1 :** Age and gender of the respondents

Age	F	%	Gender	F	%
18	5	2.7	Male	175	96.2
19	12	6.6	Female	7	3.8
20	49	26.9	Total	182	100.0
21	40	22.0			
22	36	19.8			
23	23	12.6			
24	8	4.4			
25	8	4.4			
26	1	.5			
Total	182	100.0			

The age range of the participants was 17 to 29. Furthermore, 30% (n = 90) were between the ages of 17 and 19, and 5% (n = 16) were between the ages of 25 and 29. They were mostly 20 to 24-year-olds (65%, n = 194). (Kolhar, Kazi, & Alameen, 2021).

The current study results also aligned with the previous study as Table 1 shows the age of the respondents, in which 2.7% were of 18 years of age, 6.6% were of 19 years, 26.9% were of 20 years, 22% were of 21 years, 19.8% were of 22 years, 12.6% were of 23 years, 4.4% were of 24 years, 4.4% were of 25 years and 0.5% was of 26 years of age. These results showed that most BS students at the University of Malakand are aged 20 to 22. Table I also illustrates the gender of the respondents; among them, 96.2% were male, and 3.8% were females who responded to the questionnaire. The female students did not respond to the researcher because of cultural barriers, and most of them said that they don't use Facebook due to their culture.

**Table 2:** Departments & Semester of the Respondents

Department	F	%	Semester	F	%
Journalism	26	14.3	1 <sup>st</sup>	20	11.0
Political sciences	32	17.6	2 <sup>nd</sup>	2	1.1
Social work	34	18.7	3 <sup>rd</sup>	76	41.8
Tourism	18	9.9	5 <sup>th</sup>	52	28.6
Law	26	14.3	7 <sup>th</sup>	31	17.0
Archeology	17	9.3	8 <sup>th</sup>	1	.5
Sociology	29	15.9	00	00	00
Total	182	100.0	Total	182	100.0

Table 2 demonstrates the department of the respondents in which 14.3% belonged to the journalism department, 31.9% were to political science, 18.7% to Social work, 9.9% were to tourism, 14.3% were to Law, 9.3% were to Archeology, and 15.9% were of Department of Sociology. The Table also shows the semester-wise distribution of the respondents, in which 11% of students were from 1<sup>st</sup> semester, 1.1% were from 2<sup>nd</sup> semester, 41.3% were from 3<sup>rd</sup> semester, 28.6% were from 5<sup>th</sup> semester, 17.0% were from the 7<sup>th</sup> semester, and 5% respondents were of 8<sup>th</sup> semester.

**Table 3:** Time Spent with friends by the respondents on Facebook

Time	F	%	Friends	F	%
Less than one hour.	66	36.3	Fewer Than 100.	30	16.5
1-2 hour	62	34.1	100-1000	62	34.1
2-4 hour	39	21.4	1000-2000	58	31.9
More than 4 hours.	15	8.2	Others	32	17.6
Total	182	100.0	Total	182	100.0

Table 3 shows that 36.3% of respondents spend less than one hour daily on Facebook, 34.1% spend 1 to 2 hours, 21.4% spend 2 to 4 hours, and 8.2% spend more than four hours daily on Facebook. The Table also illustrates shows that 16.5% of respondents have fewer than a hundred friends, 34.1% have a hundred to thousand friends, or between them, 31.9% of respondents have a thousand to two thousand friends, and 17.6% of respondents have other friends or contacts on Facebook. The findings indicated that 97% of the pupils accessed social media. Among them, 1% hardly ever utilised social media for academic purposes. 43% of them accessed these websites to kill time, compared to 35% who utilised these platforms to chat with others. Furthermore, 57% of them have social media addictions. Additionally, 74% of them spent



their spare time on social media platforms, 52% claimed that using social media had harmed their learning activities, and 66% felt more pulled to social media than to academic pursuits. Based on usage, the most widely used apps were Snapchat (45%), Instagram (22%), Twitter (18%), and WhatsApp (7%) ((Kolhar, Kazi, & Alameen, 2021).

**Table 4:** Effects of Facebook before Exam on Students

	Strongly Agree		Agree		Neutral		Disagree		Strongly disagree	
	Row Valid N		Row Valid N		Row Valid N		Row Valid N		Row Valid N	
	Count	%	Count	%	Count	%	Count	%	Count	%
Facebook affects my study time.	56	30.8%	67	36.8%	28	15.4%	20	11.0%	11	6.0%
Due to Facebook, I cannot prepare notes for the exam.	33	18.1%	49	26.9%	21	11.5%	55	30.2%	24	13.2%
I can share exam-related information with teachers and friends through Facebook.	20	11.0%	69	37.9%	19	10.4%	60	33.0%	14	7.7%
My teacher and friends mostly contact me through Facebook about the exam.	17	9.3%	36	19.8%	29	15.9%	74	40.7%	26	14.3%
I could share questions about exam preparation with my friends and teacher easily.	19	10.4%	58	31.9%	24	13.2%	55	30.2%	26	14.3%
Facebook divert my intention from a study for exams.	25	13.7%	65	35.7%	35	19.2%	41	22.5%	16	8.8%
I take extra courses related to the exam through Facebook.	18	9.9%	41	22.5%	23	12.6%	78	42.9%	22	12.1%
Through Facebook, I can make a plan for the exam.	9	4.9%	22	12.1%	21	11.5%	98	53.8%	32	17.6%
I can prepare a list of topics related to my subjects because of classmates' /fellow discussions.	23	12.6%	60	33.0%	24	13.2%	53	29.1%	22	12.1%

The findings indicate a bad correlation between students' exam performance and social media use. Additionally, the findings indicate that kids in urban regions spend more time on social media platforms than students in rural areas. Similarly, male students used social media more than female students, which affected their grades (GPA) on the test (Safeer & Awan, 2021).

Researchers have carefully studied the effects of social media on students' overall academic achievement (e.g., Feng, Wong, Wong, & Hossain, 2019; Junco, 2012; Muls, Thomas, De Backer, Zhu, & Lombaerts, 2020). Comparatively, few studies have identified the detrimental impacts of social media on pupils' digital reading skills (e.g., Lee & Wu, 2013; Wu & Peng, 2017).

**Table 5:** Effects of Facebook during Exam on Students

	Strongly Agree		Agree		Neutral		Disagree		Strongly disagree	
	Row Valid		Row Valid		Row Valid		Row Valid		Row Valid	
	Count	N %	Count	N %	Count	N %	Count	N %	Count	N %
Facebook Usage increase	36	19.8%	72	39.6%	17	9.3%	38	20.9%	19	10.4%
The use of Facebook during an exam is the cause of stress, tension and anxiety.	37	20.3%	60	33.0%	30	16.5%	46	25.3%	9	4.9%
Usage of Facebook causes the loss of short-term memory.	25	13.7%	65	35.7%	39	21.4%	38	20.9%	15	8.2%
During exam usage of Facebook, I miss managing my study timetable.	39	21.4%	72	39.6%	25	13.7%	39	21.4%	7	3.8%
During Exam usage of Facebook effects my writing skills including usage of short cut, miss-spell, grammar mistake errors etc.	33	18.1%	66	36.3%	26	14.3%	43	23.6%	14	7.7%

Due to Usage of Facebook during exam effects my grade and division.	25	13.7%	68	37.4%	28	15.4%	46	25.3%	15	8.2%
I got less marks due to Usage of Facebook during exam days.	21	11.5%	55	30.2%	28	15.4%	57	31.3%	21	11.5%
For refreshment and relaxation from examination, some time I use Facebook.	66	36.3%	76	41.8%	12	6.6%	16	8.8%	12	6.6%

[Paul. \(2012\)](#) claimed a negative correlation between time spent on social media and academic achievement. Overusing the Internet can lead to cravings and academic issues. He also asserted that internet addiction causes problems with concentration in class, less time for studying, lower grades, and less attention devoted to events. Children in middle school who are internet addicts also struggle with mental and psychological issues like worry, loneliness, and unhappiness. [Nalwa & Anand \(2003\)](#) argued that kids who frequently use the Internet to divert their attention from their primary tasks end up performing poorly in school. According to [Karpinski \(2009\)](#), users of social media platforms like Facebook, WhatsApp, and others tend to devote less time to their studies, which is demonstrated by the fact that they have worse GPAs than people who don't participate in these activities.

### Hypothesis Testing

**Table 6:** Facebook exposure and exam performance

<b>The usage of Facebook during exams affects my grade and division. * Do you use Facebook? Cross tabulation</b>				
Count		Do you use Facebook?		
		to some extent	very much	Total
The usage of Facebook during exams affects my grade and division.	Strongly Agree	16	11	27
	Agree	47	25	72
	Neutral	19	6	25
	Disagree	33	10	43
	Strongly Disagree	13	2	15
Total		128	54	182

The result of this study supported H1 "the more students use or expose to Facebook, the more their exam performance will be poor" 27 respondents out of 182 strongly agreed that Facebook affected their grades and division. In contrast, 72 agreed, 25 were unintended, 43 disagreed, and 15 students strongly disagreed that Facebook usage affected their grades and division. It proved that those students using Facebook would affect their exam performance.

**Table 7:** Shows the usage of facebook for academic purposes

<b>Do you use Facebook? * Do you use Facebook for academic purposes? Cross tabulation</b>						
Count		Do you use Facebook for academic purposes?				
		Not at all	To some extent	Very Much	4	Total
Do you use Facebook?	to some extent	27	75	26	0	128
	very much	7	31	15	1	54
Total		34	106	41	1	182

The result of the study supported the H2 "it is assumed that the students of University of Malakand are using Facebook for entertainment rather than educational purposes" that 128 out of 182 up to some extent agreed with the notion that students use Facebook for academic purposes. In contrast, 54 used Facebook very much. Hence, it is proved that students of the University of Malakand are using Facebook for entertainment rather than educational purposes.

### Findings related to Cultivation Theory

This research study partially supports the assumption of cultivation theory that if students use or are exposed to Facebook, their exam performance will be poor to some extent. It is also proved that university students mostly use Facebook for entertainment purposes compared to academic purposes. Furthermore, this study showed that Facebook affects students' study time and diverts their attention and intention from the study, leading to poor exam performance and lower grades or division.

### CONCLUSIONS

This research study was conducted to evaluate and analyse the effects of Facebook on the exam performance of university students because Facebook is one of the most popular social media platforms, especially for university students. It was also





concluded that most students are daily active users who spend less than one hour on Facebook daily. This study found that university students used Facebook to some extent for academic purposes while primarily using it for entertainment, which negatively affects the exam performance of university students.

It is also concluded that Facebook usage affects the study time of university students, due to which they did not prepare notes for the exam but are up, to some extent, sharing exam-related information with teachers and friends. This study also concluded that Facebook diverts students' attention from their studies and can create a hindrance in preparing for exams as the response to it was given negatively. The research concluded that pressure is increased on university students due to Facebook usage, and most of the time, students are given their time to use it exceedingly. Due to this, they mismanage their studies. During exam day, the Usage of Facebook caused stress, tension, anxiety, and short-term memory loss. On the other side, it also affects students' writing skills, leading them to poor marks, low grades and division.

#### LIMITATIONS AND STUDY FORWARD

Only Social Sciences Students were investigated in this study, while other faculty students use Facebook during exams. The sample and location were also very limited in this study.

#### CONFLICT OF INTEREST

A conflict of interest is not present in the data. Throughout the research process, no specific funding or other forms of support were requested.

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#### AUTHORS CONTRIBUTION

The lead author helped with the study by choosing the blogs and reviewing the complete project, turning it into a question that could be investigated further. The other participants in the study determined the study's main goals and ensured that the critical research questions were satisfied with the study's conclusive results. We appreciate the contributions of all the authors to this work.

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