

Internet Usage and Student Academic Performance: A Brief Examination

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Abstract

This paper examines the influence of network connectivity on the daily lives of students. The internet is widely acknowledged today as a key communication tool and a significant resource. Its use by students extends beyond entertainment, affecting their engagement in the community and digital networking. However, students are increasingly encountering social challenges such as social isolation, mental health issues, reduced face-to-face interactions, time wastage, overuse of social platforms, and emotional distress. On the other hand, it was noted that students who spend more time online also tend to consume other media, engage in physical activities, and sustain social interactions. The study suggests that, given the internet's integral role in modern life, students should be mindful of how they use it. The internet is a vast source of knowledge, facilitating global communication and problem-solving. Nevertheless, excessive use of the internet, especially for social media or gaming, can lead to addictive behaviors and negatively affect educational activities. Therefore, students should focus on using the internet to learn and seek valuable information rather than merely for entertainment.

Keywords: *Internet usage, Student academic performance, Digital literacy, Social media and education, Cyberbullying, Digital divide*

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1. Introduction

The Internet is a global network of interconnected computer systems, facilitating information exchange and resource sharing. Each network may link dozens, hundreds, or even thousands of computers, enabling seamless communication. It serves as a vast web of connections spanning the world, allowing people to interact efficiently and affordably. The integration of computers and the internet has become an integral part of daily life, providing instant access to needed information. 'Internet access' refers to the link between homes or businesses and an Internet Service Provider (ISP), which enables connectivity. Students can access the internet using personal computers, laptops, tablets, or smartphones to gather information for social and academic purposes. The Internet operates as a worldwide system of connected networks utilizing the Internet Protocol Suite for communication. Alternatively, students may rely on mobile devices to access online services for educational needs. Internet access is the service that enables a device, network, or computer to connect to the web, allowing individuals and organizations to use applications such as email.

The internet is known to offer several advantages, including providing essential information and communication technologies for students' social lives. These advantages include promoting more active involvement, enhancing course discussions with detailed content, fostering independence, and improving communication among students and within their social circles. However, excessive internet use among younger generations, such as university students, may lead to increased reliance on virtual relationships and social isolation. Although several studies have examined these effects in different countries, no such in-depth analysis has been conducted in Bangladesh, particularly focusing on a public Science and Technology University, where internet access is more prominent due to a stronger focus on Information and Communication Technology.

The internet has reshaped both teaching strategies and student learning experiences. Furthermore, access to and use of the internet among high school students have been found to enhance their academic work, potentially leading to better grades. As the most extensive repository of human knowledge ever compiled, the internet has become an essential part of students' social lives, influencing how they interact and approach their studies. Internet usage impacts students' academic success, social interactions, and behavior. Its influence extends across personal, social, and economic aspects of life. Since its emergence, the internet has transformed communication, information exchange, business, education, and social interactions, significantly changing the way we live, work, and connect. Communication is one of the areas most profoundly influenced by the internet. However, many students predominantly use the internet for social networking, messaging, streaming movies, and listening to music. Excessive internet use among high school students has been linked to negative consequences, such as time wastage, procrastination on school assignments, declining academic performance, and school absenteeism.

This study examines internet usage among high school students and its effects on their social lives and learning. Specifically, it investigates students' internet access, the types of online platforms they engage with, and how these platforms influence their social learning and academic progress.

2. Internet Usage

Students remain connected to the internet throughout the day via their smartphones, using it during classes, breaks, after school, and even immediately after waking up. Many students rely heavily on technology for academic activities, such as accessing educational resources, chatting, and engaging in social media platforms like Facebook, Instagram, and YouTube. As internet capabilities continue evolving to meet the demands of modern society, the number of users is expected to increase significantly. Projections indicate that within the next five years, the global internet user base will expand by 47%, growing from 5.35 billion in 2024 to 7.9 billion in 2029.

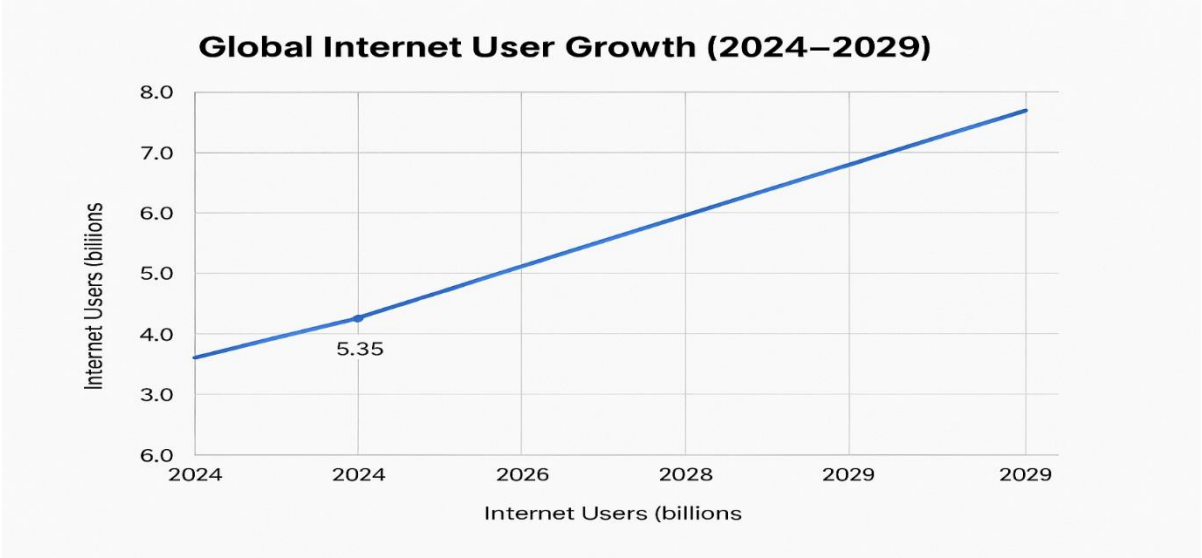


Figure 1: Global Internet User Growth (2024–2029)

Overall, a higher proportion of individuals under the age of 24 have internet access compared to those aged 25 and older, with a notable 10% gap according to Statista. Globally, 75% of individuals aged 15 to 24 have internet access, while only 65% of those 25 and older do.

3. Influence of the Internet

The internet has transformed communication, information exchange, business, education, and social interactions in remarkable ways, reshaping how people live, work, and connect. Many individuals have acknowledged that the internet has enabled them to establish connections with numerous people for both personal and professional reasons. However, excessive internet usage has been reported to negatively impact students’ creativity, especially when completing assignments.

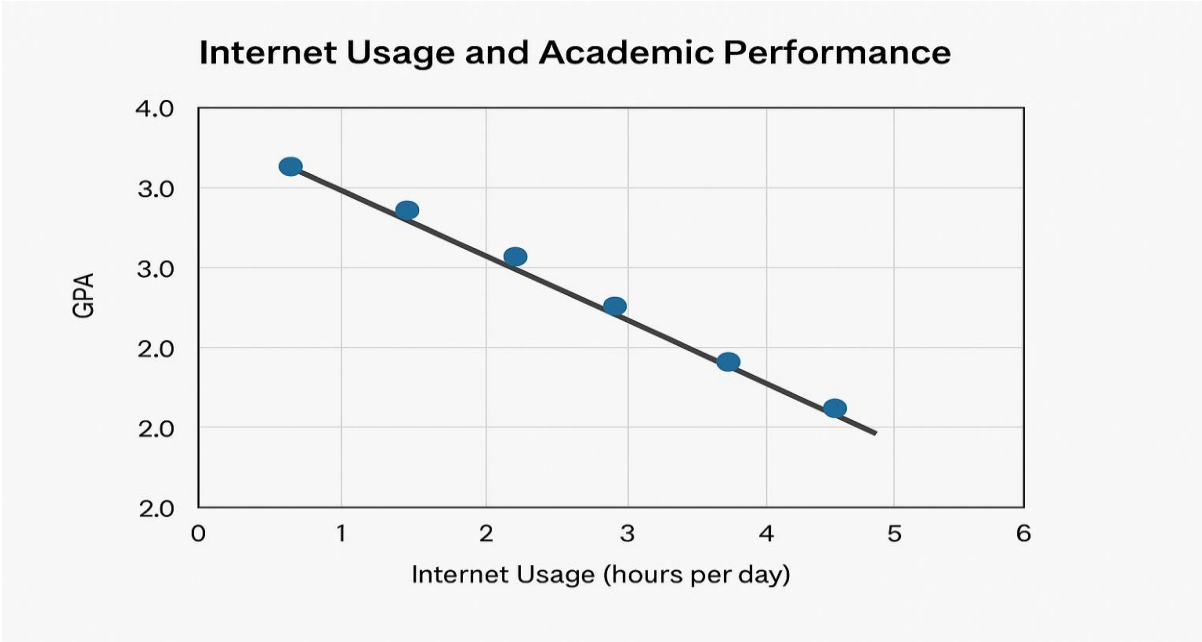


Figure 2: Correlation between daily internet time and academic performance

Instead of engaging in critical thinking and expressing ideas in their own words, students often rely on copying and pasting information, leading to unquestioned trust in online content.

On the positive side, the internet enhances efficiency by saving time, thus benefiting students in their academic, business, and social lives. It improves productivity through social networking, digital learning, gaming, education, skill development, and electronic communication. As a product of technological advancements, the internet—short for "Interconnected Networking"—refers to a vast network of linked computers. In everyday life, it provides immense benefits, especially to students. Furthermore, the internet has become a crucial source of academic materials, offering a wealth of diverse information with varying purposes, target audiences, and levels of reliability. Therefore, it is essential for users to critically assess the credibility of online information.

The rapid expansion of telecommunications has introduced online services, dedicated networks, websites, electronic mail, software, and global information databases, seamlessly integrating them into homes and educational institutions.

4. Advantages of the Internet

4.1. Educational Resources

The internet supports education in multiple ways, such as through virtual learning, collaborative studying, language development, time management, information analysis, and offering significant assistance in students' academic pursuits.

4.2. Access to Information

A significant portion of online knowledge is stored on websites. Today, students remain connected to the internet, enabling them to access a vast array of information via digital platforms and applications. The internet offers unrestricted access to knowledge, allowing students to explore educational content, download materials, and obtain precise information from any device.

4.3. Communication

The internet facilitates multiple communication methods, including email, instant messaging, online discussions, social media interactions, and virtual calls, fostering stronger global connections. It enables students to engage with peers worldwide, reducing isolation and enhancing the quality of communication without the need for physical travel.

4.4. Collaboration

Students can easily engage in teamwork through the internet, enabling them to solve problems and participate in group projects. Collaboration fosters active involvement, motivation, and improved performance by encouraging interaction, constructive feedback, and peer learning. It helps develop critical thinking, verbal communication, self-management, and other essential skills. Many students utilize online tools to collaborate efficiently in academic and extracurricular activities.

4.5. Career Development

The internet plays a pivotal role in career advancement. Students can search for job opportunities, apply online, and explore various professions and industries, aiding in informed career decisions. Online courses also provide students with the flexibility to acquire new skills and earn degrees, particularly benefiting those who face challenges attending traditional classrooms.

4.6. Access to Study Materials

Obtaining relevant academic resources has become easier with the internet. With a simple search, students can find information on various subjects, enhance their understanding, and access valuable study materials. The internet also allows students to interact with peers, share ideas, and exchange knowledge in real-time from different locations. Research indicates that internet usage positively influences students' academic performance by offering access to essential learning resources.

5. Disadvantages of the Internet

While the internet is a valuable learning tool, it also presents challenges for students. The negative effects of excessive internet use include addiction, decreased motivation, exposure to harmful content, and mental health concerns.

5.1. Distraction

Overuse of the internet for entertainment can lead to academic neglect. Excessive engagement in online leisure activities often results in reduced study time, declining reading and writing skills, and weakened relationships with family and friends. This detachment from responsibilities can significantly impact students' academic achievements.

5.2.Reduced Creativity

The internet may hinder students' creativity. Experts argue that instant access to information discourages independent thought and originality. Many students tend to copy and paste material instead of formulating their own ideas. Therefore, it is important to balance internet use with activities that stimulate creativity, such as reading and hands-on projects.

5.3. Information Overload

The overwhelming volume of data available online can confuse students. Searching for relevant information may lead to excessive content exposure, resulting in cognitive fatigue, stress, anxiety, and difficulty in decision-making.

5.4.Health Implications

Internet addiction can contribute to various health issues, including low self-esteem, poor dietary habits, mental health conditions like depression and anxiety, sleep disturbances, and reduced social interaction.

5.5.Cyberbullying

Online harassment is a serious issue affecting students' mental well-being. Victims of cyberbullying may experience anxiety, depression, self-harm tendencies, and difficulty in socializing, leading to distrust and emotional withdrawal.

5.6.Internet Dependency

Prolonged internet use can negatively impact students' academic performance by diverting attention away from studies. Poor time management, lack of physical activity, and declining focus on responsibilities are common consequences of excessive online engagement.

5.7.Time Wastage

One major drawback of the internet is time mismanagement. Students often spend excessive hours browsing, gaming, or engaging on social media rather than focusing on academic

responsibilities. This behavior can result in decreased productivity, leading to long-term negative consequences on their educational progress.

6. Challenges in Internet Access

Limited access to the internet can hinder students' ability to communicate with educators, conduct research, and complete assignments. Several factors, including technical issues, service disruptions, and a lack of digital literacy, can contribute to this problem. Unequal access to technology creates a digital divide, where students from disadvantaged backgrounds face difficulties in obtaining necessary digital tools and skills.

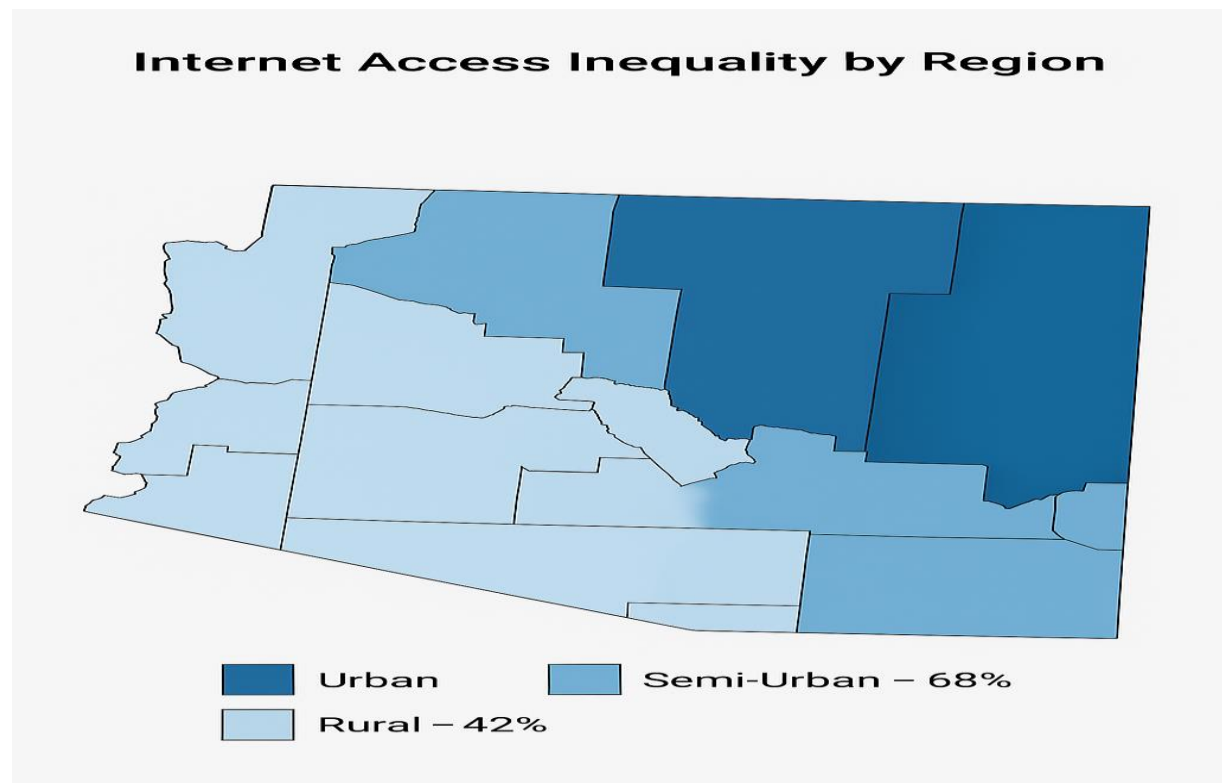


Figure 3: Internet access disparity inequality by region

6.1. Digital Literacy

Digital literacy encompasses the ability to search, analyze, create, and share information effectively. Many individuals struggle with developing essential technological and analytical skills, making digital literacy a crucial component of modern education and professional growth.

6.2. Privacy and Security

Protecting personal information from unauthorized access is essential. Students should use privacy settings, avoid oversharing online, and remain cautious about disclosing personal details to prevent identity theft and cyber threats.

7. Solutions to Internet Challenges

- ✓ Implement Data Protection Measures – Use encryption and security protocols to safeguard sensitive information.
- ✓ Enforce Privacy Regulations – Establish policies to protect personal data from misuse.

- ✓ Enhance Digital Literacy – Educate students about online privacy settings and how to manage their personal data securely.
- ✓ Bridge the Digital Divide – Ensure equal access to the internet and technology across different socioeconomic groups.
- ✓ Provide Cybersecurity Training – Teach students how to identify unsafe links, avoid scams, and create strong passwords.
- ✓ Promote Balanced Internet Usage – Encourage students to regulate their screen time and engage in offline activities.
- ✓ Encourage Time Management – Guide students in developing schedules that balance academic responsibilities and recreational internet use.

By integrating interactive study materials, such as educational videos, webinars, and collaborative projects, teachers can make learning more engaging. Encouraging healthy digital habits and online safety practices will help students maximize the benefits of the internet while minimizing its risks.

8. Conclusion

It is evident that internet usage significantly impacts students' lives in both positive and negative ways. While it enhances academic performance, facilitates social interactions, and provides access to learning resources, it also poses challenges such as cyberbullying, addiction, and reduced face-to-face communication. Students must develop responsible internet usage habits to leverage its advantages while avoiding potential drawbacks.

The internet serves as a powerful educational tool, enabling students to stay informed, improve their skills, and expand their global connections. However, maintaining a balance between online and offline activities is essential for long-term success. By fostering digital literacy, responsible usage, and time management, students can maximize the internet's benefits while safeguarding their well-being and academic growth.

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