# THE IMPACTS OF ARTIFICIAL INTELLIGENCE DRIVEN INTERNET AND SOCIAL MEDIA ON BOOK READING HABITS: A CASE STUDY IN TWO INSTITUTIONS IN SOUTHERN DISTRICTS OF ODISHA

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# **ABSTRACT**

This work endeavours to find the impacts of Artificial Intelligence (AI) enhanced internet and artificial intelligence driven social media on book reading habits. The population chosen for this study is 97 students from two engineering colleges from Ganjam and Gajapati districts in Odisha. Basic information is collected through a questionnaire survey. The study tries to dive into finding that students are more inclined towards AI enhanced social media and less towards reading books. Therefore, the study tries to highlight the effect of AI driven social media on reading habits of engineering students. So, this work makes an effort to uncover the vulnerability of reading habits.

Keywords: Social Media, Engineering Students, Distraction, Reading Habits, Artificial Intelligence



#### 1. INTRODUCTION

The Z generation is surrounded with technology. Technology is developing, upgrading and transforming every day. This leaves a void in users to upgrade or experience the latest. Some technologies are so addictive that knowingly or unknowingly it hampers them.

It seems doing more harm than good to many. Technological advancement has revolutionized almost all industries and left an indelible impact on many using it. While it has positive impact on many stake holders like the business, bank, education, etc., it has its share of troubles affecting many. Likewise, social media also has a dual effect on its users. Social media was designed to help people connect with one another. Later, it developed to be a tool to facilitate many other purposes. Lately, with the addition of artificial intelligence, social media has turned out to be more of a menace. With the new technologies, AI driven social media is yet to even become more dangerous. From distorted information that can damage personal relation to destabilizing nation, AI driven social media is a potent danger that has already started showing its true nature. It is felt during elections particularly; AI driven social media is used to manipulate election by manipulating users who are potential voters. Also, Parents complaining that their children are over using social media is not new. (Huang et al., 2014) noted, "the amount of reading is declining significantly and reading skills are decreasing".

Reading is essential for both individual growth and the development of a nation. It fosters critical thinking, shapes personality, and enhances intellectual abilities, which are vital for building a prosperous society. The research aims to raise awareness about how we have gradually distanced ourselves from our most valuable and irreplaceable companion—books.

#### 2. LITERATURE REVIEW

Among the four foundational language skills, reading stands as the cornerstone of learning. Its significance is magnified in foreign language education, contributing substantially to education and professional growth (Carrell, 1989; Grabe, 1991). Historically, the importance of reading was so profound that familiarity with works by authors like Tagore or Tolstoy was seen as a mark of societal value (Mishra, 2008). However, (Johnsson-Smaragdi and Jönsson 2006) highlighted the challenges posed by visually-aided technology and Information and Communication Technology (ICT), which have diminished interest in literature and printed books. Students now find the allure of new technologies more engaging than traditional reading.

Studies by (Johnsson-Smaragdi and Jönsson 2006 and Loan 2012) revealed that technological advancements have adversely affected reading habits. Teenagers, in particular, dedicate more time to television and the internet than to reading books (Pivec, 1998). (Hastings and Henry 2006) noted that eighty five percent of children preferred TV over books. Reading, as (Dadzie 2008) defines it, involves interpreting written words and extracting meaning for personal growth. (Palani 2012) emphasizes that cultivating a reading habit is essential for creating a literate society. He argues that reading nurtures creativity, enhances critical thinking, and shapes personality. However, the current generation appears more engrossed in social media than in traditional reading practices.

(Grosseck 2009, Gaona 2012 and Palani 2012) believe on the transformative power of reading in facilitating knowledge sharing. According to a Mexican National Survey on Reading, most book reading occurs between the ages of 17 and 22, with textbooks being the most frequently read material (Gaona, 2012). Despite its importance, the growing influence of ICT has disrupted traditional reading habits, posing challenges to fostering a reading culture.

Social Media is a gateway to a larger world. With many users at the other end, it becomes more exciting to use. Not just users but the tempting content also makes the user happy using it. (Mastrocicasa and Metellus, 2013) noted that social networking applications helps like-minded users connect with one another. According to (Lusk 2010), social media as "an aspect of the Internet which allows individuals and groups to create and publish online content, share the content, and interact about it". (Junco and Loken, 2010) defines social media as a "collection of Internet websites, services, and practices that support collaboration, community building, participation, and sharing". (Kaplan & Haenlein, 2010) defines social media as applications which runs with internet and facilitates customised content generation.

(Lubis et al.; 2012, Shabir et al., 2014) in their study found that social media had little effect on the students' academic grades. Likewise, (Kirschner and Karpinski, 2010) studied that those using social media get less studying hours than those not using it. Their study notes, Facebook users with 1-5 hours per week spend 11-15 hours less in studies per week. (Wang, Chen, & Liang, 2011; Shehu & Shehu, 2014; Yeboah & Ewur, 2014; Sharma & Shukla, 2016) found out that social media is a huge distraction in classrooms. The addictive nature of social media makes students use phone more, (Bhatt & Arshad, 2016). (Wang, Chen, and Liang, 2011) found that students use most of the time in social media in making friends that leads to poor performance and reading habit . (Ewur, 2014) also found that WhatsApp users spend more time with friends than academics. (Madge et al., 2009), noted that social connection and not academics was the major use by Facebook users. (Schmar-Dobler, 2003) finds that internet which has tempting content drives the users into it and drives them away from reading. (Sharma and Shukla, 2016; Yeboah and Ewur; 2014) found that Simple grammar and sentence making skills are disturbed by chats on social media. (Obama, 2008) is of the opinion that children have to be away from television if they were to become more aspiring.

However, many studies highlight the advantages of social media on reading culture. It acts as a platform for gaining knowledge, sharing information, and promoting awareness of socio-political and environmental issues (Hussain, Loan, & Yaseen, 2017). Social media also serves as a tool for staying connected with loved ones (Madge et al., 2009; Shabir et al., 2014; Shehu & Shehu, 2014; Chander & Singh, 2017; Hussain, Loan, & Yaseen, 2017). Many individuals utilize

social media for educational purposes and learning by self. (Khan, 2012; Chander & Singh, 2017), with peer influence being a significant factor driving its use (Khan, 2012).

Additional research, including studies by (Junco et al. 2011), Madge et al. (2009), and Olutola et al. (2016), highlights the impact of online platforms on students. These studies suggest that social media enhances reading habits and academic performance, underscoring its contribution to creating a more effective learning environment.

### 3. RATIONALE OF THE STUDY

This study holds particular importance as it explores the influence of the AI enabled Internet and AI enhanced social media on the reading habits of students in engineering colleges in southern Odisha. Moreover, the findings may provide valuable insights into the current state of human thought and behaviour.

# 3.1. OBJECTIVES OF THE STUDY

The aim of the study is to bring to light the effect of latest internet and social media which are AI enable on reading habits. And, to bring in awareness among students of the digital habits which will lead them to inculcate healthy reading habits. Further, to suggest measures to address the findings.

#### 3.2. HYPOTHESIS OF THE STUDY

The hypothesis formulated for this study is that students devote much of their time using AI driven internet and AI driven social media compared to reading books.

#### 4. METHODOLOGY OF THE STUDY

This work used simple survey to gather raw information. A well analysed questionnaire was used to collect information. The questionnaire was curated using references from previous similar studies. Before, finalising the questionnaire, a pilot study on 11 students was done on the questionnaire to ensure the survey was reliable and valid.

The population in this case study are the engineering students from Parla Maharaja Engineering College (PMEC) in Ganjam district and Centurion University in Gajapati district. In order to collect information, permission was sought from both the colleges. A random total of 100 students from both institutions PMEC and Centurion University were chosen. The sample chosen were handed out the questionnaire. However, 97 responses were taken into consideration as the other 3 were either incomplete or multiple responses chosen in more than one question. Effort was made to have approximately equal number of male and female students. Their ages were recorded to be between 18 and 22. The data gathered was processed with Statistical Package for the Social Sciences (SPSS) 24.0. The information recorded are shown in the figures below.

#### 5. THE RESULTS

**Table 1** What do you do in your free time?

| Read novels | Use technology |
|-------------|----------------|
| 32          | 65             |

There are 65 students out of 97 students spend their free time using technology for some reason or the other. In contrast, only 32 participants read novels in their free time.

**Table 2** Do you like chatting with friends regularly?

| Enjoy chatting with friends | Not interested |
|-----------------------------|----------------|
| 70                          | 27             |

In this table, 70 participants (72.2%) enjoy chatting with during their free time, while the remaining 27 participants (27.8%) are not much into chatting.

**Table 3** Do you regularly read non-academic books?

| Read non-academic books | Don't read non-academic books |
|-------------------------|-------------------------------|
| 23                      | 74                            |

The result in this figure show that only a small number of participants, 23 (24.5%), regularly read non-academic books, while the majority, 74 (75.5%), do not engage in regular reading of non-academic books.

**Table 4** Is movie watching more enjoyable than reading books?

| Agree | Disagree | Not sure |
|-------|----------|----------|
| 78    | 7        | 12       |

This table records a disappointing result regarding book-reading habits. It shows that above three-quarters, 78 students agree that watching movies provides more immediate fun than reading books. Meanwhile, 12 students are unsure about this idea, and only a small number, 7 students disagree with this viewpoint.

**Table 5** How much time do you spend reading books on a daily basis?

| More than 4 hours | 2 to 4 hours | 2 hours | 1 hour | No book reading habit |
|-------------------|--------------|---------|--------|-----------------------|
| 2                 | 6            | 9       | 42     | 38                    |

The table shows that close to forty percent, 38 participants do not have a daily book-reading habit. Another third, 42 (43.2%), read books daily for only one hour. The rest participants are divided as follows: 9 (10.3%) read for 2 hours a day, 6 (6.9%) read for 2-4 hours, and 2 (2.3%) read for more than 4 hours each day.

**Table 6** How regularly do you browse the AI enhanced Internet?

| Daily | Don't use internet | Twice of thrice a week |
|-------|--------------------|------------------------|
| 83    | 4                  | 10                     |

This figure shows that 83 (85.6%) students, browse the internet daily. Additionally, 10 students (10.3%) use the internet two or three times a week, while only 4 participants (4.1%) do not use the Internet at all.

**Table 7** Do you use more money to access AI enhanced internet than buy books?

| Spend more on books | Spend more on internet | Not sure |
|---------------------|------------------------|----------|
| 17                  | 68                     | 12       |

This table shows that 68 students acknowledge they spend more money to access Internet than purchase books. From the rest 29 students, 12 are unsure about this issue, and 17 spend more on books.

**Table 8** Do you love spending time watching TV than reading books?

| Agree | Disagree | Not certain |
|-------|----------|-------------|
| 68    | 20       | 9           |

This table shows that 68 students prefer spending more time watching TV, while 9 students are uncertain about this, and 20 participants disagree with this statement.

**Figure 9** How frequently do you use non-academic books from your college/university library?

| Once a week | Once a month | Few times a year | Normally do not collect |
|-------------|--------------|------------------|-------------------------|
| 12          | 11           | 4                | 70                      |

This table shows quite discouraging, revealing 27% of the students use non-academic books from their institution. Among them, 12 students (12.4%) do so weekly, and 11 students (11.3%) borrow books monthly. Additionally, 4 students (4.1%) get books only fewyearly. However, it is striking that over half of the participants, 70 students (72.2%), typically do not visit their college or university library to borrow books.

**Table 10** Do you enjoy using in AI enhanced technology/AI driven social media than in reading books.

| Agree | Disagree | Cand decidee |
|-------|----------|--------------|
| 70    | 21       | 6            |

This table indicates that 70 students (70%) report finding more enjoyment in using technology or social media compared to reading books. Additionally, 6 participant students (5%) are uncertain about their preference, while 21 students (25%) disagree, expressing that they do not derive greater pleasure from technology or social media.

**Table 11** Do you believe reading books help acquire knowledge?

| Agree | Disagree |
|-------|----------|
| 74    | 23       |

The findings presented in table 11 are quite striking, showing that 74 students consider reading books for knowledge acquisition to be an outdated practice, while 23 students think otherwise.

**Table 12** Do you think new AI enhanced technology provides more information, fun and enjoyment than printed books.

| Agree | Disagree | Can not decide |
|-------|----------|----------------|
| 82    | 5        | 10             |

Table 12 shows that most of participants, 82 (84.5%), believe that the AI enabled technology offers more input, fun, and enjoyment compared to printed books. Meanwhile, 10 participants (10.3%) are uncertain about this perspective, and only a small minority, 5 students (5.2%), disagree with this view.

**Table 13** Which helps learn about worldwide culture?

| Book reading | Browsing the internet |
|--------------|-----------------------|
| 18           | 79                    |

It highlights the extent to which technology has overtaken traditional book reading habits. It indicates that 79 participants (81.4%) believe that browsing the AI enhanced Internet is the primary way to become familiar with global culture, while only 18 participants (18.6%) rely on book reading for this purpose.

**Table 14** Do you think use of wide ranges of AI enhanced technology reduces your time for printed books?

| Increase reading time | Decrease reading time | No impact |
|-----------------------|-----------------------|-----------|
| 8                     | 83                    | 6         |

The table reveals that 83 students (85.6%) acknowledge that extensive use of technology decreases the time they spend reading books. Meanwhile, 6 students (6.2%) are uncertain about this claim, and only 8 students (8.2%) think it rather increases their reading time.

# 6. MAJOR FINDINGS

Most students do not engage in reading non-academic books during their leisure time. Instead, the majority spend their free hours browsing the internet, using social media platforms like AI enhanced Facebook, talking on cell phones, listening to music, or playing games. This indicates that while modern individuals may express an interest in reading, they often opt for other activities as substitutes. Watching movies, for instance, is perceived as a quicker and more enjoyable option than reading books. Many participants openly shared their fondness for using technological devices.

The study also reveals that the growing influence of the internet and social media has made it increasingly rare to find people with a consistent reading habit. Although students purchase books each year, only a few dedicate time to reading them. Alarmingly, nearly 70% of participants agreed with the statement that "Nowadays, buying books is primarily for decorating modern, fashionable drawing rooms." As time progresses, the habit of reading books struggles to keep pace, with digital resources gradually replacing traditional libraries.

This finding aligns with Yong's (2009) observation that modern entertainment and information dissemination methods, such as television, computers, game consoles, and the internet, dominate young people's living and learning spaces. Given that today's individuals use the internet daily, they prioritize spending money on internet access over purchasing books. For them, the internet offers a gateway to explore diverse cultures and regions globally. When asked why they prefer the internet, participants explained that it allows them to learn about and observe the traditions, cuisines, and languages of various countries. Satellite channels further enable easy exposure to different cultures, making browsing the internet and social media more appealing for students who wish to become globally aware.

The findings presented in Figure 9 show that 72% students do not visit their college or university libraries to borrow books. Despite their heavy reliance on technology, a significant portion of participants admitted that extensive use of digital tools significantly reduces the time they spend reading printed books. The study's results thus underscore the alarming impact of growing technological dependency and its time-consuming nature on students' reading habits.

#### 7. EDUCATIONAL IMPLICATIONS

The findings bring out the necessity to devise solutions to address the obscure problem prevailing among engineering students. This will push the policy makers and think-tankers to remedial steps. Effectively implementing the steps will discourage students wasting time in AI enabled digital platform.

#### 8. CONCLUSION AND SUGGESTIONS

In today's rapidly evolving world, the diminishing culture of reading among the younger generation, particularly students at higher secondary and tertiary levels, is significantly impacting the skills of graduates passing out from the nation's top educational institutions. This study highlights how the steady progress of technology has created unavoidable obstacles to intellectual growth. Modern individuals are increasingly overlooking the importance of reading books which remains one of the most effective ways to enhance intellectual abilities.

While it is true that technology has greatly simplified daily tasks, it cannot fully replace the value of cultivating a reading habit. Without this habit, students miss the opportunity to become well-rounded and knowledgeable individuals. The results of this work reveal that the increasing dependency on technology and its substitutes is a major factor behind students' declining interest in reading books. Most participants reported spending their time chatting with friends, playing games, watching television, using cell phones, or browsing the internet, with only a few opting to read printed books. Even among those who read, many admitted they do so solely to prepare for exams.

Students are increasingly dependent on technology for information, entertainment, and leisure, which has contributed to their reluctance to visit libraries. This study concludes by establishing the corelation between latest technologies with AI enhanced features and reading habits. This encourages further large-scale research to provide deeper insights into this issue and explore potential solutions. Some probable suggestions could be framing new policies are to be framed for the usage of latest technologies; educational institutions may consider regulating digital hours spent by the students; and encouraging quality reading during library hours.

## **CONFLICT OF INTERESTS**

None.

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