

# Use of Smart Devices by Students of Library and Information Science: A Case of Babasaheb Bhimrao Ambedkar University, Lucknow



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**ABSTRACT:** *In recent years, smartphones have surpassed the importance of one's shadow. When an individual is functioning without a smartphone, he feels uneasy, as if something is missing or frightened of losing contact with friends and family. The study showed how UG and PG Library and Information Science students at Babasaheb Bhimrao Ambedkar University used intelligent devices. The study's objectives were met through the use of an online questionnaire. The results reveal that every respondent has a smartphone, and the most popular app among students is WhatsApp. According to the findings, respondents believe that they have difficulty solving study-related problems if Internet connectivity is unavailable. In addition, some respondents think that mobile phones distract them and impact their health. The findings of this study show that while mobile devices are beneficial for studying these days, they should be used with parental supervision.*

**Keywords:** Mobile Device, Library and Information Science, BBAU, Online Learning, m-Learning, Lucknow

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## 1. Introduction

Information and communication technology (ICT) and internet services have influenced nearly every aspect of human existence. It's increasingly seen in how individuals teach and learn. Mobile phones are used in every possible campus situation, including the classroom, both overtly and quietly, according to even an essential examination of today's university students. The device appears to be capable of contributing as mobile phone technology develops. Because of its multi-functionality and efficacy, m-learning (mobile learning) has become a popular learning approach to education, notably higher education, worldwide.

Mobile learning is still in its infancy, despite the considerable development and the promise of mobile devices. Using mobile technology and the internet, students may obtain their study materials anywhere and anytime. Academicians can utilize mobile devices and applications to improve knowledge sharing activities and provide new methods to connect with their campuses, course materials, students' records, and colleagues.

## 2. Smart devices for ease of use

➤ Learning has many avenues, and it is open to many platforms where the Students' attention increases. Smartphones ensure autonomy to the students over their educational experience (Buck et al., 2013) and enable standard learning information and opportunities (Day & Erturk, 2017). There are many apparent advantages, but the most striking feature is the handy or portable size and its use in the classroom and away from the school (Mokoena, 2012). This potential makes it advantageous than the traditional platform for learning and teaching, which was characterized by books and chalk/marker boards and is confined to the physical location of the classrooms.

➤ Due to their adaptability and efficacy, smartphones are increasingly used for learning activities. In the various studies organized, the intelligent devices in the classroom are found to improve cooperation, engagement, and students' interest in course content and assignments and facilitate formative and summative assessment methods. As a result of integrating mobile devices into the classroom, students will have more opportunities to connect with the outside world, such as their families.

➤ **Up-to-date Learning:** The lost tendency of looking for specifics in books and other sources has passed. Suppose students use cell phones in the classroom. In that case, they can quickly access the most up-to-date information about everything and everything, which boosts student enthusiasm and involvement in their studies. They will also have immediate access to knowledge about emerging technology in their fields of interest, which they may share with other students through a smartphone. Even though lecturing is one method of imparting knowledge to pupils, it does not retain their attention for very long. As a result, this kind of information exchange will considerably assist pupils in broadening their knowledge.

➤ **Textbook Alternatives:** The traditional practice of visiting the library and looking for books, topics, and subjects have been replaced by remote access. Many textbooks lack the information that students require. In the same way that smartphones provide up-to-date information, library books cannot. Only if students have rapid access to up-to-date, correct information on everything can their knowledge expand. On their cell phones, they may also save digital textbooks in.docx,.pdf, and other formats, as well as e-books. In favor of smartphones, pen drives, external hard discs, and other data storage devices are being phased out.

## 3. Issues with the use of Smartphones

Smartphones cause health problems, particularly for the ear, nervous system, and heart. Vibrations emanating from smartphones raise many health issues. The telecommunication signals affect the body to a considerable extent.

➤ Smartphones are presently causing a great deal of disruption, where their use warrants at any time. The over-dependence of smartphones by students during studies affects creativity and learning as they engage with the phones most of the time.

➤ Intelligent smartphones may have cloning difficulties. Cloning is when someone steals a company's identification number and uses them to make long-distance calls on the owner's account.

## 4. Review of Literature

During the COVID-19 outbreak, students may benefit from mobile learning to cover the gaps in their education, which is evident from many studies. (Biswas, Roy, and Roy (2020)) By June 2020, teaching has started to depend on smartphones, and intelligent devices influence the world. Although many developed nations consider mobile to be positive, a few countries such as Bangladesh underutilizes learning as a robust educational tool. This method of surveying 416 students from several Bangladeshi institutions was utilized to understand their perspectives on using mobile phones as a learning tool. This investigation shows that most university students are positive towards mobile learning.

Gomez (2020) linked students' academic performance and their usage of smartphones in secondary schools. For this reason, the author has conducted secondary exploitation of the Ministry of Education database for 2017, which contains information on 1,887,027 students from 7381 Spanish secondary schools. A multilevel correlation study is used as a method of analysis. The findings revealed a substantial link between centers and areas that permit mobile devices in education and academic achievement.

The influence of using smartphones on undergraduate students' academic performance at North-West University in South Africa was investigated by Ifeanyi (2020). This study used a quantitative research technique to collect data from 375 undergraduate students using questionnaires to assess the effect. Many undergraduate students use their smartphones to communicate with their peers and professors. It was also discovered that using smartphones diverts students' attention away from their academics in several ways. The findings also revealed how smartphone use affects kids' academic ability and growth. Research by Adjei (2019) used the Technology Acceptance Model (TAM) and included 294 participants. The study was conducted using a survey research approach using questionnaires. The study's main goals were to determine the perceived ease of using a smartphone in learning activities, the perceived usefulness of a smartphone in students' academic achievement, the effect of using a smartphone in students' learning activities, and the factors that inhibit the use of a smartphone as a learning tool.

In a study, Hossain (2019) determined how mobile phone usage affects academic performance among male and female students at Jahangirnagar University in Bangladesh. A face-to-face survey was done among 274 students from different departments of Jahangirnagar University in Bangladesh, including 159 male students and 115 female students ranging from second to the fourth year. Gender, age, and a connection with someone of the opposite sex all have a considerable favorable impact on pupils' academic achievement. However, marital status, time spent on the phone, and the detrimental effect of telephone and application use while studying negatively impact students' academic performance. On the other hand, the author believes that mobile phone manufacturers should consider how young people utilize their phones for educational purposes.

Similarly, in his study, Darko-Adjei (2019) used questionnaires to survey research. The study's main goals were to assess the perceived convenience of using a smartphone in learning activities, as well as the perceived utility of a smartphone to look at the impact of using a smartphone on pupils' academic performance to explore the variables that prevent students from using a smartphone as a learning aid and from using a smartphone in their learning activities. According to the research, cell phones were also an essential element of distance learning students' academic pursuits in Ghana. However, the analysis indicated some barriers to smartphone need, such as smartphones freezing during critical learning instances, unstable internet connectivity, impinging calls during classroom hours, and smartphone screen and key sizes, which made the smartphone unpleasant to use for learning, particularly in comparison to laptops.

##### **5. Objectives of the Present Study we have developed a few goals of this current work below.**

- Using a mobile device, determine the total number of UG and PG students in the Department of Library and Information Science at Babasaheb Bhimrao Ambedkar University in Lucknow, Uttar Pradesh, India.
- To determine which sorts of devices are used by UG and PG students at Babasaheb Bhimrao Ambedkar University in Lucknow, Uttar Pradesh, in Library and Information Science.
- To explore the requirements of intelligent devices for the learning process.
- To find out which application is most used by UG and PG students of the Department of Library and Information Science from Babasaheb Bhimrao Ambedkar University.
- To explore the use of mobile data per day by the UG and PG students.
- To find out the mobile device can change the reading habits of the UG and PG students of the Department of Library and Information Science from Babasaheb Bhimrao Ambedkar University.

##### **6. Significance of Research Study**

- Mobile phones have become as important as a person's shadow in recent years. When a person does not have access to a mobile phone, he feels uneasy, as if something is missing or frightened of losing contact with friends and family. With so many essential advantages to mobile phones, it's crucial to investigate the conclusions of mobile communication studies.

## 7. Methodology

➤ This study took a survey method, with data collected via an online questionnaire. The study's target audience was UG and PG students from Babasaheb Bhimrao Ambedkar University's Department of Library and Information Science in Lucknow, Uttar Pradesh, India. The population of the study consisted of 60 students in total. Only 34 UG and PG students responded to the survey out of 60.

## 8. Data Analysis and Interpretation

Gender	Qualification
Male = 52.9	UG = 47.1
Female = 47.1	PG = 52.9

Table 1. Basic information of respondents in percentage (%)

Table 1 demonstrates that male respondents account for a higher proportion of total respondents than female respondents, and PG respondents account for a higher percentage of total respondents than UG respondents

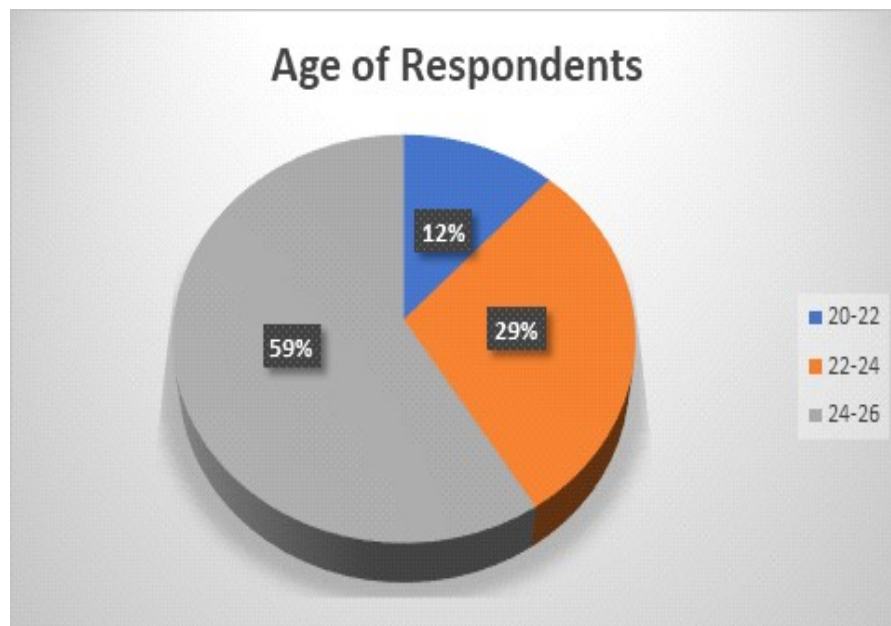


Figure 1 shows that 58 percent of respondents are between 24 and 26, while 29 percent are between 22 and 24. In the Library and Information Science departments at Babasaheb Bhimrao Ambedkar University, the figure clearly shows that the age group of 24 to 26 uses more mobile than the other groups.

Table 2 and Figure 3 show that UG and PG library and information science students at Babasaheb Bhimrao Ambedkar University have cell phones. Figure 3 similarly reveals that 26% of students use a laptop. However, there are no students who use a PDA in this table.

Figure 4 depicts the reason for utilizing a mobile device, revealing that 14% of respondents used a mobile device for the department of LIS, BBAU's study. Respondents also use their mobile devices for social networking, accessing study materials, playing games, and other activities. According to this data, just 1% of respondents in the LIS department utilize mobile devices for digital payments.

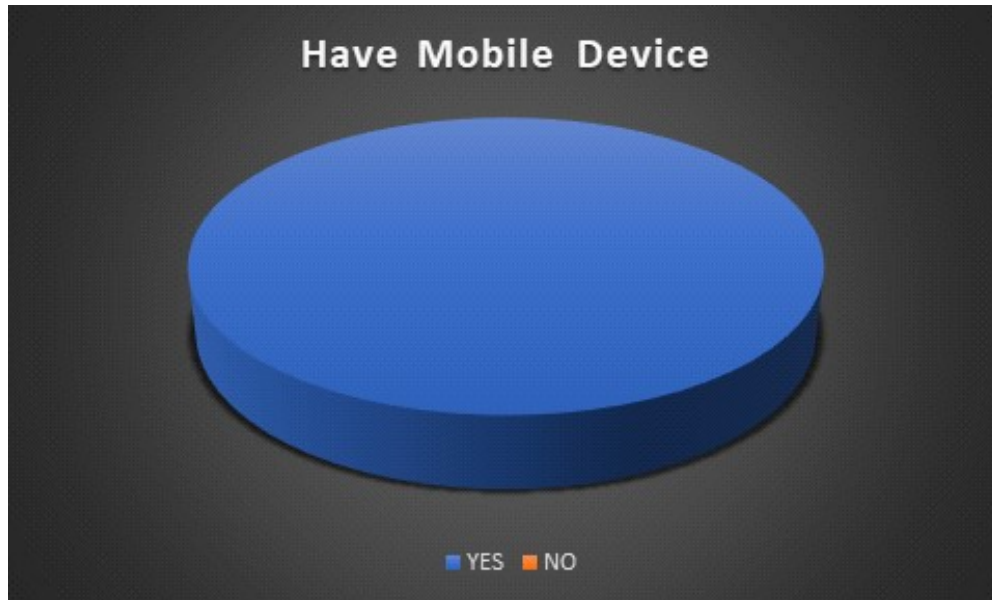


Figure 2. Shows that all UG and PG library and information science students at Babasaheb Bhimrao Ambedkar University have cell phones

Cell Phone	Laptop	Tablet	PDA
68.8%	26%	5.2%	00%

Table 2. Types of devices used by UG and PG students

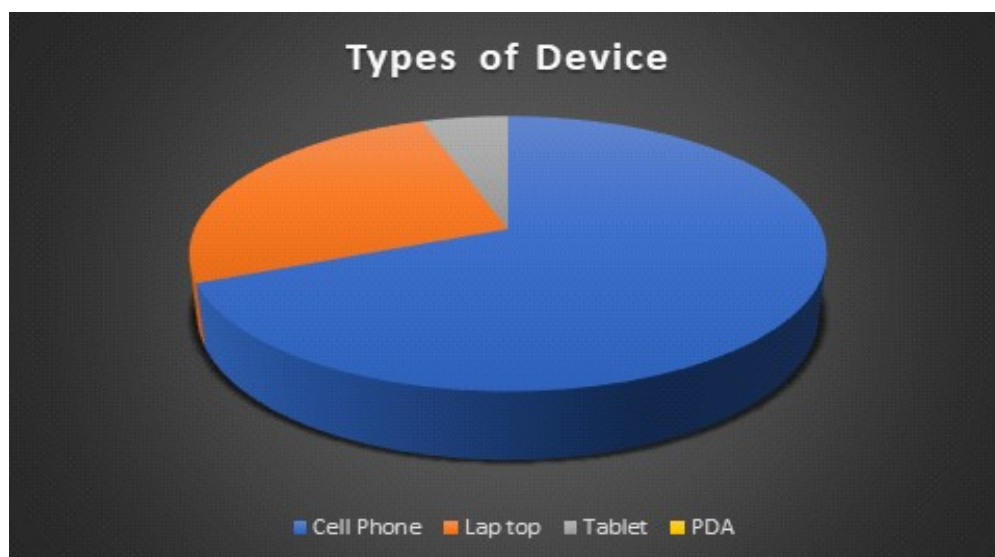


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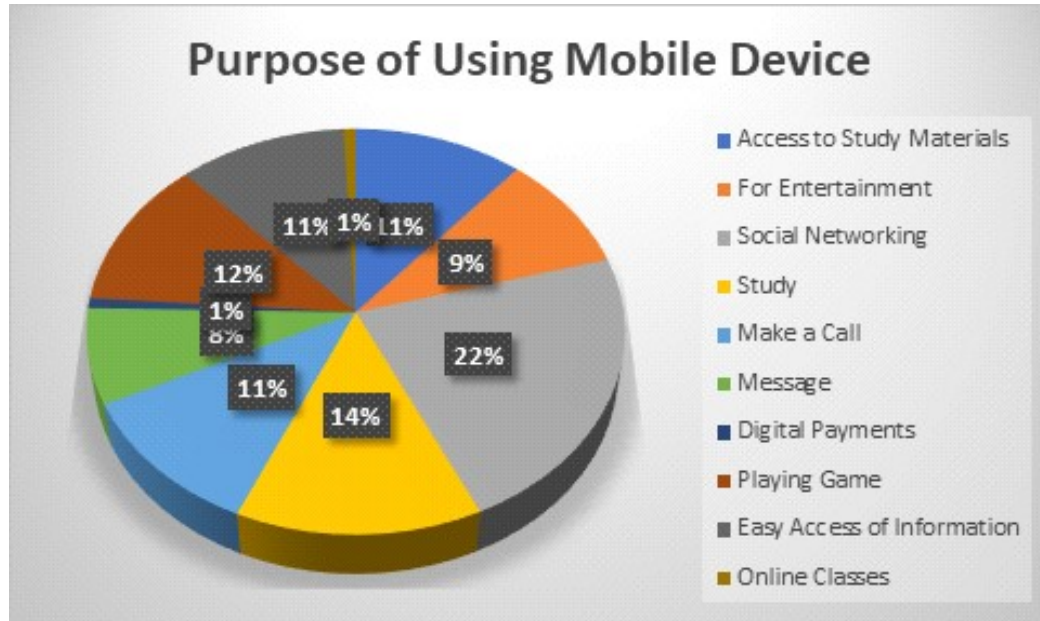


Figure 4. Depicts the reason for utilising a mobile device

Figure 4 depicts the reason for utilising a mobile device, which reveals that 14% of respondents used a mobile device for the department of LIS, BBAU's study. Respondents also use their mobile devices for social networking, accessing study materials, playing games, and other activities. According to this data, just 1% of respondents in the LIS department utilise mobile devices for digital payments.

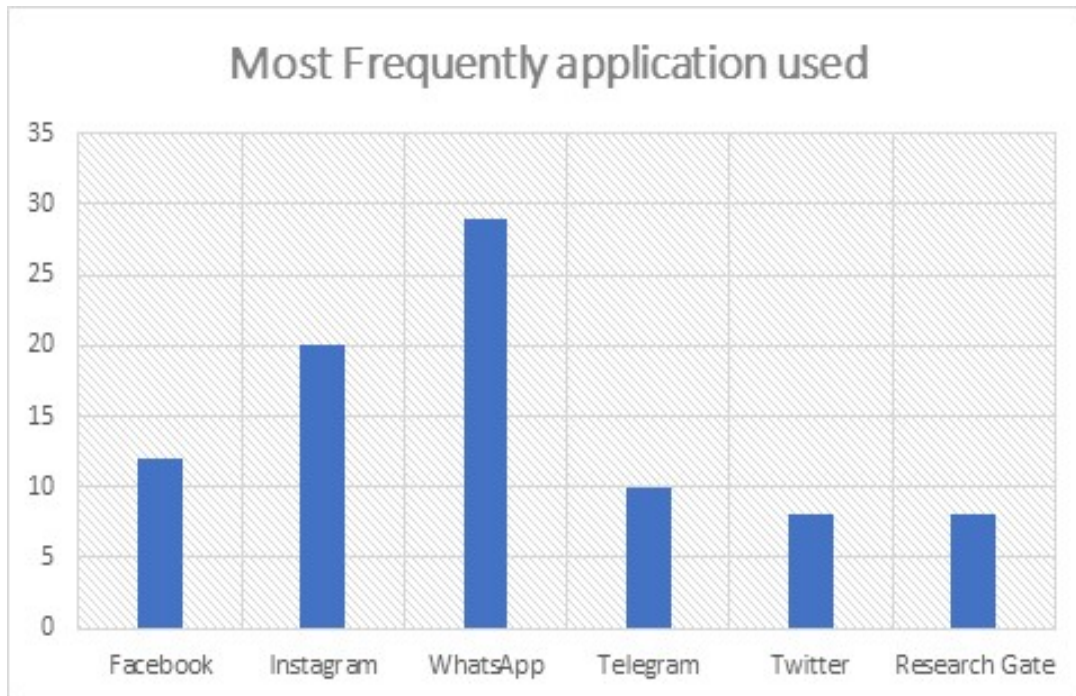


Figure 5 reveals that 85 percent of respondents use WhatsApp the most frequently, followed by 58 percent who use Instagram and Telegram 29%. UG and PG students also use Research Gate for their research. Twenty-three percent of those polled also use Twitter.



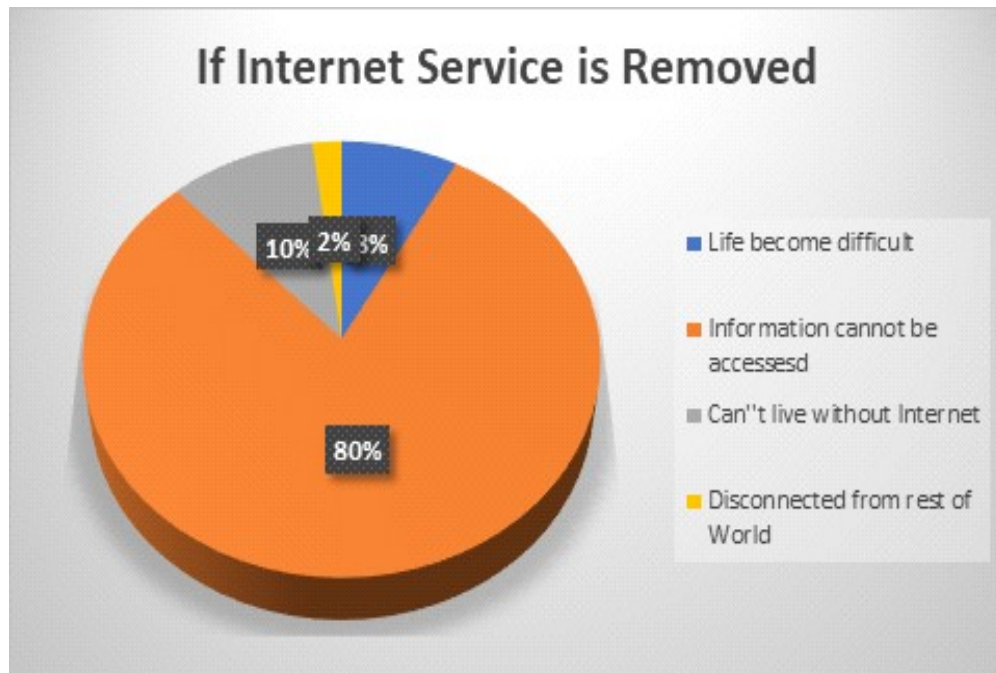


Figure 6 demonstrates that most respondents believe that removing Internet access from the phone will make it challenging to solve study-related problems. Simultaneously, some respondents believe they cannot live without the internet. According to this graph, respondents believe that life would be challenging and separated from the rest of the world if they did not have access to the internet.

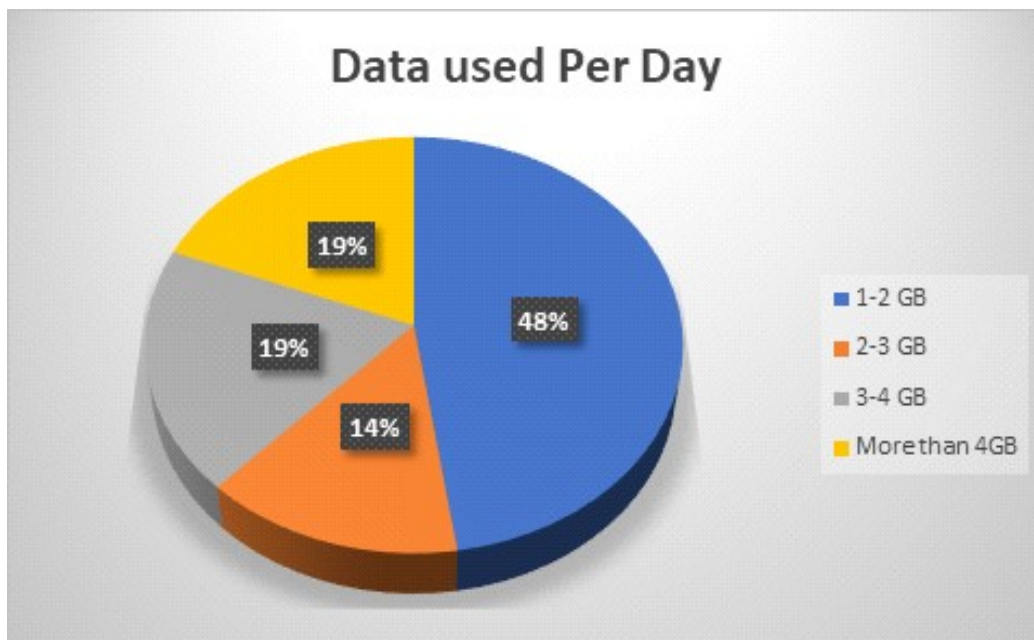


Figure 7. According to this graph, students at Babasaheb Bhimrao Ambedkar University's UG and PG Library and Information Science programmes utilised an average of 2 GB of data each day. Figure 7 also shows that 19% of respondents use more than 2 GB of data per day, and 19% consume more than 4 GB of data per day.

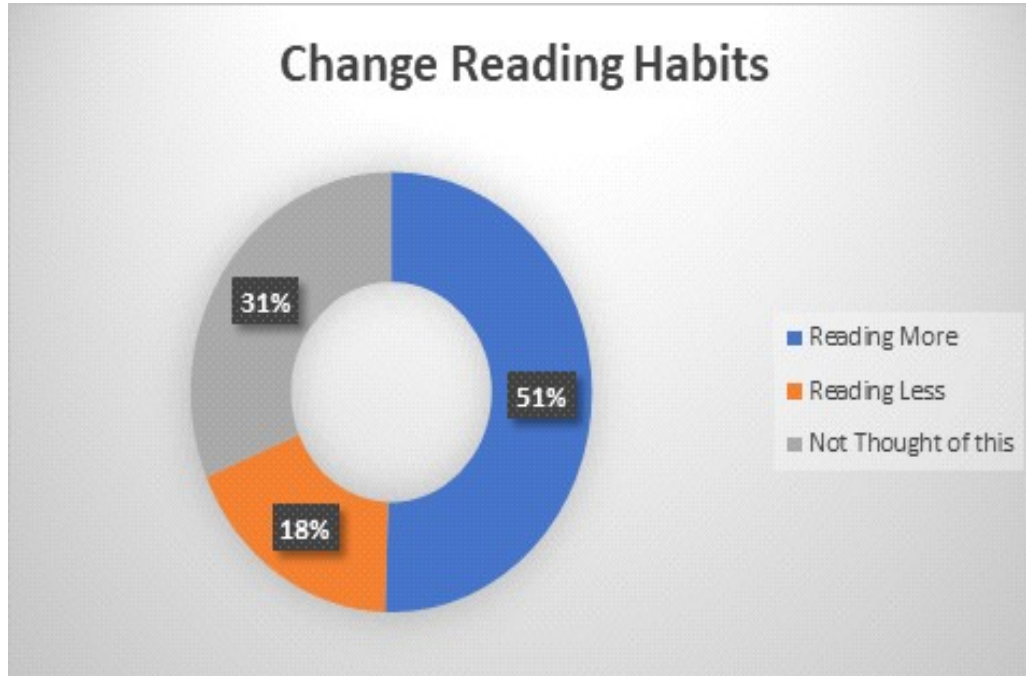


Figure 8. According to their responses, 51 percent of respondents have a good influence of using a mobile device, and they study more with the aid of a mobile device at the same time. Although 31% of respondents did not consider these arguments, 18% of respondents from Babasaheb Bhimrao Ambedkar University’s Department of Library and Information Science believe that using a mobile device reduces study time.

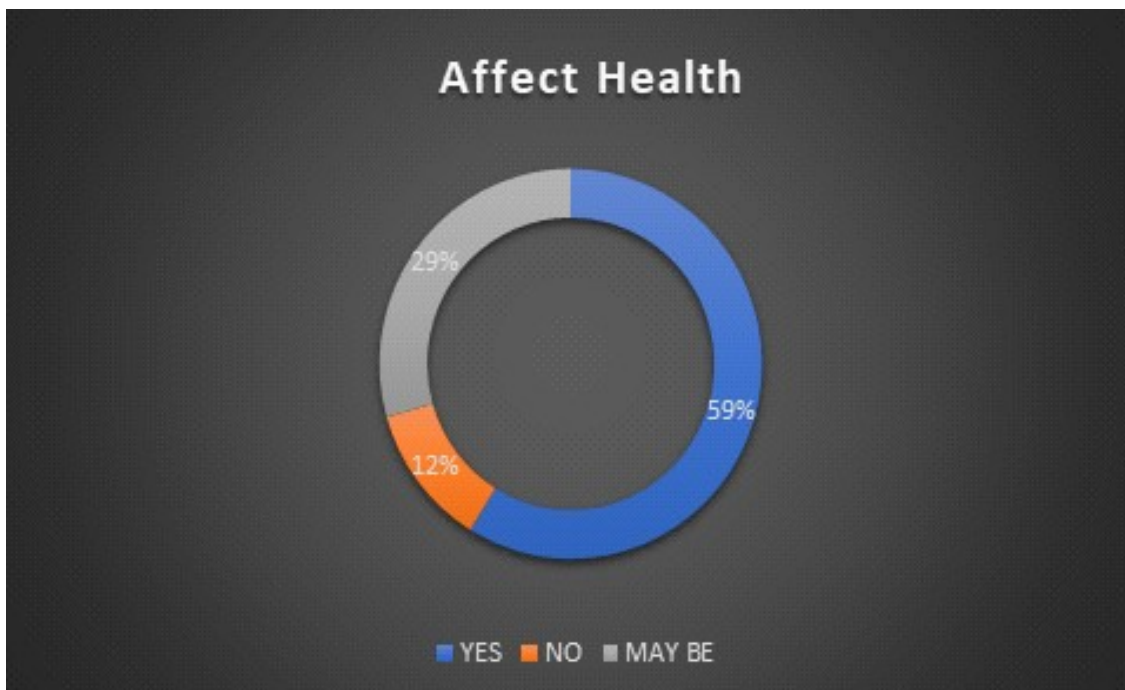


Figure 9 shows that UG and PG students believe that using a mobile device impacts their health, with 29 percent of respondents not sure about, while just 12 percent believe that using a mobile device has no impact on their health. According to this figure, using a cell phone for excuses is harmful to one’s health.



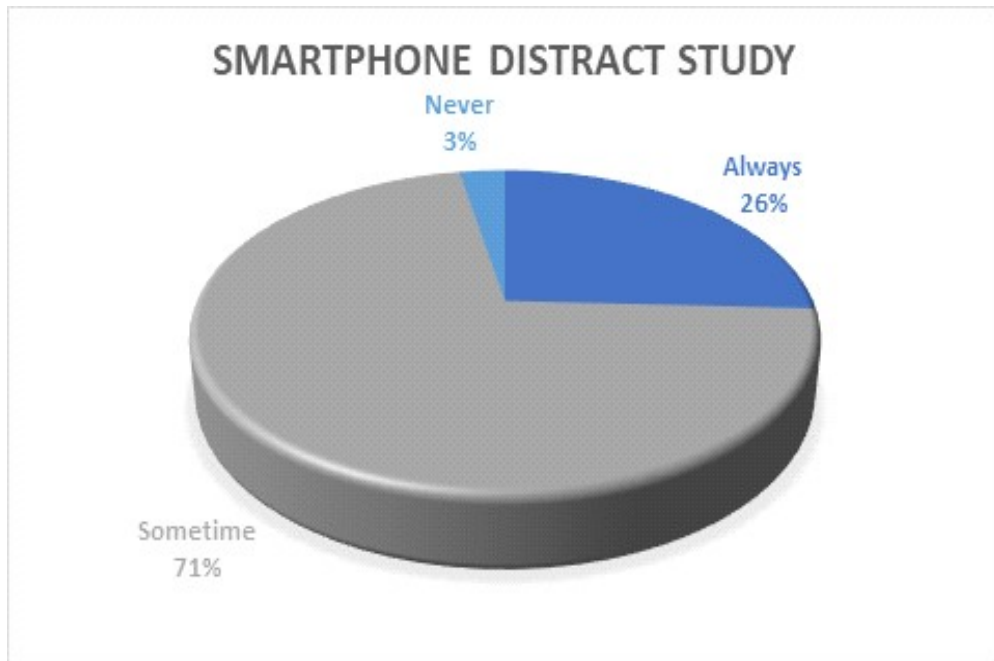


Figure 10 demonstrates that students in Babasaheb Bhimrao Ambedkar University’s UG and PG Library and Information Science programmes believe that using a smartphone is distracting. They are unable to concentrate on their studies. Only 3% of respondent are disagree with it.

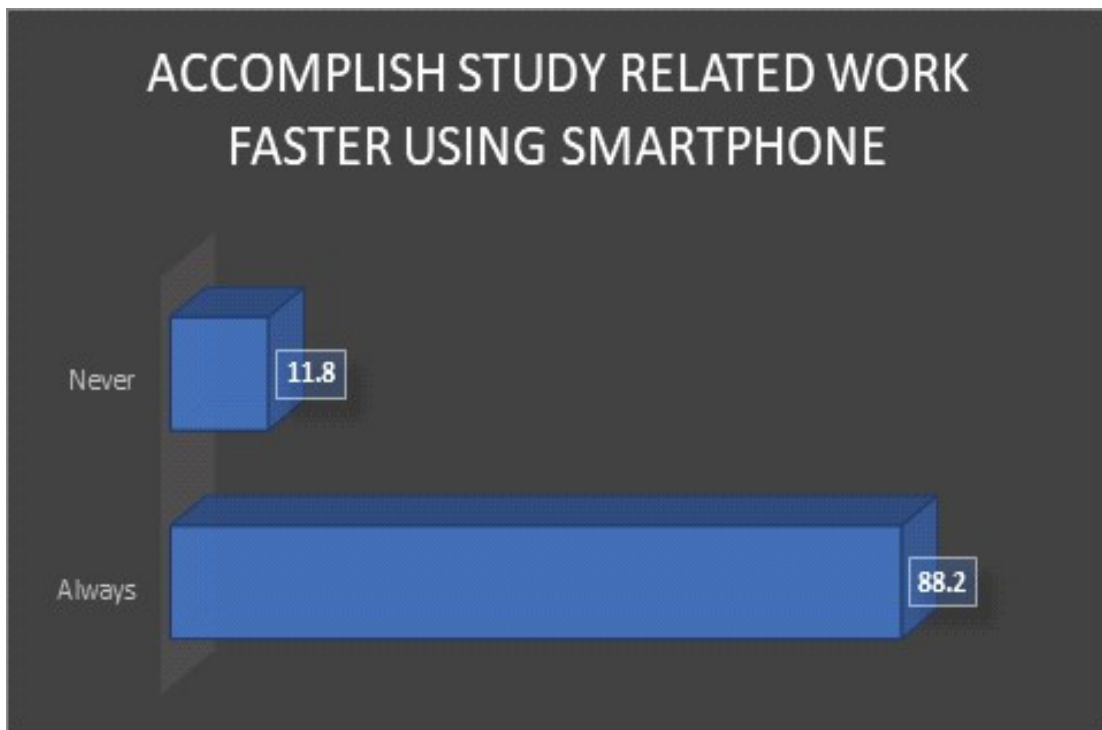


Figure 11 shows that using an intelligent phone speed up the completion of study-related tasks. It is supported by 88 percent of those who answered. Only 11.8 percent of those polled disagree with it.

## 9. Conclusion

The smartphone is a significant component of our lives these days since it allows us to do many activities such as study, shopping, play games, view movies, make phone or text calls, and make online payments to others. The current study is limited to tap the use pattern of intelligent phones by Babasaheb Bhimrao Ambedkar University's UG and PG Library and Information Science students. The study's findings reveal that respondents had either a good or negative attitude about the use of mobile devices. According to the study's findings, every respondent owns an intelligent machine, and it tends to impact the life of the students. But it is our primary role to orient the students to the right learning path.

## References

- [1] Iqbal, S., Khan, N., Malik, I. (2017). Mobile phone usage and student's perception towards M-learning: *A case of undergraduate students in Pakistan, International journal of E-learning & Distance education*, 32 (1) 1-16.
- [2] Sharma, R., Madhusudan, M. (2017). Use of devices by library and information science students in central, *DESIDOC Journal of Library & Information Tenchnology*, 37, 287-296.
- [3] Odu, O., Omini, U. (2017). Mobile phone application and the utilization of library services in digital era international research, *Journal of Library & Information Science*, 7, 157-166.
- [4] Dresselhas, A., Shrode, F. (2012). Mobile technology & academics do students use mobile technologies in their academic live and are librarians ready to meet this challenge, Mansfield library faculty publication 82-101.
- [5] Lesitaokana, W. (2016). Influencing factors to mobile phone adoption among urban youth in Botswana, *Journal of media and communication studies*, 8, 8-13.
- [6] Singh, K., Parameswaran, R. (2017). Academic use of smartphone by the students of faculty of social, *Journal of Advances in Library and Information Science*, 6, 394-399.
- [7] Bharti, k. S., Mangam, M. (2019). Content evaluation of Jawaharlal Nehru university and Banaras Hindu university library websites in India, *Library Philosophy and Practice (e-journal)*.1-24.
- [8] Adjei, D., N. (nd). The use of and effect of smartphones in learning activities evidence from the university of Ghana, Legon. *Library philosophy and practice (e-journal)*.1-38.
- [9] Dias, L., Victor, A. (2017). Teaching and learning with mobile devices in the 21<sup>st</sup> century digital world benefits and challenges. *European journal of multidisciplinary studies*, 2.
- [10] Kljunic, J., vukovac, P. D. (2015). A survey on usage of mobile devices for learning among tertiary students in Croatia, *Central European conference on information and intelligent systems*, 97-104.
- [11] Ali, G., Mbabazi, P. B., Lacwrence, N., Geoffrey, A. (2017). Use of mobile devices by students to support learning in universities: a case of Muni university, *Impact international journal of research in engineering technology*, 5, 1-15.
- [12] Nawaz, S., Ahmad, Z., (2012). Statistical study of impact of mobile on student & life. *Journal of humanities and social science*, 2(1)43-49.
- [13] Singh, K. K. M., Samah, A. N. (2018). Impact of smartphone A review on positive and negative effects on students, *Canadian centre of science and education*, 14 (11) 83-89.
- [14] Ifeanyi, P. I., Chukwuere, E. J. (2018). The impact of using smartphone on the academic performance of undergraduate students, *Knowledge Management & E-Learning*, 10 (3) 291-308.
- [15] Nazime, T. (2016). Smartphones as tools for distance education, *Journal of educational and instructional studies in the world*, 6 (2) 20-30.
- [16] Kim, B. (2013). The present and future of the library mobile experience, *Library Technology Reports*, 15-27.
- [17] Nasser, R. (2014). Use mobile devices to increase students' academic outcomes in Qatar, *Open journal of social science*, 2, 67-73.
- [18] Bartholomew, S. R., Reeve, E. (2018). Middle school students' perceptions and actual use of mobile devices highlighting disconnects in students planned and usage of mobile devices in class.

[19] Biswas, B., Roy, S. K., Roy, F. (2020). Students' perception of mobile learning during covid-19 in Bangladesh: University students' perspective. *Aqademia*, 4 (2) 20-23.

[20] Hossain, H. M. (2019). Impact of mobile phone usage on Academic performance. *World scientific news an international scientific journal*, 118. 164-180.