

A Study on Internet Usage Behaviour of Postgraduate Students of State Agriculture University of Uttar Pradesh

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Abstract

The extent of digital technology utilisation has transformed information access and learning behaviour among postgraduate students, making internet use an important part of academic activities in State Agricultural Universities (SAUs). The study was conducted during 2024-25 in four SAUs of Uttar Pradesh. A total of 240 postgraduate students were selected through simple random sampling. Data were collected using a structured and pre-tested interview schedule and analysed using descriptive and inferential statistics. The findings indicated that 37.50 per cent of students used the internet for 2-4 hours and an equal proportion for 5-7 hours daily, while 10.80 percent reported usage exceeding 10 hours. Weekly usage showed that 44.20 per cent of respondents spent 20-30 hours online, and 33.30 per cent spent more than 30 hours online. Academic purposes, such as searching for general information, research work, and accessing research papers, have the highest internet use, whereas non-academic activities like entertainment and social networking generally have usage of less than one hour. Internet usage among postgraduate students is largely academic-oriented; however, the presence of high-frequency users highlights the need for promoting efficient and responsible use through digital literacy and time management interventions.

Key words: Internet usage behaviour, Postgraduate students, SAUs, Academic use, Digital literacy

The rapid expansion of digital technology has significantly transformed the access and utilization of information by students for education and research. The swiftness of information explosion has revamped the manner in which postgraduates behave and react to information obtained from the university's library database to satisfy their insatiable needs and desire to conduct research and solve daily life problems. Producing and disseminating the information in a wide variety of fields has been one of the main reasons for calling the contemporary era the age of information, and therefore, knowledge has become one of the most significant elements of human progress and civilisation [1]. Universities play a crucial role in knowledge generation, where postgraduate students actively engage in research and information-seeking processes to meet academic requirements. to identify relevant information sources, including searching, evaluating, and utilizing information, collectively referred to as information-seeking behaviour [2]. This aligns with Information Seeking Behaviour (ISB) models, which emphasize purposeful and need-based information search [3]. Information-seeking behaviour is a process in which people try to change their

knowledge position purposefully, and nowadays, this kind of behavior should be considered by all human beings (Zimmerman and Shaw, 2020). With the advancement of digital technologies, the internet has emerged as a primary source of information in higher education, enabling students to access academic resources efficiently without physical constraints [4-5]. The Internet helps a wide range of researchers and students to satisfy their information needs with no physical presence in libraries or other information centers [5]. Studies indicate that students increasingly prefer digital resources over printed materials due to their ease of access and availability [6]. Quick and easy access to the information is one of the main reasons that users prefer electronic information resources to the printed information resources. However, excessive and non-purposeful use of the internet may lead to issues such as distraction, reduced academic focus, and potential dependency [7-8]. An internet addiction phenomenon that has become prevalent coincidentally with the increasing the users' daily access to continuous resources is similar to a real dependency such as the drug addiction; although, this kind of dependency is not associated with the physical problems of chemical addictions,

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its consequent social problems are similar to other kinds of addiction [8]. Students use the internet more than other people do in order to meet their educational needs. For this reason, they are more prone to internet addiction. Based on the studies, the excessive use of the internet causes the dangers of improper use of the internet, education problems, and the lack of participation in the curricula for the students [9]. Prolonged and unregulated internet use may also influence students' academic performance and social interactions [9]. Internet addiction may have serious consequences such as changing the lifestyle in order to spend more time on the internet, ignoring the individual health and main activities, reducing the social relationships, ignoring the family and friends, and finally, financial, educational, and physical problems [10]. In India, internet usage has expanded rapidly, with over 658 million users, making it one of the largest digital markets globally. The COVID-19 pandemic further accelerated digital adoption, as educational institutions shifted to online teaching, learning, and evaluation systems. Internet use is dominated by mobile phone users both in rural and urban areas. In pre-COVID India, digitalization had spread in about 50% of India. In India, the use of the Internet and Internet-based services has increased from 40% to 100% during and post-COVID. The use of Internet-based services was adopted by educational institutions, i.e., online-based teaching modules, and examinations were conducted online, during and after COVID. Today's Students increasingly rely on online learning materials, including recorded lectures, digital content, and interactive resources, to support their academic activities. While the academic use of the Internet is primarily intended for faculty research and communication, the Internet has also become an important part of student life [11]. However, apart from the ethical use of the Internet, i.e., digitalization-based services the Internet is used more for socializing. Although the hybrid model of teaching has been in practice post-COVID the use of the Internet has not decreased, and the use of the Internet for other than educational purposes is comparatively increasing [12].

MATERIALS AND METHODS

The study was conducted during the year 2024-25 in Uttar Pradesh. The state has four State Agricultural Universities (SAUs) in which the student can take admission through qualifying the competition of Uttar Pradesh Combined Agriculture and Technology Entrance Test (UPCATET) and ICAR examination. All four SAUs of Uttar Pradesh were selected for the study. The population of the study was consisting of agriculture postgraduates including M. Sc. and Ph. D. students of agriculture and allied discipline from all the SAUs of Uttar Pradesh. For making the sample size more convenient 60 respondents from each university were selected through equal proportions using the simple random sampling method. Thus, it made a total sample size of 240 respondents i.e. 25% of the total students of post graduate and Doctor of Philosophy in each university. A well-developed, structured and pre-tested interview schedule was used to collect the data from the students. The descriptive and inferential statistics were employed to analyse the data obtained from the respondents. All statistical analysis was carried out using SPSS (Statistical Package for Social Science) version 16.

RESULTS AND DISCUSSION

Frequency of daily internet use

The daily internet usage patterns among postgraduate students (Table 1) revealed a bimodal distribution, with the

highest engagement in moderate usage ranges (5–7 hours and 2–4 hours, both 37.5%), while extreme usage (both high and low) was less common. Only 10.8% of students reported using the internet for >10 hours/day, and a mere 2.1% used it for <1 hour/day. The aligned with the results of Basri *et al.* [13] and Adorjan *et al.* [14].

Table 1 Distribution of respondents according to time spent using internet on daily basis (n=240)

Frequency of internet use daily	Response	
	Yes (%)	No (%)
More than 10 hours	10.80	89.20
8-10 hours	12.10	87.90
5-7 hours	37.50	62.50
2-4 hours	37.50	62.50
Less than 1 hour	2.10	97.90

Frequency of weekly internet use by the respondents

The findings revealed a polarized distribution, with 33.30% of students reporting >30 hours/week of internet use, while only 1.60% used it for <10 hours/week. Moderate usage ranges (20–30 hours/week) accounted for 44.20% of respondents. The polarized distribution of weekly internet usage among postgraduate students in SAUs with 33.30% reporting high usage (>30 hours/week), 44.20% exhibiting moderate usage (20–30 hours/week), and only 1.60% falling into low usage (<10 hours/week). The findings are in accordance with Jafari and Dayani [15].

Table 2 Distribution of respondent according to time spent using internet on weekly basis (n=240)

Frequency of internet use weekly	Response	
	Yes (%)	No (%)
More than 30 hours	33.30	66.70
25-30 hours	22.90	77.10
20-25 hours	21.30	78.80
15-20 hours	10.00	90.00
10-15 hours	10.80	89.20
Less than 10 hours	1.60	98.40

Purpose of internet usage of postgraduate students

Students use internet for various purpose and it can be observed from the (Table 3) that a significant portion of the respondents used the internet for general information (43.30%) less than 1 hour, (40.40%) for 2–4 hours, (12.50%) for 5-7 hours, 2.10% more than more hours and (1.70%) for more than 8-10 hours. Research for homework shows that (32.50%) less than 1 hour, (50.40%) for 2–4 hours, (13.30%) for 5-7 hours, (3.80%) for more than 8-10 hours and (0.0%) more than 10 hours. Meeting a friend / family / relative show that majority of respondent's meets (85.80%) for less than 1 hour, (10.80%) for 2–4 hours, (2.50%) for 5-7 hours, (0.80%) for more than 8-10 hours and (0.0%) more than 10 hours. Chatting and being a member of social networks indicates that majority of respondents uses (80.0%) less than 1 hour, (16.70%) for 2–4 hours, (2.90%) for 5-7 hours, (0.40%) for more than 8-10 hours and (0.0%) more than 10 hours. Download and watching films signify the response (89.60%) less than 1 hour, (9.20%) for 2–4 hours, (1.70%) for 5-7 hours, (0.0%) for more than 8-10 hours and (0.0%). Download and listening music results (89.6%) less than 1 hour, (8.80%) for 2–4 hours, (1.70%) for 5-7 hours, (0.0%) for more than 8-10 hours and (0.0%) more than 10 hours. Download files signify that (85.00%) less than 1 hour, (12.50%) for 2–4 hours, (0.40%) for 5-7 hours, (0.40%) for more than 8-10 hours and (0.0%) more than 10 hours. most of the respondent use to Download and reading Research paper

(37.9%) for 1 hour, (38.80%) for 2–4 hours, (21.30%) for 5-7 hours, (1.70%) for more than 8-10 hours and (0.40%) more than 10 hours. Online shopping (86.70%) less than 1 hour, (12.1%) for 2–4 hours, (0.80%) for 5-7 hours, (0.40%) for more than 8-10 hours and (0.0%) more than 10 hours. Playing Games (86.70%) for 1 hour, (12.10%) for 2–4 hours, (0.80%) for 5-7 hours, (0.0%) for more than 8-10 hours and (0.0%) more than 10 hours.

10 hours. Booking ticket (bus, train, airplane) (90.00%) for 1 hour, (10.00%) for 2–4 hours, (0.00%) for 5-7 hours, (0.40%) for more than 8-10 hours and (0.0%) more than 10 hours. Entertainment purpose (55.40%) for 1 hour, (32.10%) for 2–4 hours, (11.30%) for 5-7 hours, (0.40%) for more than 8-10 hours and (0.80%) more than 10 hours. Sending- reading emails (90.80%) for less than 1 hour, (9.20%) for 2-4 hours.

Table 3 Distribution of respondents on the basis of purpose of internet usage (n=240)

Purpose	Response of internet usage in per cent				
	Less than 1 hour	2-4 hours	5-7 hours	8-10 hours	More than 10 hours
General information	43.30	40.40	12.50	1.70	2.10
Research for home works	32.50	50.40	13.30	3.80	0.0
Meeting a family / friend / relative	85.80	10.80	2.50	0.80	0.0
Chatting and being a member of social networks	80.0	16.70	2.90	0.40	0.0
Sending Reading e-mail	90.80	9.20	0.0	0.0	0.0
Download and watching films	89.60	9.20	1.30	0.0	0.0
Download and music	89.6	8.8	1.7	0.0	0.0
Download files	85.0	12.5	2.1	0.40	0.0
Download Research paper	37.9	38.8	21.3	1.70	0.40
Online Shopping	86.70	12.10	0.80	0.40	0.0
Playing Games	86.70	12.10	0.80	0.40	0.0
Booking ticket (bus, train, airplane)	90.0	10.0	0	0.0	0.0
Entertainment	55.40	32.10	11.30	0.40	0.80

Inclination toward internet use

The majority of the respondents had positive inclination on internet use behaviour (Fig 1) with the following statements have more than 90% of respondents have positive inclination, I utilize the Internet to do my research projects and assignments (95.00%), Educational website helps in enhancing my knowledge on learning strategies (94.60%), I use the internet to get the latest data and news (93.80), for research purpose, I prefer e-resources (92.90%), Excessive use of the Internet has an impact on my academic performance(92.10%), Internet helps in studies (92.10%) and I am entertained via the internet (90.40%). Whereas some statements have negative inclination (> 50% respondents) on internet use, sorting information on the Internet can sometimes make me feel unprotected (67.50%), I downloaded books from the Kindle (64.60%), wastage of time during use of internet (62.90%), I interact too much via Internet (55.40%), My life has been affected adversely by Internet use (55.00%), after spending a lot of time on the Internet, I don't feel bad about wasting time (53.80%), Internet use has a negative impact on my writing abilities (51.70%) and I prefer to utilize social networking websites than face-to-face conversations (50.80%).

The study provides an understanding of internet usage behaviour among postgraduate students in State Agricultural Universities (SAUs) of Uttar Pradesh. It can also be interpreted from the perspective of Uses and Gratifications Theory (UGT) and Information Seeking Behaviour (ISB) models [16]. These theoretical frameworks help explain not only the extent of internet use but also the underlying motivations and patterns of engagement. The daily and weekly usage patterns observed in the study indicate that majority of students fall in moderate to high categories [17]. According to UGT, individuals actively choose media channels that satisfy specific needs such as information acquisition, academic performance, and personal development. The concentration of students within the 2–7 hours daily usage range suggests a purposeful and goal-oriented engagement with the internet, primarily driven by academic requirements. At the same time, the presence of a significant proportion of high-frequency users (>10 hours/day and >30 hours/week) reflects an intensified dependency on digital

platforms, which may be attributed to both academic pressures and the multifunctional nature of internet resources [18]. From the perspective of Information Seeking Behaviour, postgraduate students represent a group with high cognitive and academic demands, requiring continuous access to updated and credible information. The findings that a large proportion of respondents spend considerable time searching for general information, conducting research for homework, and downloading research papers [19], it clearly aligns with ISB models, which emphasize systematic, need-based, and problem-solving-oriented information search processes. The predominance of 2–4 hours engagement in academic tasks suggests that students are efficiently navigating digital information systems to meet their scholarly needs. The findings are in accordance with Pateria *et al.* [20], Ali and Jan [21]. The study also reveals that non-academic uses, such as entertainment, social networking, and media consumption, are present but generally limited in duration. Within the UGT framework, this reflects the gratification of affective and social needs, including relaxation, social interaction, and stress relief. The relatively lower time allocation for these activities indicates that students maintain a functional balance between academic and recreational uses of the internet. However, even limited engagement in such activities, when frequent, may cumulatively contribute to distraction and reduced academic focus, especially among high-frequency users [22]. An important insight emerging from the findings is the dual nature of internet usage as both an academic resource and a socio-recreational tool. Uses and Gratifications Theory (UGT) supports this duality by proposing that users derive multiple gratifications simultaneously from a single medium. Similarly, ISB models suggest that information seeking is not always linear or purely academic; it may be interspersed with exploratory and non-task-oriented browsing, which can sometimes lead to information overload or deviation from the original search intent. The minimal time spent on activities such as email communication, online transactions, and formal digital interactions indicates task efficiency and familiarity with digital tools, reflecting a high level of digital competence among postgraduate students. This supports the notion that modern

learners are “digitally adaptive information seekers,” capable of selectively utilizing internet resources based on their immediate needs, similar results were observed by Obi and Oladokun [23]. The study demonstrates that internet usage behaviour among postgraduate students is predominantly purpose-driven, need-based, and theoretically consistent with Uses and Gratifications Theory and Information Seeking Behaviour models. However, the increasing intensity of usage underscores the necessity for institutional strategies to ensure that digital engagement

remains productive, balanced, and conducive to academic excellence. Also from an extension education perspective, the findings highlight the importance of enhancing digital literacy and promoting mindful internet usage [24]. While the current usage patterns are largely constructive and aligned with academic goals, the existence of high-intensity users suggests the need for interventions focusing on time management, critical evaluation of online information, and avoidance of digital distractions [25].

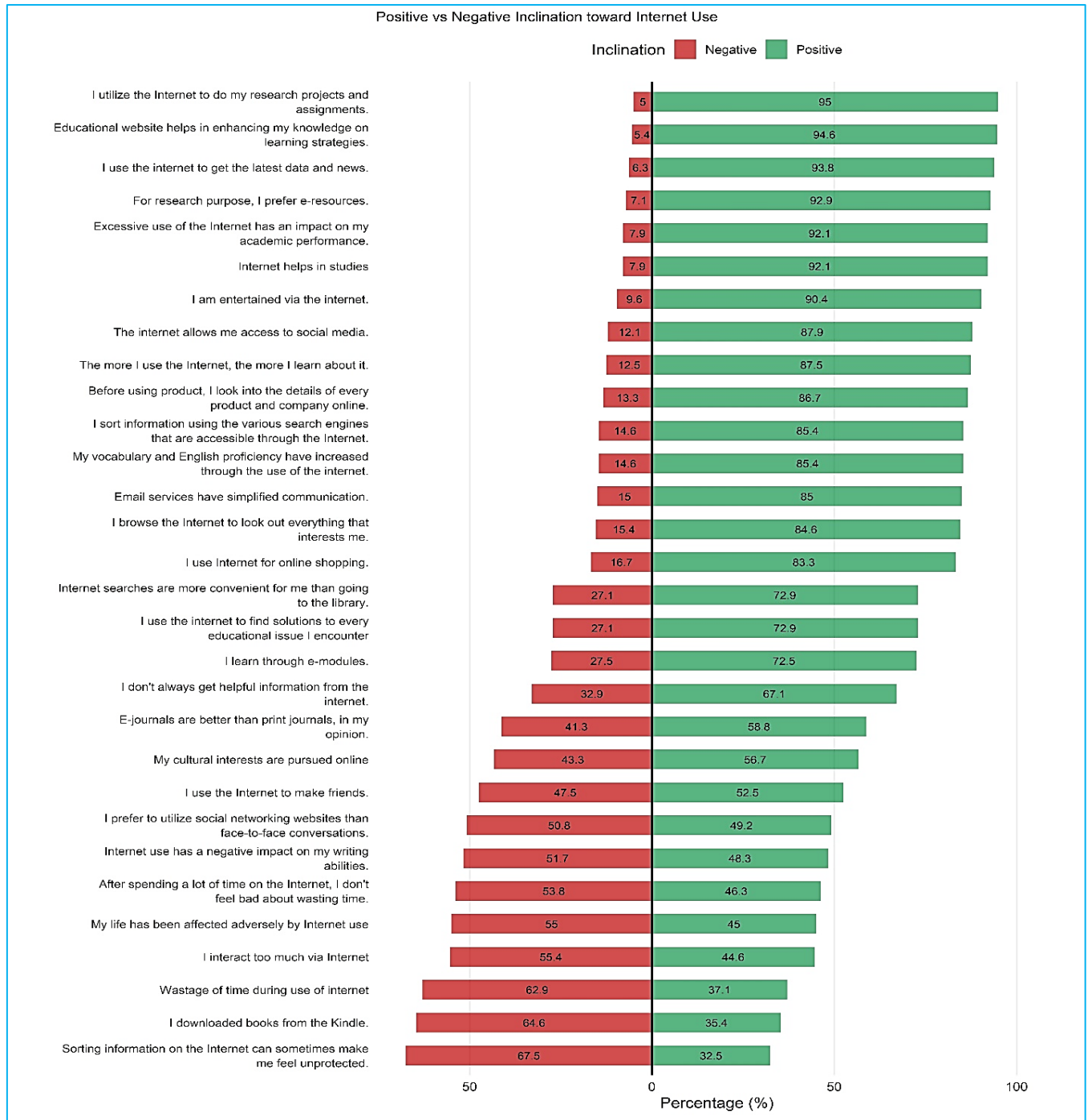


Fig 1 Positive vs negative inclination toward internet use

CONCLUSION

The study concludes that the use of internet has become an essential component in the academic ecosystem for postgraduate students of State Agricultural Universities. The findings reveal that a majority of students have moderate to high levels of internet usage, representing its important role in supporting academic activities such as information search,

research work, and access to scholarly resources. At the same time a significant increase in users indicates a growing dependence on digital platforms. The study also highlights that while internet usage is predominantly oriented towards academic purposes, non-academic activities such as entertainment and social networking also form a significant part of students’ daily routines, though generally within limited durations. This suggests a balanced usage pattern among most

students; however, the potential risk of excessive use among some students cannot be overlooked. The findings also emphasize that the internet serves as a powerful tool for knowledge acquisition, research enhancement and there is also a need to promote efficient, purposeful, and responsible usage through digital literacy and time management. Encouraging

optimal utilization of online resources while minimizing distractions will further enhance academic productivity and contribute to the holistic development of students. Overall, fostering awareness about responsible internet use can help students maximize academic benefits while minimizing potential negative impacts.

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