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ASSESSMENT OF AWARENESS AND USAGE OF EDUCATIONAL APPS AND DIGITAL SKILLS AMONG UNDERGRADUATE STUDENTS IN SALEM DISTRICT

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ABSTRACT :

Technology has rapidly exploded in education during the global epidemic. With technology on every profession is learning about more development of new knowledge. Educational apps are software applications designed to facilitate learning by providing educational content, activities, and tools accessible through digital devices such as smartphones, tablets, and computers. Digital skills refer to the ability to use digital devices, communication tools, and networks to access, manage, create, and share information effectively. The present study is based on the awareness and usage of educational apps and digital skills among undergraduate students in Salem District. A sample comprised of 1500 undergraduate students studying in undergraduate was selected randomly from arts and science college of Salem district. The research tool awareness and usage of educational apps and digital skills developed by the investigator. A normative research method and stratified random sampling technique was used in the present study. Statistical methods the data was analyzed using the percentage analysis. The result of the study showed that the level of awareness and usage of educational apps and digital skills of undergraduate students is accepted.

Keywords: awareness and usage of educational apps, digital skills, undergraduate students

INTRODUCTION

Education is the process of acquiring knowledge, skills, values, and attitudes through formal, informal, and non-formal learning experiences. It enables individuals to develop intellectually, socially, and morally to contribute meaningfully to society. Technology has played a pivotal role in transforming traditional learning environments into dynamic, interactive, and student-cantered spaces. By integrating digital tools and resources, educational institutions have revolutionized the way knowledge is delivered and consumed, enabling more personalized, efficient, and engaging learning experiences. One significant contribution of technology is the shift from teacher-cantered to learner-cantered approaches. With the advent of tools such as learning management systems, online discussion forums, and multimedia resources, students are empowered to take a more active role in their education. These tools not only enhance engagement but also foster critical thinking and collaboration among learners (Laurillard, 2013).

Awareness and usage of Educational Apps

Educational apps are software applications designed to facilitate learning by providing educational content, activities, and tools accessible through digital devices such as smartphones, tablets, and computers. These apps aim to enhance the learning experience, often incorporating interactivity, gamification, and personalized learning paths to engage users and improve knowledge retention (Smith, 2020). Educational apps have made learning easy and accessible for people worldwide with just the click of a button. Children's smartphone usage has been increasing at a fast pace. The core purpose of educational apps is to make learning more interactive, personalized, and accessible. By incorporating multimedia elements, gamified features, and adaptive technologies, these apps address diverse learning needs and styles, ensuring greater engagement and improved outcomes (Alqahtani & Mohammad, 2015). Digital education offers wider learning accessibility and opportunities to students, and hence, it is very much capable of supplementing a traditional classroom setting. Digital education aims to provide students with broad educational opportunities to learn more (Ambika & Selvamathi Sugirtha, 2025).

Digital Skills

Digital skills refer to the ability to use digital devices, communication tools, and networks to access, manage, create, and share information effectively. These skills are essential for navigating and thriving in today's digital world, where technology permeates all aspects of life personal, professional, and academic. Digital skills can range from basic computer literacy to more advanced competencies, including data analysis, coding, and digital collaboration Ferrari (2012). The need for digital skills has grown rapidly as digital technologies have become integral to education, business, and social life, emphasizing the importance of digital literacy in the modern workforce and society. They include basic skills like emailing and online searching, as well

as more advanced skills like programming and development. Digital skills involve the ability to use computers to find, evaluate, store, produce, present and exchange information and to communicate and participate in collaboration networks through the internet (European Parliament and the Council, 2006).

REVIEW OF RELATED LITERATURE

Lara Hoareau and Youssef Tazouti (2024) found that effect of teachers' acceptance of an educational app on students' early literacy and early numeracy skills. Results revealed a significant link between the students' post-test early literacy and early numeracy scores and their teachers' perception of the app's usability. Sini and Praveen (2023) studied development of an educational app to enhance achievement and attitude towards inclusive education among primary school teachers. The results of the study 't' value calculated using the paired 't-test of the pre-test and post-test scores of Achievement scores of teachers was significant. Goodwill Phezulu Mbambo**;** Elizabeth and Plessis (2025) analyzed evaluating technical vocational education and training college student's digital skills versus throughput rate. The findings of the study relationship between the TVET college's low throughput rate and students' lack of digital skills were statistically significant. Roberto Líder Churampi-Cangalaya et al (2024) assessed impact of digital skills on teaching performance in higher education. The results indicated that the value of 0.890 in Spearman's Rho correlation coefficient and a significance level of .000, which shows that there is a high positive relationship between the study variables; likewise, the hypothesis is accepted.

OPERATIONAL DEFINITION OF KEY TERMS

Awareness and Usage of Educational Apps

Awareness of Educational Apps refers to the extent to which undergraduate students are cognizant of the existence of various educational apps and digital tools designed to support their learning. Usage of educational apps states to the frequency and manner in which students engage with these apps to enhance their learning. In the present study awareness of educational apps refers performance expectancy, effort expectancy, social influence, voluntariness of use, facilitating conditions, perceived playfulness.

Digital Skills

Digital Skills refer to the competencies that enable students to use digital tools and technologies efficiently and effectively for various purposes, including learning, communication, and professional development. Digital skills include the six dimensions are operation skills, communication skills, information navigation skill, social skill, creative skill and mobile usage skills.

Undergraduate Students

An *undergraduate student* is someone who is pursuing their first level of university or college education, typically working toward a bachelor's degree or an associate degree.

OBJECTIVES OF THE STUDY

- To find out the level of awareness and usage of educational apps of undergraduate students is moderate
- To study the level of digital skills of undergraduate students is moderate.

HYPOTHESES OF THE STUDY

- The level of awareness and usage of educational apps and digital skills of undergraduate students is moderate
- The level of digital skills of undergraduate students is moderate

METHODOLOGY

The normative survey method was used for present research work.

[a] Population of the study

All the undergraduate students studying in arts and science college of government, government aided and private colleges of Salem District.

[b] Sample size and sampling method

For the present study a representative sample of 1500 undergraduate students from government, government aided and private higher secondary schools of Salem district was selected randomly and stratified random sampling techniques used for present study.

[c] Research Tool

The research tool Awareness and usage of educational apps and digital skills developed by the investigator.

Awareness and usage of educational apps scale

Awareness and usage of educational apps scale was developed by the investigator of undergraduate students containing twenty-seven items

and six dimensions viz, performance expectancy, effort expectancy, social influence, voluntariness of use, facilitating conditions, perceived playfulness. The maximum scale value: 135, Minimum value: 27. The reliability value is 0.859.

Digital skills scale

The tool used for the present study was developed by the investigator. The tool consists of 35 items with five-point scale and with six dimensions as communication skills, information navigation skill, social skill, creative skill and mobile usage skill. The reliability value is 0.86 and through this the consistency of the scale was established.

[d] Statistical Methods

In order to attain the objectives of the study, the investigators used percentage analysis.

DATA ANALYSIS

PERCENTAGE ANALYSIS

- ❖ The level of awareness and usage of educational apps and digital skills of undergraduate students is moderate

Table – 1

Table Showing the Level of Awareness and Usage of Educational Apps of Undergraduate Students

Awareness and Usage of Educational Apps	Low		Moderate		High	
	N	%	N	%	N	%
Performance expectancy	381	25.4	144	9.60	975	65.00
Effort expectancy	385	25.67	239	15.93	876	58.4
Social influence	134	8.93	123	8.20	1243	82.87
Voluntariness of use	376	25.07	1038	69.20	462	30.80
Facilitating conditions	191	12.73	187	12.47	1122	74.80
Perceived playfulness	513	34.2	590	39.33	397	26.47
Total Awareness and usage of educational apps	392	26.13	444	29.60	664	44.27

Interpretation

- A significant majority (65.00%) of graduate students reported a high level of awareness and usage of educational apps, suggesting that they strongly believe these apps enhance their academic performance. However, 25.4% exhibit a low level of awareness and usage, indicating that a considerable number of students are yet to fully recognize the benefits of educational apps.
- Over half of the students (58.4%) have a high level of awareness and usage, reflecting a perception that educational apps are user-friendly and require minimal effort. Around 25.67% have a low level of engagement, suggesting the need for improved app design or training to enhance usability for some students.
- The majority (82.87%) reported a high level of awareness and usage, indicating that peer and societal influences strongly encourage the use of educational apps. Only 8.93% had a low level of awareness, showing that social encouragement is widely prevalent.
- A large proportion of students (69.20%) reported a moderate level of voluntariness, suggesting that while many uses educational apps by choice, external factors might still play a role. Notably, 30.80% reported a high level of voluntariness, indicating a strong preference for self-motivated use.
- The majority (74.80%) reported a high level of awareness and usage, reflecting that infrastructure, resources, and support systems are conducive to using educational apps. Only 12.73% reported a low level, indicating that barriers to access are limited to a smaller subset of students.
- Awareness and usage are distributed more evenly across levels, with 39.33% reporting a moderate level and 34.2% a low level. This indicates that the element of fun and engagement in educational apps might not be fully optimized for all users.
- A significant portion (44.27%) of students demonstrated a high level of awareness and usage, indicating that educational apps are widely adopted and utilized among graduate students. However, 26.13% reported a low level, signalling a need for further awareness campaigns and support to ensure broader adoption and usage.

Conclusion

- ❖ The level of awareness and usage of educational apps of undergraduate students is accepted.

Table – 2

Table Showing the Level of Digital Skills of Undergraduate Students

Digital Skills	Low		Moderate		High	
	N	%	N	%	N	%
Operation skills	441	29.40	579	38.60	480	32.00
Communication skills	412	27.47	552	36.80	536	35.73
Information navigation skill	623	41.53	405	27.00	472	31.47
Social skill	455	30.33	538	35.87	507	33.80
Creative skill	515	34.33	275	18.33	710	47.33
Mobile usage skill	527	35.13	551	36.73	422	28.13
Digital Skills	383	25.53	737	49.13	380	25.33

Interpretation

- A moderate level of operation skills is most common (38.60%), indicating that many students are proficient in basic computer and digital device operations. However, 29.40% have a low level, showing the need for foundational digital training for a notable segment of students.
- A significant portion (35.73%) of students have a high level of communication skills, suggesting they can effectively use digital platforms for communication. At the same time, 27.47% fall into the low category, signalling a gap in digital communication literacy for some students.
- This skill shows a concerning trend, with 41.53% of students having a low level, indicating difficulty in searching, evaluating, and using online information. Only 31.47% have a high level, highlighting the need to strengthen information literacy among graduate students.
- A significant portion (35.87%) exhibits a moderate level of social skills in digital spaces, while 33.80% have a high level. The 30.33% in the low category suggests some students may struggle with engaging appropriately in digital social environments.
- Nearly half (47.33%) of the students report a high level of creative digital skills, reflecting strong abilities to generate and innovate using digital tools. However, 34.33% are at a low level, showing room for improvement in fostering creativity through digital platforms.
- Most students demonstrate moderate (36.73%) or low (35.13%) levels of mobile usage skills, suggesting a need for enhanced training to optimize mobile device use for learning and productivity.
- A majority (49.13%) of students report a moderate level of digital skills, indicating that while they have basic proficiency, they may lack advanced capabilities. Notably, 25.53% have low digital skills, while only 25.33% exhibit high digital skills, emphasizing a need for interventions to improve overall digital literacy.

Conclusion

- ❖ The level of digital skills of undergraduate students is accepted.

FINDINGS OF THE STUDY

- ❖ The level of awareness and usage of educational apps of undergraduate students is accepted.
- ❖ The level of digital skills of undergraduate students is accepted.

SUGGESTIONS

- A study can be conducted on awareness and usage of educational apps and digital skills of university students.
- The present study has been largely concerned with the higher secondary students of Salem District. It would be highly desirable if a similar study could be taken up, perhaps, with a wider sample from the other state.
- The study can be extended among students at different levels such as primary and college level.
- A comparative study could be made between primary and secondary school students with different variables like awareness and usage of educational apps and digital skills.

CONCLUSION

The main aim of the study is to find out the significant difference between the awareness and usage of educational apps and digital skills among undergraduate students. The results showed that undergraduate students have generally high levels of awareness and usage of educational apps, particularly in areas such as performance expectancy, social influence, and facilitating conditions. However, areas like perceived playfulness and effort

expectancy show scope for improvement. Undergraduate students possess moderate digital skills in general, with notable strengths in creative skills and communication skills. However, information navigation and mobile usage skills are areas of concern, as a significant proportion of students demonstrate low levels in these dimensions.

REFERENCES

1. Alqahtani, M., & Mohammad, H. (2015). Mobile applications' impact on student performance and satisfaction. *Turkish Online Journal of Educational Technology-TOJET*, *14*(4), 102-112.
2. Ambika.P & Selvamathi Sugirtha.R (2025). A Study on the Usage of Digital Skills among Undergraduate Students. *Thiagarajar College of Preceptors Edu Spectra ,*7(1),66-72.
3. Ferrari, A. (2012). *Digital competence in practice: An analysis of frameworks* (Vol. 10, p. 82116). Luxembourg: Publications Office of the European Union.
4. Hoareau, L., & Tazouti, Y. (2024). Effect of teachers' acceptance of an educational app on students' early literacy and early numeracy skills. *Education and Information Technologies*, *29*(7), 8393-8414.
5. Laurillard, D. (2013). *Teaching as a design science: Building pedagogical patterns for learning and technology*. Routledge.
6. Mbambo, G. P., & du Plessis, E. C. (2025). Evaluating technical vocational education and training college student's digital skills versus throughput rate. *Discover Education*, *4*(1), 1-12.
7. Plan, P. I. (2006). Communication from the Commission to the Council and the European Parliament.
8. Smith, E. M. (2021). *Speech-Language Pathologists' Feelings and Attitudes Towards the Use of Apps in a School-Based Setting* (Master's thesis, Miami University).