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Integration of Digital Technology and Higher Education among College Students

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Abstract

Integration of Digital Technology in higher education refers to using digital technology to enhance the college student's learning experience. Digital Technology integration can also refer to the application, database, and programs used by an educational institution for present and future references. Technology Integration is defined as the use of digital technology and its applications to enhance and support the educational environment so students can complete their assignments. It supports students' education to improve education quality. For this reason, the current study's discussion of digital technology integration in higher education is important. The study's sample strategy is stratified random sampling, and the research design follows the normative survey approach. 432 college students—202 men and 230 women—from several government, government-aided, and private institutions across Chennai's rural and urban districts as well as the Kancheepuram district form the sample. The present study employed a one-way Analysis of Variance (ANOVA) and a t-test to analyze the data gathered. From the findings, female college students have more interest in integration with digital technology and education when compared to male college students. Compared to urban college students, rural college students use digital technology in higher education more frequently. When it comes to how college students use digital technology for higher education, there aren't many notable differences between government,

government-aided, and private colleges. By incorporating digital technology into higher education, college students can improve their digital literacy and use it to further their education, preparing them to be strong future leaders of our country.

Keywords: digital technology, higher education, college students, integration, applications, learning, teaching

Introduction

Digital Technology is an essential tool utilized in higher education to improve the value of education. Technology has powerful impacts on the education system. Technological improvements in education systems have made learning easier for college students. Instead of using pen and pencil, college students can use digital tools to prepare presentations and projects. Digital technologies create interest among college students to do their research in higher education.

Need for the Study

In this present education, digital technology plays a major role in higher education to develop the knowledge of college students. It also helps to develop the technological skills among college students to face the issues and challenges in this competitive world. To increase digital skills in higher education, digital technology integration with higher education is mandatory and improves the quality of higher learning. Furthermore, the need felt by the investigator to do this study “Integration of Digital Technology and Higher Education among College Students“.

OBJECTIVES

1. To find whether there is any significant difference in the integration of digital technology and higher education among college students concerning their Gender.

2. To find whether there is any significant difference in the integration of digital technology and higher education among college students concerning their Locality.
3. To find whether there is any significant difference in the integration of digital technology and higher education among college students concerning their type of management of colleges.

Hypotheses of the Study

1. There is no significant difference in integrating digital technology and higher education among college students concerning their gender.
2. There is no significant difference in integrating digital technology and higher education among college students concerning their locality.
3. There is no significant difference in the integration of digital technology and higher education among college students concerning their type of management of colleges.

Methodology

Stratified random sampling is the sampling strategy used in this study, and the normative survey approach is the research design.

Sample

432 college students—202 men and 230 women—from several government, government-aided, and private institutions across Chennai's rural and urban districts as well as the Kancheepuram district form the sample.

Instruments Used

The "Integration of Digital Technology and Higher Education Scale (IDTHES)" was employed by the investigator. The investigator created the 52-statement Integration of Digital Technology and Higher Education Scale. Data regarding college students' use of digital technology in their higher education is gathered through the use of tools. The college students were given the scales along with the following instructions: "Please carefully study the statements as some are phrased negatively and some positively. To indicate your response, place a tick mark (✓) next to the option that best fits your opinion based on the Likert scale (Strongly Agree, Agree, Uncertain, Disagree, Strongly Disagree)". There is a minimum score of 1 and a maximum score of 5 for each statement. The questionnaire has a minimum score of 52 and a maximum score of 260. Data from college students attending science and arts colleges in both rural and urban locations was carefully gathered.

Analysis and Interpretation of Data

The present study employed a one-way Analysis of Variance (ANOVA) and a t-test to analyze the data gathered.

Testing of Hypothesis

Hypothesis 1

There is no significant difference in integrating digital technology and higher education among college students concerning their gender.

Table 1

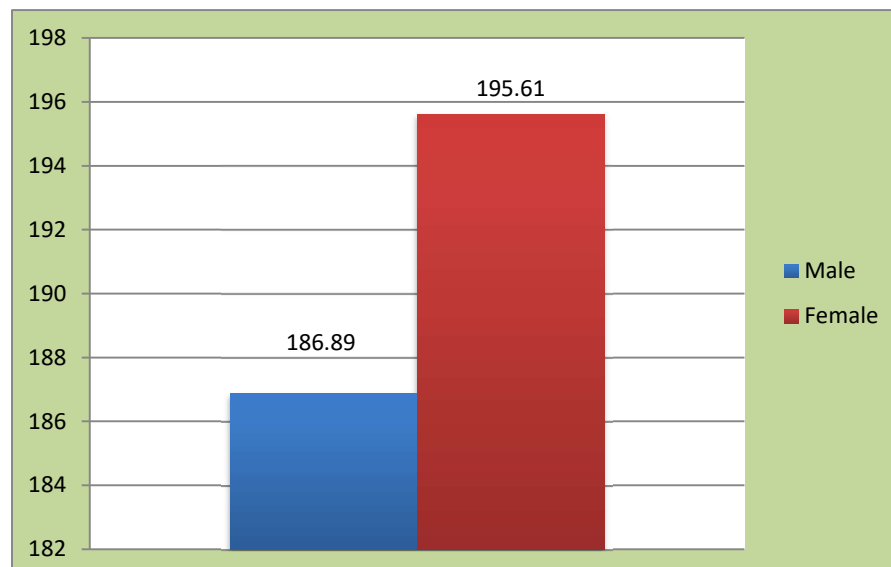
The Difference Between College Students' Gender-Based Integration of Digital Technologies and Higher Education

Title	Gender	N	Mean	SD	CR value	Level of significance
Integration of Digital Technology and Higher Education	Male	202	186.89	42.225	2.1972	0.05
	Female	230	195.61	40.195		

At the 0.05 level of significance, the computed 'CR' value (2.1972) from Table 1 is higher than the table value (1.96). Therefore, it can be said that there is a notable variation in how college students integrate digital technology and higher education depending on their gender. Furthermore, compared to male college students, it can be deduced from the mean value that female students have a higher degree of integration with digital technology and education. When compared to male college students, female students may be more likely to use digital technological apps for their learning process since they are curious about this new method of instruction.

Figure 1

The Difference Between College Students' Gender-Based Integration of Digital Technologies and Higher Education



Hypothesis 2

There is no significant difference in integrating digital technology and higher education among college students concerning their locality.

Table 2

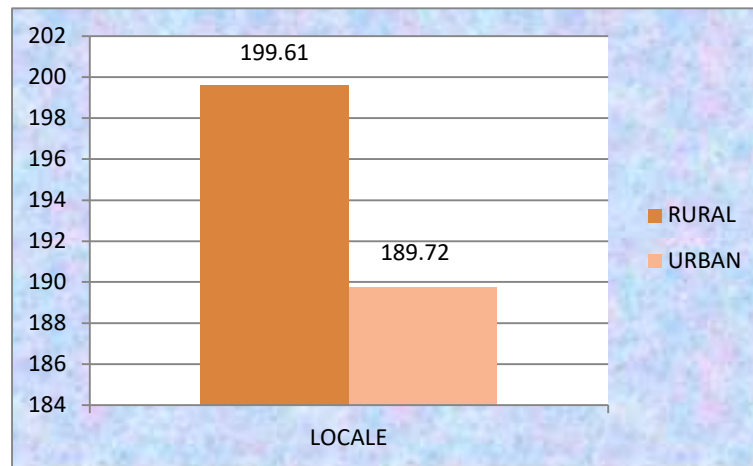
The Differences in How College Students Use Digital Technologies and Higher Education Depending on Where They Live

Title	Locality	N	Mean	SD	CR value	Level of significance
Integration of Digital Technology and Higher Education	Urban	220	189.72	39.612	2.3967	0.05
	Rural	212	199.61	46.019		

❖ At the 0.05 level of significance, the computed 'CR' value (2.3967) from Table 2 is higher than the table value (1.96). Therefore, it can be said that there is a notable distinction in how urban and rural college students use digital technology for learning. Furthermore, it can be deduced from the mean value that rural college students use digital technology in higher education more effectively than their urban counterparts. This could be because rural college students are more curious than urban college students to learn through the use of digital technologies in their coursework.

Figure 2

The Differences in How College Students Use Digital Technologies and Higher Education Depending on Where They Live



Hypothesis 3

There is no significant difference in the integration of digital technology and higher education among college students concerning their type of management of colleges.

Table 3

The Differences in How College Students Incorporate Digital Technology into their Higher Education Depend on the Type of College Administration

Title	Type of management of colleges	Df	Sum of squares	Mean squares	F-value	Level of Significance
Integration of Digital Technology and Higher Education	Between Groups	2	417.919	243.614	0.912	NS
	Within Groups	429	69678.690	376.162		

The table shows that, when it comes to the type of college management, there are no significant variations in how college students integrate digital technology and higher education. It follows that when it comes to how college students integrate digital technology into their higher

education, government, government-aided, and private universities do not differ all that much. This might be because all college students in the district schools of Chennai and Kancheepuram have equal access to digital technology apps for higher education.

Educational Implications

Higher education is greatly influenced by digital technologies. The quality of the current educational system has significantly changed as a result of the integration of digital technologies into higher education. Among the suggestions are:

- College students' excitement for using digital technology apps for their projects and learning process needs to be stimulated in this fast-paced world.
- Colleges can host digital technology training programmes to spark students' curiosity and develop creative applications of digital technology to help them deal with the problems and difficulties of today's world.
- Colleges can host workshops to increase awareness about the uses of digital technologies in higher education.
- Provide college students with the chance to present their projects and seminars on various digital technology platforms.
- Engage college students in creative activities that make use of digital technology to help them understand the value of social media platforms. For instance: Quizizz, Zoom, Google Classroom, WhatsApp, etc.

Conclusion

Professors and college students can apply their education in creative ways to the teaching and learning process with the aid of digital technologies. The integration of digital technology into

education brings about innovative and technical improvements in the current educational surroundings, preparing college students for the demands of the future. These days, technology is integral to every aspect of human existence. Technology is essential in education to raise the technical literacy of future adults. Therefore, in order to become effective future pillars of our country, educators and college students must enhance their digital literacy and integrate digital technology into their teaching and learning processes.

References

- Aagaard, T., Lund, A. (2019). *Digital Agency in Higher Education: Transforming Teaching and Learning*. United Kingdom: Taylor & Francis.
- Worthington, T. (2017). *Digital Teaching In Higher Education: Designing E-learning for International Students of Technology, Innovation and the Environment*. Australia: Lulu.com.
- Smale, M. A., Regalado, M. (2016). *Digital Technology as Affordance and Barrier in Higher Education*. Germany: Springer International Publishing.
- Selwyn, N. (2014). *Digital Technology and the Contemporary University: Degrees of Digitization*. United Kingdom: Taylor & Francis.
- Guri-Rozenblit, S. (2010). *Digital Technologies in Higher Education: Sweeping Expectations and Actual Effects*. United States: Nova Science Publishers.
- Luppigini, R., Haghi, A. K. (2010). *Cases on Digital Technologies in Higher Education: Issues and Challenges*. Ukraine: Information Science Reference.