A Study on Attitude of College Students towards E-Learning

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Abstract- E-learning represents a dynamic and evolving spectrum of pedagogical tools and technologies that support flexible, accessible, and interactive education. It enables students to engage with diverse learning materials and communicate effectively with peers and instructors, regardless of time and location (Kar et al., 2014). Central to the effectiveness of e-learning is students' attitude, which encompasses their thoughts, emotions, and behaviors toward using digital learning resources. A positive attitude can significantly influence students' motivation, engagement, and overall academic performance. The present study aims to assess the attitude of college students towards e-learning in relation to various demographic and socio-economic factors such as age, gender, subject, optional subjects, locality, parents' education, family income, marital status, religion, community, and personal ambitions. The study employs both descriptive and inferential statistical methods to analyze the data. The findings are expected to provide valuable insights for educators and policymakers to enhance student engagement with e-learning platforms and foster a more effective digital learning environment.

I. INTRODUCTION

The term e- learning covers a broad spectrum of pedagogical tools and approaches that continues to evolve to meet the needs of students and educators. E-learning system provide an additional, more flexible means of communication that enables students to interact easily with others (Kar et al. 2014). E-learning covers a wide range of educational devices and approaches that keep on developing to address the issues of understudies and instructors. E-learning framework gives an extra, more adaptable method for imparting that empower understudies to communicate effectively with others. Essentially, this framework empowers the understudies to get to assorted contents any time and from any location. e-learning, or electronic-learning (that is, using a computer to aid in the learning process Student's attitude towards e-learning is a basic component in the learning climate upheld by internet learning apparatuses. Student's attitude connected with their though process, feel about and how they act towards e-learning. Strong attitude can guides conduct and helps in the uplifting, work as well as execution of new learning strategies. Therefore, to work on the exhibition of understudies in e-learning so that they feel better while utilizing e-assets, it is vital to make them mindful of its significance and its utility. The present study was embraced with the main aim of assessing the attitude of college students towards e-learning in relation age, gender, course, father and mother's education, family income. (Kumari et al. 2022).

The present study is under taken with the view of assessing the attitude of college students towards E-learning in relation to gender and locality. The result of the present study helps to know about the Attitude of College students towards e-learning and will be significant and helpful to teachers and others in the academic area to improve their attitude in using e-learning.

II. REVIEW RELATED LITERATURE

The growing penetration of internet technologies and digital tools has led to significant transformations in higher education, particularly through the adoption of e-learning. Kattoua et al. (2016) highlighted that universities globally are investing heavily in e-learning systems to enhance traditional teaching methods and improve student learning outcomes. However, they emphasized that the success of these systems hinges on understanding the factors that influence student acceptance and usage. Complementing this, Al-Alawi and Zabadi (2016) noted that with the rise of the World Wide Web, education has become a ubiquitous service, accessible anytime and anywhere. This has prompted higher education institutions to reconfigure conventional

course delivery to prepare students, educators, and systems for the future of learning. Sharma and Suri (2015) observed a consistent trend in the application of information technology to support student learning, noting its integration into university systems. Konwar (2017) extended this by stating that in the current era of scientific advancement, ICT plays a crucial role not only in classroom instruction but across broader educational contexts. Similarly, Kaur et al. (2022) emphasized that e-learning has become a foundational aspect of educational systems in many institutions, with schools and colleges now equipped with computers, projectors, and internet access to support digital instruction effectively.The significance of a student's attitude in ensuring successful engagement with e-learning platforms was underscored by Sharma and Gopa (2022). They argued that positive attitudes encourage students to focus and retain information, especially in higher education where learners are increasingly self-directed and reliant on online platforms for knowledge, collaboration, and problem-solving. Dhas (2017) also recognized that e-learning has become a vital component of the modern education system, with most institutions integrating digital tools into their teaching environments.

From a psychological and behavioral perspective, Agir (2019) explored the intersection between students' attitudes toward learning, academic performance, and internet addiction. Meanwhile, Rhema and Miliszewska (2014) highlighted that students' satisfaction with e-learning is closely tied to their prior experiences and beliefs about technology, making these factors critical for the system's effectiveness. Das and Doley (2021) positioned e-learning as the primary means of knowledge dissemination in the 21st century, especially in response to the overwhelming growth in both global population and information. Halder et al. (2022) further asserted that e-learning is not just a tool but a necessity for communication and education in the current age. They explored whether learners' attitudes influence their engagement with such systems. Bashyal (2021) added that rapid technological progress, including the rise of mobile internet and digital communication, has significantly simplified global access to information, thus enhancing the practicality and appeal of e-learning. Paris (2004), among the early researchers in this field, documented the positive impact of ICT in learning through Online Web-Assisted Learning (OWAL), a precursor to modern e-learning platforms. Mahaputra (2021) contributed by quantitatively analyzing students' attitudes using e-learning attitude scales, offering measurable insights into user perception. Finally, Singh (2022) placed e-learning within a broader socio-educational context, noting that the educational process evolves with time and space, and e-learning represents a dynamic response to these shifts.

III. SIGNIFICANCE OF THE STUDY

The study on attitude of college students towards e-learning of Sikkim was one of the new areas to explore as well a study to know the dimension of like beliefs in one self-integrity, alienation and attitude of students. these areas were new explore, as it focuses on behavioral factors of students. Henceforth, to improve the performance of college students in e-learning so that they feel more comfortable while using e- resources, it is very important to make them aware of its importance and its utility. Hence this study will help to know how the students react and think about e-learning and what is their attitude towards it.

IV. OPERATIONAL DEFINITION

Attitude: one's behavior towards something.
E- learning: is the use of various technological tools that are either web based, web distributed or web capable for the purpose of education.
College students: studying in fourth Sem of Sikkim Government College Burtuk & Sikkim Government Arts College Mangshila.

Objectives of the Study
- To study the attitude of college students towards e-learning with respect to their gender.
- To study the attitude of college students towards e- learning with respect to their locality.

Hypotheses of the Study
The hypotheses of the study are as follows
H(0)1: there is no significant differences in the attitude of college students with respect to their gender.
H(0)2: there is no significant differences in the attitude of college students with respect to their locality.

V. METHODOLOGY AND PROCEDURE

A normative survey method has been adopted in the present investigation to obtain pertinent and precise

information concerning current status of phenomenon. It was based on what exists at present. The sample was selected 100 students from Sikkim Government College, 50 students of 4th semester from Sikkim government college Burtuk and 50 from Sikkim Government Arts college Mangshila.

The present study has used a standardized tool on E-learning, developed by Dimple Rani, Ludhiana, Punjab. the tool has 65 statetements about e-learning.

Techniques Of Data Analysis

To assess the Attitude of e-learning and involvement of college students the descriptive statistics namely; mean, median and mode was used and to test the significant difference between the gender and variables 't' ratio was adopted.

Study Of Score Distribution Of Attitude Of Colleges Students Towards E-Learning

Descriptive statistics was used to transform a set of the observation into indices that characterize the data. These measures were used to summarize the different observation and bringing it definite conclusion. Some of the descriptive measures adopted for the purpose of the study on Attitude of colleges students towards e-learning are mentioned here under:

Table 1. Descriptive Measures on the Attitude of College Students Towards E-learning.

Variation	Mean	Median	Mode	Standard Deviation
Male students	265.74	216.43	117.7	7.41
Female students	222.7	220.56	216.28	0.98
Students from urban College	219.7	11.17	-405.89	12.2
Students from the Rural college	176.06	221.9	303.58	40.55
Total	215.9	221.03	232.7	11.87

Distribution scores presented in the above table reveals that the score obtained by the college students in attitude of college students in the locus of control scale presents that with regard to gender variation it shows that the Males mean scores (265.74) is quite higher than the Females mean scores (222.7). And with regard to management, it shows that the students from Urban students mean scores (219.7) is quite higher than the Rural college (176.06).

Study of Score Distribution on Attitude of College Students Towards E-learning
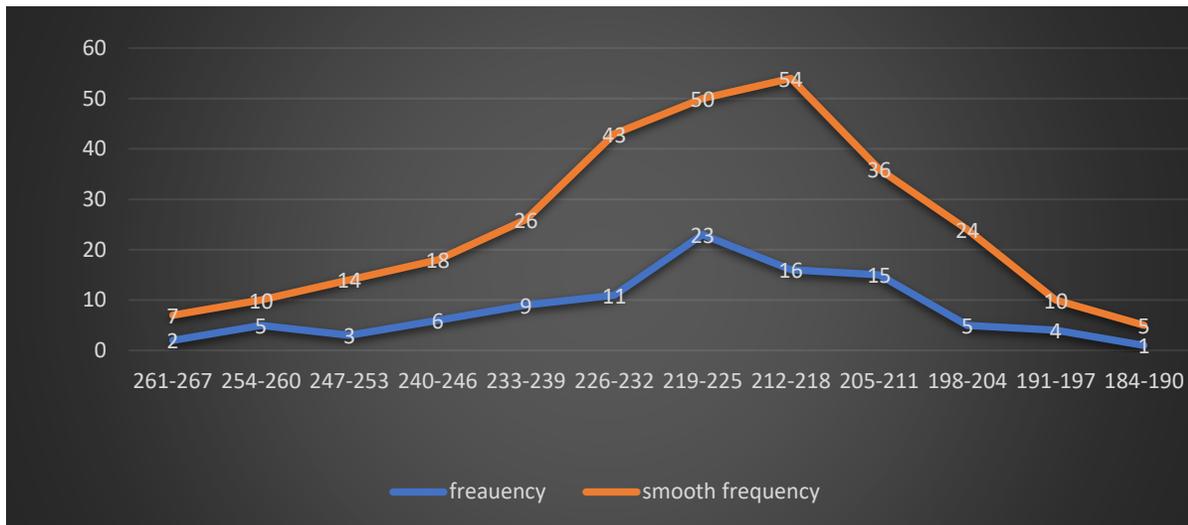

Fig (i) The distribution of the score into a frequency polygon with a smoothed frequency curve in term of e-leaning towards college students.

The distribution of scores presented in above figure reveals that the scores obtained by the college students in the attitude of e-learning ranged from 190-267. It was observed that maximum number of students (23) ranged from 219-255 and there was a gradual decreasing of scores towards the upper and lower end of the distribution. The distribution of scores was put into a frequency polygon with a smoothed frequency curve superimposed on it as presented in figure 1. The value for skewness derived was 0.0129 which depicts that it is negatively skewed as the curve is inclined more to the left. The normal value for the kurtosis is 0.263.

Differential Analysis On Attitude Of College Students Towards E-Learning And An Involvement Of The College Students.

The present intra variables analysis has been attempted to meet the objective of testing the null hypothesis (HO) stated earlier and presented in this report. In case of each intra variables, first the null hypotheses have been set up according to the requirement of the problem. The level of significance for the test has been selected and the data are subjected to the test of significance on the basis of 't' value for corresponding degrees of freedom. When the calculated value of 't' is less than the table value of 't' the null hypothesis was accepted and interpretation of result was made accordingly.

Locality Wise Differential Analysis On Attitude Of College Students Towards E-Learning In Sikkim.

In order to find difference in the score on attitude of college students towards e-learning, the college students the test of significance of difference between the mean of the urban and the Rural was calculated. the 't' was adopted and the value of 't' ratio was calculated and presented in the table below.

Table 2.

Summary of test significance of difference between mean score due to locality variation.

Contrast	Number of Samples	Mean	SD	SED	't'	Remarks
urban	50		12.2	5.98	7.29	significant
Rural	50	176.06	40.55			

Critical value for the given mean score, at 0.01 level =2.63, at 0.05 level =1.98

In case of locality variation on attitude of college students towards e-learning, the calculated 't' value 7.29 was found to be greater than the tabular value of 't' which was 1.98 at 0.05 level and 2.63 at 0.01 level of significance at 98 degrees of freedom. Therefore, the null hypothesis (HO1) stated as "there is no significant differences between the attitude of college students with respect to their locality" was rejected.

Gender Wise Differential Analysis On Attitude Of College Students Towards E-Learning In Sikkim.

In order to find difference in the scores of attitudes of college students, the test of significance of difference between the means of the males and female was calculated. The „t" was adopted and the value of „t" ratio was calculated and presented in the table below.

Table 3.

Summary of test significance of difference between means scores due to gender variation.

Contrast	Number of samples	Mean	SD	SED	't'	Remark
Males	50	265.74	7.41	0.13	3.31	significant
Females	50	222.7	0.98			

Critical value for the given mean scores, at 0.01 level =2.63, at 0.05level =1.98

In case of gender variation on attitude of college students towards e-learning, the calculated "t" value 3.31 was found to be not significant as its value was greater than the tabular value of "t" which was 1.98 at 0.05 level and 2.63 at 0.01 level of significance at 98 degrees of freedom. Therefore, the null hypothesis (HO2) stated as "there will significant difference in attitude of college students towards e-learning college students with regard to gender variation." was rejected.

VI. SCOPE AND RECOMMENDATIONS FOR THE FURTHER RESEARCH

Education provides a predominant source of worldly knowledge around us and change the perspective of the living society as a global village. Personal growth of the learners without the involvement of online learning. e-learning bring out a broader vision of source to the learners available over the web with the holistic approach to learning from anywhere.

Analysis the long-term evolution of e-learning and effect on mankind. the various method of technologies and approaches of e learning that exist in various necessities among the learner.

The recommendation system plays a vital role in referring content and enhancing the learning environment. There should be more advance in learning in advancement of technology in the modern era. The online study it gets more attention to practical skill needed rather than the theoretical knowledge the system provides more remedials classes or online teaching, online gaming etc. even it will give immense flexibility and convenience to learn regardless of time and any places, e-learning is updating the content to access is easy and materials are permanently available-learning is predominantly focusing on the growth of digital technologies and devices like cell phone. Online learner by clustering them based on online behavior style and extracting preference s and pattern using association rules and collaboration filtering result.

The same study can be replicated using similar methodology but in different college of students. This may help the future researcher to make the result more interesting in large extent. Research project on similar topic may be conducted in future investigators the perception on attitude of parents towards their child's, further its recommended that researcher can examine on different determinants that effect the attitude of college students towards e-learning. Future researches can be conducted using interview, or viva presentation techniques to gain in depth in information that could enrich the findings. Of the study and create better understanding of attitude of college students towards e-learning. In Sikkim further same project may be undertake on similar topic to make difference studies of Sikkim and others states like Manipur to study the attitude of college students towards e-learning.

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