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A STUDY ON ATTITUDE TOWARDS ICT OF UNDERGRADUATE STUDENTS

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Abstract

This study aimed to investigate and compare the Attitude towards Information and Communication Technology (ICT) among Undergraduate students in Guntur district, Andhra Pradesh, India, with reference to four variables: gender, locality, field of study, and type of management. The study employed a descriptive survey method and a sample of 600 students was selected using Cluster Sampling technique. The Attitude towards ICT was measured using a self-rating scale prepared and standardized by the researcher. The study revealed that gender and locality did not significantly affect the students' Attitude towards ICT. Both men and women students and rural and urban students had a similar Attitude towards ICT. However, there was a significant difference in Attitude towards ICT between arts and science students. Science students had a more positive Attitude towards ICT than arts students. The study found that government Undergraduate students had a significantly higher Attitude towards ICT compared to their private counterparts. This suggests that the type of management influence the students' attitude towards ICT. These findings could have implications for policy makers and educators, who could design interventions to enhance students' Attitude towards ICT based on these variables.

Keywords: Study, Undergraduate Students, Attitude Towards ICT.

Introduction

In the context of undergraduate education, a positive attitude towards ICT is particularly important, as many courses and programs incorporate digital learning tools and resources. Undergraduate students who possess a positive attitude towards ICT may be more motivated to engage with online course materials, participate in online discussions and activities, and seek out additional resources to enhance their learning experiences. This can lead to higher levels of academic achievement, as students who engage more fully with course content are often more likely to succeed. Additionally, a positive attitude towards ICT can also help undergraduate students develop valuable digital literacy skills that are essential for success in today's workforce. As many jobs require the use of technology, possessing a positive attitude towards ICT can give undergraduate students an advantage when seeking employment opportunities.

Background of the Study

The area of attitude towards Information and Communication Technology (ICT) among undergraduate students has received considerable attention from researchers, with conflicting results reported in the literature. While some studies have found no significant difference in attitude towards ICT among undergraduate students based on gender, locality, field of study, and type of management, others have reported significant differences. However, there has been a lack of research in this area specifically focused on undergraduate students in Guntur district, Andhra Pradesh, prompting the current study. The study aims to address the following research questions: 1) Is there a significant difference in attitude towards ICT among undergraduate students? 2) Are there significant differences in attitude towards ICT among undergraduate students with respect to gender, locality, field of study, and type of management? By addressing these research questions, the study aims to contribute to the understanding of the factors influencing undergraduate students' attitudes towards ICT in Guntur district.

Statement of the Problem

The present research is intended to study and compare the attitude towards ICT of undergraduate students in relation to the variables namely, gender, locality, field of study and type of management. The present study is entitled as follows.

"A Study on Attitude towards ICT of Undergraduate Students."

Need of the Study

The study of attitude towards ICT of undergraduate students is crucial in today's digital age as technology is becoming increasingly integrated into education. Understanding undergraduate students' attitudes towards ICT is important for educators to design and implement technology-enhanced learning initiatives that align with their preferences and goals. A positive attitude towards ICT may enhance students' learning experiences and contribute to their academic success. Conversely, a negative attitude may hinder their



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academic achievement. Therefore, there is a need to investigate undergraduate students' attitudes towards ICT to identify potential barriers and opportunities for enhancing their digital literacy and promoting a positive attitude towards technology in education.

Scope of the Study

The present study was confined to the Guntur district of Andhra Pradesh in India. The study included 600 undergraduate students. The study is confined to the measurement of one dependent variable, namely, attitude towards ICT. The study is restricted to four independent variables, namely, gender, locality, field of study and type of management.

Operational Definitions of Key Terms

Study

It refers to a process for gaining knowledge of the subject.

Attitude towards ICT

Attitude towards ICT refers to an individual's beliefs, feelings and perceptions towards information and communication technology. It encompasses the individual's willingness to adopt, use and embrace technology in their personal and professional lives.

Urban undergraduate Students

Students coming from urban areas and pursuing undergraduate course are considered as urban undergraduate students in the present study.

Rural undergraduate Students

Students coming from rural areas and pursuing undergraduate course are considered as rural undergraduate students in the present study.

Government college UG students

A college that is funded and run by the government is called as Government College in the present study.

Undergraduate students studying in Government colleges are considered as Government college UG students.

Private college UG students

A college that is funded and run by private organizations or individuals in the name of a society is called as private college in the present study.

Undergraduate students studying in private colleges are considered as Private college UG students.

Arts undergraduate students

Undergraduate students pursuing Bachelor of Arts (B.A.) or Bachelor of Commerce (B.Com.) are termed as arts undergraduate students.

Science undergraduate students

Undergraduate students pursuing Bachelor of Science (B.Sc.) degree in a subject, namely, physics or chemistry or biology or mathematics is termed as science undergraduate students.

Variables of the Study

The variables chosen for the present study are Gender, Locality, field of study and type of management.

Objectives of the Study

The study was conducted keeping in mind the following objectives.

1. To study the attitude towards ICT of undergraduate students.
2. To compare the attitude towards ICT of undergraduate men and women students.
3. To compare the attitude towards ICT of Urban and Rural undergraduate students.
4. To compare the attitude towards ICT of Private and Government undergraduate students.



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Hypotheses of the Study

To test the objectives of the study, null hypotheses were formulated. Null hypotheses were used for statistical testing.

Hypothesis 1 (Ho1): Undergraduate students do not differ significantly in their attitude towards ICT.

Hypothesis 2 (Ho2): Men and women undergraduate students do not differ significantly in their attitude towards ICT.

Hypothesis 3 (Ho3): Rural and urban undergraduate students do not differ significantly in their attitude towards ICT.

Hypothesis 4 (Ho4): Arts and science undergraduate students do not differ significantly in their attitude towards ICT.

Hypothesis 5 (Ho5): Government and private college undergraduate students do not differ significantly in their attitude towards ICT.

Methodology

Research Method adopted

To achieve the objectives of the study, the descriptive survey method was deemed appropriate. This method allowed for the collection of data that could be used to analyze and compare the attitude towards ICT of undergraduate students with respect to the selected variables.

Population of the Study

The study was concerned with the undergraduate students of Guntur district in Andhra Pradesh. Hence all the undergraduate students studying in Guntur district of Andhra Pradesh in India constitute the population for the present study.

Sample and Sampling Technique

In the present study, the researcher selected a sample of 600 undergraduate students by using Cluster sampling technique.

Tool used for the Study

In the present study, the Attitude towards ICT scale, which was prepared and standardized by the researcher, was used as a tool to collect data. This scale is of the Likert type and consists of 20 positive statements and 10 negative statements, and is used to assess the attitude towards ICT of the undergraduate students.

Data Collection

The required data was collected by administering the tool on the selected representative sample.

Statistical techniques used

Arithmetic mean, Standard deviation and t-test were used for the analysis of data to derive the conclusions.

Analysis of data

Testing of Hypothesis 1

Table 1: Level of Attitude towards ICT of Undergraduate students.

No. of Students	Percentage	Level of Attitude towards ICT
100	16.7	LOW
481	80.2	AVERAGE
19	3.2	HIGH

The table 1 shows the level of attitude towards ICT among undergraduate students. Out of 600 students, 100 students (16.7%) have a low attitude, 481 students 80.2% have an average attitude, and 19 students 3.2% have a high attitude towards ICT. It is observed that a greater number of students have average level of attitude towards ICT.

Hence the hypothesis 1 was rejected and concludes that undergraduate students differ significantly in their attitude towards ICT.

Testing of hypotheses 2, 3, 4 and 5

To test the validity of the hypotheses Ho2, Ho3, Ho4 and Ho5, means and standard deviations (S.D's) were calculated separately for the sub samples of each variable and then t-value was calculated in each case. The results are presented in Table-2. The level of significance chosen for the testing of null hypothesis is 0.05.



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Table 2: Comparison of attitude towards ICT of undergraduate students - Variable wise

Variable	Sub-group	N	Mean	S.D	t-value	Significance (0.05 level)
Gender	MEN	175	99.27	10.338	2.130	Significant
	WOMEN	425	101.25	10.352		
Location	RURAL	426	100.49	10.239	0.678	Not significant
	URBAN	174	101.13	10.730		
Field of study	ARTS	300	99.68	9.649	2.361	Significant
	SCIENCE	300	101.67	10.986		
Type of management	GOVT	240	102.46	10.712	3.465	Significant
	PRIVATE	360	99.49	9.990		

As per the results of the Table 2, it can be inferred that the calculated t-value is not significant at 0.05 level in the case of Locality. Hence the hypothesis Ho3 was accepted and concluded that there is no significant difference in the attitude towards ICT of undergraduate students with reference to Locality.

As per the results of the Table 2, it is evident that the calculated t-value is significant at 0.05 level in the case of gender, field of study and type of management. Hence the hypotheses Ho2, Ho4 and Ho5 were rejected and concluded that there is a significant difference in the attitude towards ICT of undergraduate students with reference to the variables gender, field of study, type of management.

Findings of the Study

The following are the findings drawn from the present study on the attitude towards ICT of undergraduate students.

1. Undergraduate students differ significantly in their attitude towards ICT.
2. Men and women undergraduate students differ significantly in their attitude towards ICT.
3. Rural and urban undergraduate students do not differ significantly in their attitude towards ICT.
4. Arts and science undergraduate students differ significantly in their attitude towards ICT.
5. There is a significant difference in the attitude toward ICT of private and government college undergraduate students. Government college undergraduate students are significantly superior to their non-Government counterparts in the attitude towards ICT.

Educational Implications of the Study

The findings of the present study hold significant educational implications for various stakeholders such as educational policy makers, institution authorities, teachers and parents. These stakeholders should take appropriate measures to improve the attitude towards ICT of the students, considering the variables of gender, locality, field of study and type of management. This would not only help in enhancing the use of ICT in education but also in the overall development of the students.

Suggestions for Further Research

Future studies may include examining the factors influencing the attitude towards ICT and its impact on academic performance.

- The present research focused on describing and comparing the attitude towards ICT among specific subgroups. Future studies may investigate the factors that influence attitudes towards ICT among undergraduate students in greater depth.
- The current study only focuses on undergraduate students. Future research can be conducted on students at different levels of education such as high school, intermediate, and post-graduation to gain a better understanding of their attitude towards ICT.
- Expanding the scope of the study to cover a larger geographical area would provide a more comprehensive understanding of the attitude towards ICT.



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