

# ATTITUDE OF THE B.Ed., STUDENTS TOWARDS M-LEARNING

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## **Abstract**

*The current investigation was undertaken to know the attitude of the B.Ed., students towards m-learning. The investigator had selected 200 B.Ed. college students studying in Cuddalore district of Tamilnadu in India. Simple random sampling was used in order to collect the sample. the attitude towards m-learning scale constructed and validated by Tsai, PS., Tsai, CC., and Hwang, GH., (2010) was used in this study was adopted. The findings of the study revealed that The B.Ed., students shows a highly favourable attitude towards m-learning, there is no significant difference in the attitude towards m-learning of B.Ed., college students studying in male, female, rural college, urban college, rural resident, urban resident, Tamil medium, English medium, arts group, science group, hostellers, day scholars, nuclear family, joint family, married, unmarried, undergraduate and postgraduate students.*

**Key Words:** Attitude towards E-learning, B.Ed. College Students

## **1. INTRODUCTION:**

An attitude is often defined as a tendency to react favourably or unfavourably toward a designated class of stimuli, such as a national or racial group, a custom or an institution. Thus defined, attitudes cannot be directly observed but must be inferred from over behavior, both verbal and non-verbal. Attitude denotes the sum-total of a man's inclinations and feelings, prejudice or bias, preconceived notions, ideas, fears, threats and convictions about any specific topic.(Thurstone 1929). Allport G.W(1935) defined an attitude as "mental and neural state of readiness organized through experience exerting a directive or dynamic influence upon the individual's response to all subjects and situations with which it is related".m-learning is commonly referred to the intentional use of networked information and communications technology in teaching and learning. A number of other terms are also used to describe this mode of teaching and learning. They include online learning, virtual learning, distributed learning, network and web based learning. Fundamentally, they all refer to educational processes that utilize information and communications technology to mediate asynchronous as well as synchronous learning and teaching activities. On closer scrutiny, however, it will be clear that these labels refer to slightly different educational processes and as such they cannot be used synonymously with the term m-learning.These various types or modalities of m-learning.

## Contemporary trends in m-learning

The growing interest in m-learning seems to be coming from several directions. These include organizations that have traditionally offered distance education programs either in a single, dual or mixed mode setting. They see the incorporation of online learning in their repertoire as a logical extension of their distance education activities. The corporate sector, on the other hand, is interested in m-learning as a way of rationalizing the costs of their in-house staff training activities. m-learning is of interest to residential campus-based educational organizations as well.

### 2. LITERATURE REVIEW:

Xiao-Binchen, (2013) studied about the tablets for informal language learning and found that tablet computers are ideal tools for creating an interactive, collaborative and ubiquitous environment for language learning, provided that the technological affordances of the devices have been fully explored with the students. This investigation also reveals that students have a generally favourable attitude towards the usability, effectiveness and satisfaction of tablet computer for mobile assisted language learning.

Shish-hsien yang (2012) explored the college students' attitudes and efficacy of mobile learning and found that most students agree that their motivation for English learning was enhanced and most of them had positive attitudes towards m-learning.

NaserJamil Alzaidiyen, et.al., (2011) studied about the examination of university students' attitude towards personal digital assistants (PDAS) usage in terms of Gender, Age and school variable and found that males' attitude scores are significantly higher than that of females, the university students attitude towards PDA usage are positive and no significant differences were found in students attitudes towards PDA in terms of age and school-variables.

Wong L H and Looi CK (2010) Studied about the vocabulary learning by mobile assisted arithmetic content creation and social meaning making and found that mobile assisted language learning has the potential to bridge the gap between formal and informal learning spaces and it was concluded that the combination of formal and informal learning fasters contextualized learning productive outputs and a socio-constructivist acquisition of the target language.

### 3. NEED AND IMPORTANCE OF THE STUDY:

The term m-learning comprises a lot more than online learning, virtual learning, distributed learning, networked or web-based learning. As the letter "m" in m-learning stands for the word "mobile", m-learning would incorporate all educational activities that are carried out by individuals or groups working online or offline, and synchronously or asynchronously via mobile phones. Hence, the present study has need and importance.

#### 4. STATEMENT OF THE PROBLEM:

The problem selected for the present investigation has been stated as follows “**ATTITUDE OF THE B.Ed., STUDENTS TOWARDS m-LEARNING**”.

#### 5. DEMOGRAPHIC VARIABLES USED:

The following demographic variables has been selected for the present investigation

- |    |                           |   |                                 |
|----|---------------------------|---|---------------------------------|
| 1. | Sex                       | : | Male Students / Female Students |
| 2. | Locality of the college   | : | Rural area / Urban area         |
| 3. | Residential area          | : | Rural are / Urban area          |
| 4. | Medium study              | : | Tamil / English                 |
| 5. | Subject group             | : | Arts group / Science group      |
| 6. | Mode of stay              | : | Hostler / Days Scholar          |
| 7. | Family type               | : | Nuclear / Joint                 |
| 8. | Marital status            | : | Married / Unmarried             |
| 9. | Educational qualification | : | Under graduate / Post graduate  |

#### 6. OBJECTIVES:

The following were the objectives formulated for the present study

1. To study the B.Ed., students attitude towards m-learning.
2. To study if there is any significant difference in attitude towards m-learning between the male and female B.Ed., students.
3. To study if there is any significant difference in attitude towards m-learning between the B.Ed., students studying in the education colleges located in the urban area and in the rural area.
4. To study if there is any significant difference in attitude towards m-learning between the B.Ed., students residing in the urban area and in the rural area.
5. To study if there is any significant difference in attitude towards m-learning between the B.Ed., students studying in the English medium and in the Tamil medium.
6. To study if there is any significant difference in attitude towards m-learning between the B.Ed., students who belongs to the arts group and to the science group in their major subject.
7. To study if there is any significance difference in attitude towards m-learning between the B.Ed., students who were hostellers and day scholars.
8. To study if there is any significant difference in attitude towards m-learning between the B.Ed., students from nuclear family and joint family.
9. To study if there is any significant difference in attitude towards m-learning between the married and unmarried B.Ed., students.
10. To study if there is any significant difference in attitude towards m-learning between the B.Ed., students who have completed their under graduate and post graduate in their major subjects.

## 7. HYPOTHESES:

The following were the hypotheses framed from the formulated objectives

1. The B.Ed., students shows a favourable attitude towards m-learning.
2. There is no significant difference in attitude towards m-learning between the male and female B.Ed., students.
3. There is no significant difference in attitude towards m-learning between the B.Ed., students studying in the education colleges located in the urban area and in the rural area.
4. There is no significant difference in attitude towards m-learning between the B.Ed., students residing in the urban area and in the rural area.
5. There is no significant difference in attitude towards m-learning between the B.Ed., students studying in the English medium and in the Tamil medium.
6. There is no significant difference in attitude towards m-learning between the B.Ed., students who belongs to the arts group and to the science group in their major subject.
7. There is no significance difference in attitude towards m-learning between the B.Ed., students who were hostellers and day scholars.
8. There is no significant difference in attitude towards m-learning between the B.Ed., students from nuclear family and joint family.
9. There is no significant difference in attitude towards m-learning between the married and unmarried B.Ed., students.
10. There is no significant difference in attitude towards m-learning between the B.Ed., students who have completed their under graduate and post graduate in their major subjects.

## 8. METHOD:

Normative survey method has been used in the present investigation.

## 9. TOOL USED:

In order to realize the aforesaid objectives, the attitude towards m-learning scale constructed and validated by Tsai, PS., Tsai, CC., and Hwang, GH., (2010) was used in this study. This scale is a five point scale, which consists of 17 statements (13 positive statements and 4 negative statements). Each statement have the options namely 'Strongly Agree', 'Agree', 'Undecided', 'Disagree' and 'Strongly disagree'. The response of the subjects was scored by using the numerical values or arbitrary weights to the items. The statements were having the scoring as 5,4,3,2 and 1 for the responses 'Strongly Agree', 'Agree', 'Undecided', 'Disagree' and 'Strongly disagree' respectively for the positive statements and the scoring procedure has been reversed for the negative statements. An individual score is the sum of all the score of the 17 items. The score ranges from 17 to 85. The maximum score that one can get in this is 85.

The level of the attitude towards m-learning scale has been given as follows:

LEVEL	RANGE OF THE SCORES
Unfavourable attitude	Upto 26
Neutral attitude	Above 26 upto 54
Favourable attitude	Above 54

The attitude towards m-learning scale has construct validity as the items selected were having the ‘t’ value of more than 1.75 (Edwards,1957). Its intrinsic validity was found to be 0.88. The reliability of this scale by split half technique (consistency) followed by the use of spearman –brown prophecy formula is found to be 0.79. Thus the attitude towards m-learning scale has validity and reliability.

### 10. SAMPLE:

Random sampling technique has been used in the selection of the sample of as many as 200 B.Ed., college students in Cuddalore district of Tamilnadu, India. This sample of 200 B.Ed., college students studying in the education colleges were found to have the following sub-samples.

MALE B.Ed., STUDENTS	10
FEMALE B.Ed., STUDENTS	97
STUDENTS STUDYING IN THE COLLEGES LOCATED IN THE RURAL AREA	141
STUDENTS STUDYING IN THE COLLEGES LOCATED IN THE URBAN AREA	59
B.Ed., STUDENTS RESIDING IN THE RURAL AREA	103
B.Ed., STUDENTS RESIDING IN THE URBAN AREA	97
B.Ed., STUDENTS STUDYING IN THE TAMIL MEDIUM	44
B.Ed., STUDENTS STUDYING IN THE ENGLISH MEDIUM	156
STUDENTS BELONGS TO THE ARTS GROUP IN THEIR MAJOR SUBJECT	171
STUDENTS BELONGS TO THE SCIENCE GROUP IN THEIR MAJOR SUBJECT	29
B.Ed., STUDENTS WHO WERE HOSTELLERS	171
B.Ed., STUDENTS WHO WERE DAY-SCHOLARS	29
B.Ed., STUDENTS FROM NUCLEAR FAMILY	59
B.Ed., STUDENTS FROM JOINT FAMILY	141
B.Ed., STUDENTS WHO WERE MARRIED	171
B.Ed., STUDENTS WHO WERE UNMARRIED	29
B.Ed., STUDENTS WHO HAVE COMPLETED THEIR UNDER GRADUADTE COURSES	59
B.Ed., STUDENTS WHO HAVE COMPLETED THEIR POST GRADUATE COURSES	141

## 11. STATISTICAL TECHNIQUES USED:

The following statistical techniques has been used in the present study

- Descriptive analysis and
- Differential analysis.

### Descriptive Analysis

Descriptive analysis limits generalization to the particular group of individual observed. No conclusions are extended beyond this group, and any similarity to those outside the group cannot be assumed. Much simple action research involves descriptive analysis and provides valuable information towards the nature of a particular group of individuals. Descriptive analysis includes the Mean and Standard Deviation.

One of the objectives of the present investigation is to study the attitude of the B.Ed., students towards m-learning. From the table 1, it is inferred that the mean and standard deviation of the entire sample is found to be 71.7100 and 4.3797 Also, the mean of the sub-samples ranges from 71.4124 to 71.9903 and the standard deviation of the sub-samples ranges from 4.2322 to 4.5340 As the mean value of the entire sample and the sub-samples were above 54, it is found that the entire sample and the sub-samples of the B.Ed., students shows a favourable attitude towards m-learning.

**Table 1**

**The Mean and the Standard Deviation of the Attitude towards M-Learning Scores of the Entire Samples and Its Sub-Samples**

S.NO	SAMPLES	SUB-SAMPLES	N	MEAN	STANDARD DEVIATION
1		Entire sample	200	71.7100	4.3797
2	Sex	Male	103	71.9903	4.2322
		Female	97	71.4124	4.5340
3	Locality of the college	Rural areas	141	71.6028	4.3706
		Urban areas	59	71.9661	4.4293
4	Residence	Rural areas	103	71.9903	4.2322
		Urban areas	97	71.4124	4.5340
5	Medium of study	Tamil medium	44	71.7500	4.3918
		English medium	156	71.6897	4.3842
6	Subject group	Arts group	171	71.7135	4.3918
		Science group	29	71.6897	4.3842
7	Mode of stay	Hosteller	171	71.7135	4.3918
		Day scholar	29	71.6897	4.3842
8	Family type	Nuclear family	59	71.9661	4.4239
		Joint family	141	71.6028	4.3701
9	Marital status	Married	171	71.7135	4.3918
		Unmarried	29	71.6897	4.3842
10	Educational qualification	Under graduate	59	71.9661	4.4293
		Post graduate	141	71.6028	4.3701

### Differential Analysis

It contains the determinations of the significance of the difference between groups with reference to selected variables. A 't' test is a numerical procedure that takes into account the difference between the means of the

two sub-groups the size of the sample in each group and amount of variation of spread present in the scores. Thus the ‘t’ test is a technique to find out whether the difference the mean performance of the two groups is significant or not.

It may be recalled that one of the objectives of the present study is to study, if there is any significant difference of the attitude towards m-learning in respect of the selected pairs of sub-samples of B.Ed., students divided on the basis of (A) Sex, (B) Locality of the college, (C) Residence, (D) Medium of study, (E) Subject group, (F) Mode of stay, (G) Family type, (H) Marital status and (I) Educational qualification. For this purpose, it has been decided to use the test of significance after having framed the suitable null hypotheses and it is to be tested at 0.05 level of significance (Table 2).

**Table - 2**

**The Significance of the Difference (‘t’ Value) in Attitude towards M-Learning between The Sub-Samples**

SUB-SAMPLES	N	MEAN	S.D	‘t’ VALUE	SIGNIFICANCE AT 0.05 LEVEL
MALE B.Ed., STUDENTS	103	71.9903	4.2322	0.93	Not Significant
FEMALE B.Ed., STUDENTS	97	71.4124	4.5340		
B.Ed., STUDENTS STUDYING IN THE EDUCATION COLLEGES LOCATED IN THE RURAL AREAS	141	71.6028	4.3706	0.53	Not Significant
B.Ed., STUDENTS STUDYING IN THE EDUCATION COLLEGES LOCATED IN THE URBAN AREAS	59	71.9661	4.4293		
B.Ed., STUDENTS RESIDING IN THE RURAL AREAS	103	71.9903	4.2322	0.93	Not Significant
B.Ed., STUDENTS RESIDING IN THE URBAN AREAS	97	71.4124	4.5340		
B.Ed., STUDENTS STUDYING IN THE TAMIL MEDIUM	44	71.7500	4.3918	0.07	Not Significant
B.Ed., STUDENTS STUDYING IN THE ENGLISH MEDIUM	156	71.6897	4.3842		

B.Ed., STUDENTS WHO BELONGS TO THE ARTS GROUP IN THEIR MAJOR SUBJECT	171	71.7135	4.3918	0.02	Not Significant
B.Ed., STUDENTS WHO BELONGS TO THE SCIENCE GROUP IN THEIR MAJOR SUBJECT	29	71.6897	4.3842		
B.Ed., STUDENTS WHO WERE HOSTELLERS	171	71.7135	4.3918	0.02	Not Significant
B.Ed., STUDENTS WHO WERE DAY-SCHOLARS	29	71.6897	4.3842		
B.Ed., STUDENTS FROM THE NUCLEAR FAMILY	59	71.9661	4.4239	0.53	Not Significant
B.Ed., STUDENTS FROM THE JOINT FAMILY	141	71.6028	4.3701		
MARRIED B.Ed., STUDENTS	171	71.7135	4.3918	0.02	Not Significant
UNMARRIED B.Ed., STUDENTS	29	71.6897	4.3842		
UNDER GRADUATE B.Ed., STUDENTS	59	71.9661	4.4293	0.53	Not Significant
POST GRADUATE B.Ed., STUDENTS	141	71.6028	4.3701		

## 12. IMPORTANT FINDINGS:

The following are the important findings of the present investigation.

1. The B.Ed., students shows a favourable attitude towards m-learning.
2. There is no significant difference in the attitude towards m-learning between the male and female B.Ed., students.
3. There is no significant difference in the attitude towards m-learning between the B.Ed., students studying in the education colleges located in the urban areas and in the rural areas.
4. There is no significant difference in the attitude towards m-learning between the B.Ed., students residing in the urban areas and in the rural areas.
5. There is no significant difference in the attitude towards m-learning between the B.Ed., students studying in the English medium and in the Tamil medium.
6. There is no significant difference in the attitude towards m-learning between the B.Ed., students who belongs to the arts group and to the science group in their major subject.

7. There is no significance difference in the attitude towards m-learning between the B.Ed., students who were hostellers and day scholars.
8. There is no significant difference in the attitude towards m-learning between the B.Ed., students from the nuclear family and from the joint family.
9. There is no significant difference in the attitude towards m-learning between the married and unmarried B.Ed., students.
10. There is no significant difference in the attitude towards m-learning between the under graduate and post graduate B.Ed., students.

### 13. CONCLUSION:

The present investigation revealed that the B.Ed., students studying in the Cuddaloredistrict of Tamilnadu, India, were found to have a favourableattitude towards m-learning which in turn gives a very high level of achievement for students. So it can be revealed from the investigation that the B.Ed., students should develop the attitude towards m-learning in a constructive way.

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