# Attitude towards e-Learning among Research Scholars with Respect to their Intelligence

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## ABSTRACT

*E-learning means the utilization of electronic application as well as system to instruct and study. e-learning application as well as system comprises of computer-based learning (CBT), Web-based learning (WBT), virtual classrooms (vc), digital collaboration so on. In long run e-learning experiences provide a cherished opportunity to an educational institution in receiving latest & contemporary area in favour of such form of edification. As such these educational systems enabled learners to access various content everywhere, any-time, allowing students to have control on their learning experiences. The present study was conducted on research scholars of University of Kashmir are of no exception as most of them hold the two roles in the educational settings student as well as educator. The investigators adopted the stratified proportionate random sampling to draw the sample of 450 research scholars. Data, collected with the help of Test of intelligence by Jalota and Attitude towards e-learning scale developed by Rani, were analyzed by employing test of significance. The results showed that more intelligent research scholars have more e-learning interest, feel at ease while learning online, and seem to be more confident than the less intelligent ones.*

**Key Words:** *Attitude; e-learning; Intelligence; Scholars*

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## INTRODUCTION

Every society has three necessities- Teaching, Learning, and Research. These important practices as well as talents are found in a particular chunk of people know as scholars or researchers. They play various role in extending scientific services and for society development. Teaching, Learning, and Research are the procedures those can help in the removal of related obstacles which are concerned with educators, academia authorities, and other appropriate policymakers as well as representatives. In today's world the educational challenges are provided with the lone solution of e-learning which has delimited education beyond the campuses. The learners who remained impotent to join quality courses due to provincial discrepancies nowadays stand as receivers and beneficiaries (Sastry, 2010). The Government of India (GOI) has launched some program like SWAYAM, NPTEL, e-Gyan, Gyan Darshan, Edu Sat which are exceptionally successful.

The supportive e-learning structure is being created by the universities and some universities, IITs are already providing online degrees, certificates as well as free content to learners (Sharma et al. 2014). But relatively a different picture of e-learning exists there in Kashmir valley (the most northern part of India).

The evolution of a number of new technologies over the years has optimized the communication process and the information flow. The use of technology in education is a necessity as a result of technological evolution. E-learning is a rapidly growing industry, impacted by means of information and communication technology (ICT) within

educational institutions as well as at universities. It has changed the learning methods of people and made interaction possible among participants, watch lectures, read books, and be tested by teachers while students remain at their home. e-learning promotes personal knowledge accumulation as well as group knowledge sharing, improving learning efficiency. e-learning platform appears as an effort for quality and effective education. It as a new learning technology undoubtedly adds to learning environment to a great extent. In a developing country like India, universities are increasing online learning programs to satisfy the needs of the students searching for online courses. Colleges as well as universities continue to spend large amount of money in automation, electronic communication facilities and so on. The latest information by means of the UK-India Business Council (2015) reports that India became biggest market of e-learning following the US. This anticipated to boost up from government Digital India initiative. The Digital India initiative has increased Internet access that helps to give quality education to large population. e-learning sector in India is supposed to develop twofold faster than universal standard. Although e-learning is considered an essential method in higher education, its implementation in universities is one of the important dimensions of university policies. In the draft of new National Education Policy (2019) Government of India have kept to set up an autonomous body (the national Educational Technology Forum, NETF) a platform for free exchange of ideas on technology integration in education. Three types of higher educational institutions have been proposed to restructure the higher education.

Salloum et al., (2019) examined factors affecting university students' acceptance of e-learning and revealed that quality knowledge and its sharing had positive control over acceptance of e-learning among university students. Jasuli (2018) intended to understand student's attitude towards e-learning & dominant attributes about use of e-learning and found student attitude towards e-learning was positive & dominant attribute by students was considered to be easy accessibility toward the use of e-learning. Sobkow et al., (2018) explored the relationship between intuitive abilities, intelligence and personality and showed three types of intuitive abilities that had different relation with cognitive ability and personality which could be predicted by intelligence and openness to Aesthetics. Ghazi et al., (2011) revealed positive, significant association between multiple intelligence & academic achievement of college students. The present paper studied the attitude of research scholars towards e-learning with respect to their intelligence.

E-learning means the utilization of electronic application as well as system to instruct and gain knowledge. E-learning application as well as system comprise of computer-based learning (CBT), Web-based learning (WBT), virtual classrooms, digital collaboration et cetera. Attitude towards e-learning means way an individual shows interest in using the electronic resources towards learning. It also means how comfortable and confident s/he is while using these e-resources. However, intelligence is the general ability of an individual to adapt his thinking to new alternatives. It is common mental adaptability to novel conditions and problems of life. Intelligence means brainpower put to use. Intelligence is the capability to adjust and learn new and

changing situations. Intelligence is the cumulative capacity possessed by an individual to take action purposefully, to assume rationally & to deal successfully with one's surroundings.

## OBJECTIVES

1. To study and compare the average score on e-learning interest of more & less intelligent research scholars.
2. To study and compare the average score on usefulness of e-learning of more & less intelligent research scholars.
3. To study and compare the average score on ease of e-learning of more & less intelligent research scholars.
4. To study and compare the average score on e-learning confidence of more & less intelligent research scholars.
5. To study and compare the average score on Attitude towards e-learning of more & less intelligent research scholars.

## HYPOTHESES

$H_{01}$ There is no significant difference in the average score on e-learning interest of more & less intelligent research scholars.

$H_{02}$ There is no significant difference in the average score on usefulness of e-learning of more & less intelligent research scholars.

$H_{03}$There is no significant difference in the average score on ease of e-learning of more & less intelligent research scholars.

$H_{04}$There is no significant difference in the average score on e-learning confidence of more & less intelligent research scholars.

$H_{05}$There is no significant difference in the average score on Attitude towards e-learning of more & less intelligent research scholars.

## METHODOLOGY

### SAMPLE

The research scholars from the various departments of University of Kashmir, Jammu and Kashmir, India was the population under study. The stratified proportionate random sampling procedure has been employed to draw sample of 450 research scholars from various departments. It is pertained to mention that three streams (Arts, Science, Social Science) which comprised of Nine schools and Five researcher centers with a proportionate representation of research scholars from each schools and center. Each School comprises of various departments and the investigators took the sample from each department.

### TOOLS USED

*Test of Intelligence:* This test was constructed by S. Jalota. This test consists of 100 questions in five areas like reasoning, analogies, number series, classification, language. It is used to measure the Intelligence of college going adults in English speaking areas of India. The TEST is tried for 25 minutes only. As this test contains hundred

questions. Each item has been framed in such a way that it provides mostly 5 alternatives in order to make scoring more rigid and objective. The participants who scored 60 or less were treated as less intelligent and ones who had scores more than 60 were treated to be more intelligent research scholars.

*Attitude Towards e-learning Scale:* This scale has been designed by Rani. This scale comprises of 65 items representing four Areas as (i) e-learning interest, (ii) Usefulness, (iii) Ease of e-learning, and (iv) e-learning confidence.

## STATISTICAL TREATMENT

The data was put to suitable statistical analysis by using various statistical techniques as Mean, S.D, as well as test of significance had been used so as to find out whether any significant difference occur between the average scores of high and low intelligent subjects on the variable under study.

## ANALYSIS AND INTERPRETATION

The data were analyzed with the help of SPSS 20.0

### 1.1. Intelligence wise comparison of mean scores of e-learning interest of research scholars

The first objective has been to study and compare the average score on e-learning interest of more & less intelligent research scholars. The data were analyzed with the help of test of significance and result is given in Table 1.

**Table 1: Intelligence wise M, S.D., N, t-value of e-learning interest of research scholars**

| Intelligence | M | S. D. | N | t-value |
|---|---|---|---|---|
| Less intelligent | 46.20 | 5.74 | 242 | 3.014* |
| More intelligent | 47.84 | 5.72 | 208 | |

*Significant at 0.01 level

It can be observed that 3.014 (t-value) is significant at 0.01 level with df = 448 (vid Table 1). This reflects that the average score on e-learning interest of less & more intelligent research scholars vary notably. Hence, the null hypothesis that *there is no significant difference in the average score on e-learning interest of more & less intelligent research scholars* is rejected. It may, therefore, be said that more intelligent research scholars were found to have high e-learning interest than those of less intelligent research scholars.

### 1.2. Intelligence wise comparison of mean scores of usefulness of e-learning of research scholars

The second objective has been to study and compare the average score on usefulness of e-learning of more & less intelligent research scholars. The data were analyzed with the help of test of significance and outcome is given in Table 2.

**Table 2: Intelligence wise M, S.D., N, t-value of usefulness of e-learning of research scholars**

| Intelligence | Mean | S. D. | N | t-value |
|---|---|---|---|---|
| Less intelligent | 96.14 | 11.86 | 242 | 1.369 |
| More intelligent | 97.75 | 12.94 | 208 | |

Since the Table 2 shows the t-value is 1.369 which is not significant. It reflects that the mean score of usefulness of e-learning of less and more intelligent research scholars don't change considerably. So, the null hypothesis that *there is no significant difference in the average score on usefulness of e-learning of more & less intelligent research scholars* is not rejected. It may, therefore, be said that both less and more intelligent research scholars were found feel e-leaning equally useful.

### 1.3. Intelligence wise comparison of mean scores of ease of e-learning of research scholars

The 3rd objective has been to study and compare the average score on ease of e-learning of more & less intelligent research scholars. The data were analyzed with the help of test of significance and end result is given in Table 3.

**Table 3: Intelligence wise M, S.D., N, t-value of ease of e-learning of research scholars**

| Intelligence | Mean | S. D. | N | t-value |
|---|---|---|---|---|
| Less intelligent | 51.56 | 6.99 | 242 | 2.307** |
| More intelligent | 53.21 | 8.21 | 208 | |

**Significant at 0.05 level

Table 3 indicates the t-value is 2.307 that is significant with df=448 at 0.05 level. This reveals that average score on ease of e-learning of less and more intelligent research scholars disagree drastically. Therefore, the null hypothesis that *there is no significant difference in the average score on ease of e-learning of more & less intelligent research*

*scholars* is rejected. It may, therefore, be said that more intelligent research scholars were found feel more ease of e-learning than those of less intelligent research scholars.

### 1.4. Intelligence wise comparison of mean scores of e-learning confidence of research scholars

The 4th objective has been to study and compare the average score on e-learning confidence of more & less intelligent research scholars. The data were analyzed with the help of test of significance and result is given in Table 4.

**Table 4: Intelligence wise M, S.D., N, t-value of e-learning confidence of research scholars**

| Intelligence | Mean | S. D. | N | t-value |
|---|---|---|---|---|
| Less intelligent | 40.54 | 5.55 | 242 | 3.309* |
| More intelligent | 42.34 | 6.01 | 208 | |

**Significant at 0.01 level*

Table 4 highlights the 3.309 (t-value) that is significant with df = 448 at 0.01 level. This specifies that average score on e-learning confidence of less & more intelligent research scholars differ significantly. Hence, the null hypothesis that *there is no significant difference in the average score on e-learning confidence of more & less intelligent research scholars* is rejected. It may, therefore, be said that more intelligent research scholars were found be more confident while using e-learning than those of less intelligent research scholars.

### 1.5. Intelligence wise comparison of mean scores of attitude towards e-learning of research scholars

The last objective has been to study and compare the average score on attitude towards e-learning of more & less intelligent research scholars. The data were analyzed with the help of test of significance and end result is given in Table 5.

**Table 5: Intelligence wise M, S.D., N, t-value of attitude towards e-learning of research scholars**

| Intelligence | Mean | S. D. | N | t-value |
|---|---|---|---|---|
| Less intelligent | 234.44 | 22.07 | 242 | 2.825* |
| More intelligent | 214.13 | 28.13 | 208 | |

*Significant at 0.05 level

Table 5 revealed 2.825 (t-value) that is significant with df=448 at 0.01 level. This implies that average score on attitude towards e-learning of less & more intelligent research scholars vary considerably. So, the null hypothesis that *there is no significant difference in the average score on attitude towards e-learning of more & less intelligent research scholars* is rejected. It may, therefore, be said that less intelligent research scholars were found have better attitude towards e-learning than their counterparts.

## DISCUSSION

The outcomes reflected that more intelligent research scholars have more e-learning interest, feel at ease while learning online, and seem to be more confident than the less intelligent ones. It can be concluded from the results that there is significant difference between more and less intelligent research scholars on attitude towards e-learning.

Further by the dimension wise t-test analyses indicated that more intelligent and less intelligent research fellows don't have any significant mean differences on usefulness of e-learning dimension. while as more intelligent and less intelligent research scholars have significant mean difference [Vide Table 1, Table3, Table4]. Therefore, it can be said that more intelligent research scholars have significantly better e-learning interest than less intelligent research scholars. From the results it can be inferred that more intelligent research scholars like to learn the use e-learning & enjoy it than less intelligent ones. Now a-days technology is so much advanced that every small thing is dependent on let us say conversation may it be academic or non-academic it is done via e-mailing the research fellows ought to check frequently their e-mails IDs. According to the more intelligent research fellow's today's youth greatly trust on e-learning while doing their assignments, projects completed in time. e-learning is collaborative and attractive than conventional teaching. They feel e-learning helpful in many ways. However, more intelligent research scholars feel e-learning is a boon and is easy to use. Less intelligent research scholars feel it is time consuming and costly. Less intelligent research scholars prefer to read from books than from computer or potable screens, as they feel health problems while continuously using it. Beside e-learning make more intelligent research scholars confident and competent. With the assistance of e-learning research scholars improve their performance.

## CONCLUSION

E-learning, defined as electronic learning or online learning, where in an individual embarks to learn anywhere

and at any time. All the edifying programs that are conveyed at individual or group level operating off-line and on-line; synchronously and asynchronously through connected or unconnected electronic devices such as PCs, Laptops. The results of present study revealed that more intelligent research scholars had scored better on the three dimension of attitude towards e-learning i.e. e-learning interest, ease of e-learning, and e-learning confidence than those of less intelligent ones. It can be said that the more intelligent research scholars like to learn online. They love to receive information online and enjoy learning more while traveling. They often check their e-mails in this period of e-learning. According to them e-learning is motivating than classroom learning. They feel with minimum time and efforts; they get maximum information through e-learning and keep updated. It enables them to achieve more, to do home assignments and projects.

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