



## DEVELOPMENT AND STANDARDISATION OF e-LIBRARY ATTITUDE SCALE (e-LAS)

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### Abstract

*A library strives to play a leading role in the teaching, learning and research activities. It should be aggressively dynamic in the provision of its services and manned by personnel of the highest quality, who possess adequate background, appropriate professional training and experience, and the proper orientation to meet the challenges of modern academic. So, we are thinking about the online environment as a way of connecting students who may be located physically in a place with their learning that is somewhere else. So the investigators have decided to construct and validate a scale to measure the e-library attitude of college students in Salem District of Tamilnadu, and succeeded in it.*

**Key Words:** e-Library, Attitude

### Introduction

A library strives to play a leading role in the teaching, learning and research activities. It should be aggressively dynamic in the provision of its services and manned by personnel of the highest quality, who possess adequate background, appropriate professional training and experience, and the proper orientation to meet the challenges of modern academic. User expectation from any information system is to make available directly or remotely and in real time the needed information, format notwithstanding. The library is a major information providing system supports teaching, learning and research with information materials of various types. The advent of Information and Communication Technology (ICT) has however drastically changed the nature of traditional library services. Perhaps in any discussion of application of modern technology in the library, the first thing that comes to mind is the computer. The computer has made such a tremendous impact on the organization, management and dissemination of information that it readily commends itself to any library ready to accept it. When computers first made their impact on libraries especially with the automation of house-keeping routines, resource managers had expected financial savings as machine took over the work of humans. However, in higher education, the real result has been that automation has enabled institutions to cope with great increases in demand without increases in staffing and how they are able to provide a much wider range of services, to improve the quality of work performed by students, simultaneously saving them time when searching for information. Computers in libraries have proved useful in assisting the information processing aspects of traditional library operations like acquisitions, registration of readers, circulation functions and keeping track of reading and research interests of users. Thus, repetitive and routine data processing tasks, which characterized most library operations are effectively and efficiently handled by computers. The computerization/automation of library services brings with it many benefits, meant to improve the quality of services that the library renders to its users. Some of the benefits of automation include: enhanced productivity, increased output, more productive tasks in documentation and information processing, network enhancement and perfect control of records management and retrieval. The computerization of library, therefore, leads to a change in the way the library offers services to its clientele. A computerized library comprises not only facilities and formats, but also the essential human elements: users and staff. The success of any library system, after all, rests not on how well the design works on paper, in abstract, but on how readily people will accept it and how effectively they can use it. And it is the users of the library that embrace or reject the new technologies; fulfill or frustrate the intentions of system designers and experience anxiety and disorientation as a result of

their use. Attitudes are enduring patterns of belief, believed to be predictive of behavior, reflecting people's biases, inclinations or tendencies that influence their response to situations, activities, people or programme goals. Students varied in their information needs and their seeking attitudes. They constitute a part of society who is fortunate to have access at little or no cost to themselves a variety of computerized services in their institutions' libraries. This is made possible because institutions use considerable proportions of their budget to provide this technologies for their students to assist in the teaching, learning and research processes. One of the major barriers in implementing new innovations in libraries is not only technical but also attitudinal, as positive attitude towards technology contributes to the better performance in a technologically advanced environment. However, little is known about student attitudes towards e-libraries and without a better understanding, it remains difficult for these libraries to effectively provide these services for their users.

### **Attitudes towards E-Library**

The success of efforts at the e-library depends not only on how well the system works, but also on how well it is received by its intended users, which is reflected in users' attitude towards it and predictive of their behaviour. Positive attitude contributes to its success, while negative attitude only detracts from the merits of the system because it translates into its low use or non-use. Some studies have however shown generally positive attitude towards e-library.

Lombardo and Condic (2000) set out to determine user acceptance of the On-line Public Access Catalogue and found that users overwhelmingly preferred the OPAC and found it easy to use.

Ogunsola, (2004) Studied about the case of application of modern technology in the library should start with the acceptance of the new technology as vital to the effective performance of the functions of the library.

### **Development of the Scale**

As there is no suitable scale available to study students' attitude towards e-library, the investigator has decided to construct and standardize a scale to measure the students' attitude towards e-library. As the first step the investigators collected variety of information from various sources like website search, Journals, Books, experts in colleges and in universities. Its is of 'Likert type scale' having as many as 48 statements. They were both favourably (38) and unfavourably (10) worded. The statements were categorized with the experts opinion.

Each statement is set against a five - point scale of 'Strongly Agree' 'Agree', 'Undecided' 'Disagree', 'Strongly Disagree' and arbitrary weights of 5,4,3,2, and 1 are given in that order for the favourably worded statement and the scoring is reversed for the unfavourably worded statements. The scores in this scale range from 48 to 240.

### **Pilot Study of the Scale**

This scale of 48 statements intended for the pilot study was administered to the sample of as many as 100 students studying in the engineering colleges. Then their responses have been scored carefully and arranged in the descending order from the highest scorer to the lowest scorer. Then they were subjected to item analysis.

### **Item Analysis**

The next step in the standardization of an e-library attitude scale after pilot study is to find out the 't' value of each statement, which forms the basis for item selection in order to build up the final scale. The Likert type scale calls for a graded response to each statement on a five-point scale ranging from 'Strongly Agree' to 'Strongly Disagree". The individual score for all the 100 students were found out and they were ranked from the highest to the lowest score. Then 25% of the subjects (High) with the highest total scores and 25% of the subjects (low) with the lowest total scores were sorted out for the purpose of item selection. The high and the low groups, thus selected, formed the criterion groups and each group was made up of 25 students (Edward.L.Allen., 1957).

It may be recalled that each statement is followed by five different responses of 'SA', 'A', 'UD', 'DA', and 'SD' in the e-library attitude scale. As already indicated weights are given for the response category in respect of each statements. Then each statement was taken individually and the number of students who responded 'SA', 'A', 'UD', "DA", 'SD' was found out in both the high and low groups separately. Thus for all the 48 statements, the number of students coming under each category was found out separately for both the high and the low group. The value of 't' is a measure of the extent to which a given statement differentiates between the high and low group. If the 't' value is equal to or greater than 1.75 it indicates that the average response of the high and low groups to a statement differs significantly, provided there are 25 or more subjects in the high group and also in the low group (Edward.L.Allen., 1957).

**Table-1**  
**Rank Order of Items in E-Library Attitude Scale based on 't' Values**

Rank Order	Nature of the Statement	't' Value	ORIGINAL Serial Number	Statement Selected/not Selected
1	Positive	7.09	2	Selected
2	Positive	6.74	20	Selected
3	Positive	6.46	40	Selected
4	Positive	6.44	22	Selected
5	Positive	6.36	29	Selected
6	Positive	5.72	30	Selected
7	Positive	5.44	45	Selected
8	Positive	5.42	24	Selected
9	Positive	5.23	14	Selected
10	Positive	5.14	19	Selected
11	Positive	5.10	13	Selected
12	Positive	5.09	44	Selected
13	Positive	4.89	1	Selected
14	Positive	4.89	10	Selected
15	Positive	4.83	26	Selected
16	Positive	4.81	11	Selected
17	Positive	4.81	21	Selected
18	Positive	4.74	7	Selected
19	Positive	4.67	47	Selected
20	Positive	4.63	8	Selected
21	Positive	4.53	25	Selected
22	Positive	4.43	5	Selected
23	Positive	4.36	31	Selected
24	Positive	4.20	33	Selected
25	Positive	3.91	36	Selected
26	Positive	3.79	46	Selected
27	Positive	3.75	34	Selected
28	Positive	3.73	17	Selected
29	Positive	3.60	23	Selected
30	Positive	3.56	32	Selected
31	Positive	3.49	35	Selected
32	Positive	3.44	28	Selected
33	Positive	3.36	37	Selected

34	Positive	3.10	43	Selected
35	Positive	2.92	18	Selected
36	Positive	2.76	27	Selected
37	Positive	2.57	12	Selected
38	Positive	2.40	3	Selected
39	Negative	2.16	15	Selected
40	Negative	2.01	42	Selected
41	Negative	1.67	16	Not Selected
42	Negative	0.98	9	Not Selected
43	Negative	0.79	38	Not Selected
44	Negative	0.67	6	Not Selected
45	Negative	0.60	41	Not Selected
46	Negative	0.50	48	Not Selected
47	Positive	0.41	4	Not Selected
48	Negative	0.31	39	Not Selected

In the present study there are 25 subjects each in the high and low groups, the total number of subjects involved in the pilot study being 100. As many as 40 statements having the highest 't' value have been chosen in order to form the final scale (Table-1).

#### Scoring Procedure

The scale has as many as 38 Positive statements and 2 negative statements the scoring procedure is given in the table furnished below:

Nature of the Statement	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
Favourably Worded	5	4	3	2	1
Unfavourably Worded	1	2	3	4	5

The score ranges from 40 to 200. The maximum score that one can get in this is 200. The level of the scale was given below.

Level	Range of scores
Favourable Attitude (P25)	Up to 129
Neutral Attitude (P25-P75)	Above 129 up to 162
Unfavourable Attitude (P75)	Above 162

#### Validity

e-library attitude scale has construct validity as items were selected having the 't' values equal to or more than 1.75 (Edwards,1975). It's intrinsic validity was found to be 0.70 which clearly states that the scale is valid.

#### Reliability

The reliability of this scale by split-half technique (Consistency) followed by the use of spearman-Brown prophecy formula was found to be 0.49 and hence the scale is reliable.

#### Conclusion

Thus the investigators constructed and validated a e-library attitude scale (e-LAS) and contributed it to the field of education.

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