

Purpose of Accessing INDEST e-Resources by The Faculty Members of IITs: A Study

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Abstract

The study examines the purposes (both core and augmented) of accessing INDEST e-resources by the faculty members of IITs. It also highlights the basic advantages/disadvantages of accessing e-resources. The paper presents the availability and accessibility, expected facilitation and value addition of accessing INDEST e-resources. The investigators distributed 1050 questionnaire through e-mail to faculty members of top seven IITs and received 411 filled questionnaires making a moderate response rate of 39%. The analysis found that faculty has positive attitudes about the use of INDEST e-resources.

Keywords: INDEST e-Resources, faculty members, IIT's

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INTRODUCTION

Due to the explosion of information resources for a library it is difficult to meet the users need easily. Changes in technology in recent years have dramatically alternated how information is accessed, stored and disseminated. This change effects not only the collection development but also the service provided by the libraries. With advance in technology and e-publishing; access to information globally by overcoming the traditional barrier of time, and space has become easy.

Large amount of scholarly literature in full text journal, books, thesis, reports etc., are publishing in electronic medium, which can be used by the users globally without spending more money and time. Therefore the number of users of e-resources is increasing day by day. But still due to the scattering of information it takes time and money to access the correct sources of information.

To solve this problem many consortia, databases etc., are made; from which the users can get their proper sources of information in related field by not spending more money and time too. Today internet plays a vital role in teaching and research process. It is assumed

that the engineering students in India feel more dependent on internet/e-resources for their assignments and projects. Engineering faculties feel handicapped in collecting information without using internet.

REVIEW OF LITERATURE

The trends in acquisition of e-resources vis-a-vis their print counterparts identified the e-resources and analyzed the usage of these resources during 2004–11 [1]. The study revealed that IIT libraries spend a significantly large proportion of their budgets to acquire e-resources. There is a clear shift in the collection development policies of these libraries where e-resources have become a vital part of their core collections.

So, Ahoo and Agarwal discussed various consortia operating in India; the inception of INDEST-AICTE consortium; objectives, administrative structure, membership, services and activities of INDEST-AICTE consortium [2–3] etc. They also discussed the selection of e-resources, review of e-resources, license agreement with publishers, fair use, usage analysis of various e-resources, economics of expenditure, research output of core members, archival access of e-resources for the core as well as other member of the consortium and

future plan for the consortium. Verma and Gupta described use of e-resources by the faculty members of GLA Institute of Technology and Management, Mathura [4]. They also described various aspects like awareness of the users, use pattern of e-resources, user satisfaction level and problems encountered while accessing e-resources. Possible solutions have also been suggested for the effective utilization of e-resources. Vasanth and Mudhol presented approach towards partnership, networking, consortia and resource sharing adopted by libraries need radical changes to evolve responsive partnerships in order to achieve best performance in service [5].

Cooperation amongst institutions for sharing their library resources is being practiced for decades. The proliferation of electronic resources in the networked society has resulted in the development of "shared subscription" or "consortia-based subscription" to journals everywhere in the world. Shared-subscription to electronic resources through consortia of libraries is a feasible strategy to meet the pressures such as diminishing budget,

increased user's demand and rising cost of journals.

OBJECTIVES OF THE STUDY

- To know the purpose (both core and augmented) of using INDEST e-resources.
- To examine the availability and accessibility of INDEST e-resources, their advantages/disadvantages.
- To find out the expected facilitation and value addition in accessing INDEST e-resources.
- To know the satisfaction of using INDEST e-resources.

SCOPE AND LIMITATION OF THE STUDY

The present study will focus on the use pattern of INDEST consortia by the faculty of top seven Indian Institute of Technology (IIT). Hence, the study is limited to top seven Indian Institute of Technology and all of them are governed by The Institutes of Technology Act, 1961, which has declared them as institutions of national importance and further lays down their powers, duties, and framework for governance.

List of Top Seven IITs

S/N	Name	Acronym	Year of Establishment	Location	State/Union Territory
1	IIT Kharagpur	IITKGP	1951	Kharagpur	West Bengal
2	IIT Bombay	IITB	1958	Mumbai	Maharashtra
3	IIT Madras	IITM	1959	Chennai	Tamil Nadu
4	IIT Kanpur	IITK	1959	Kanpur	Uttar Pradesh
5	IIT Delhi	IITD	1963	New Delhi	New Delhi
6	IIT Guwahati	IITG	1994	Guwahati	Assam
7	IIT Roorkee	IITR	2001	Roorkee	Uttarakhand

METHODOLOGY

The survey method was considered as most appropriate for this study because it could measure faculty' background, experience and what they know about electronic information, and it was well suited to the research questions taken up for this study.

The data has been obtained by using questionnaires; this data has been standardized for comparison. The questionnaire was designed, keeping in view the objectives of the study for collecting usage data from faculty of different departments of seven IIT's.

RESULT AND DISCUSSION

IIT Wise Distribution (Distribution of Source Data)

The investigator distributed a total of 1050 questionnaires amongst the professors, associate professors and assistant professors of top seven IIT's selected for the study. Out of 1050 questionnaires distributed a total of 411 filled questionnaires were received; which were found usable for the study. The details of the distribution analysis are described in Figure 1.

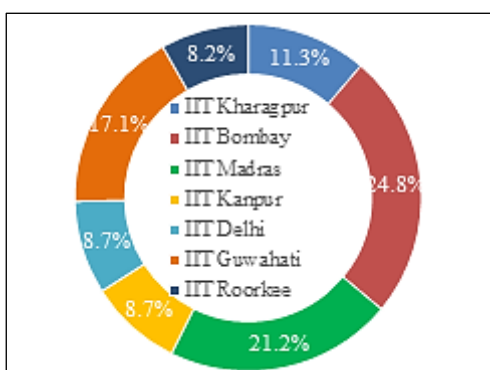


Fig. 1: IIT Wise Distribution (Distribution of Source Data).

Out of seven Indian Institutes of Technology examined, IIT Bombay has the largest response number 102 (24.8%), followed by IIT Madras and IIT Guwahati with 87 (21.2%) and 70 (17.1%). 46 (11.3%) of the total respondents are from IIT Kharagpur followed by IIT Kanpur, IIT Delhi and IIT Roorkee with 36 (8.7%), 36 (8.7%) and 34 (8.2%) respectively.

Gender

The gender wise distribution of Indian Institutes of Technology users is shown in Figure 2. It may be seen that majority of the respondents numbering 348 (84.7%) are male and the remaining 63 (15.3%) are female.

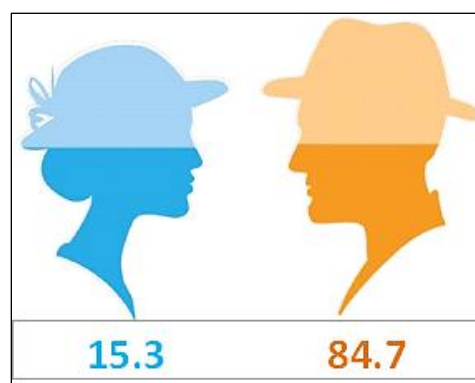


Fig. 2: Gender.

Age

The age wise distribution of INDEST e-resources respondents is shown in Figure 3. The age of the Indian Institutes of Technology faculty is arranged in different ages ranging between 25 and 56 years. It is clear from the figure that majority of the respondents numbering 165 (40%) are in the age group of 36–45 years. The respondents between the age group of 46 and 55 years scoring 93 (22.7%) are the second largest. About 81 (19.8%) Indian Institutes of Technology faculty fall into the age group of 25–35 years. A few respondents accounting 72 (17.6%) are under the age group of >56 years. The figure clearly shows that the age group of users between 36 and 45 years are is the highest.

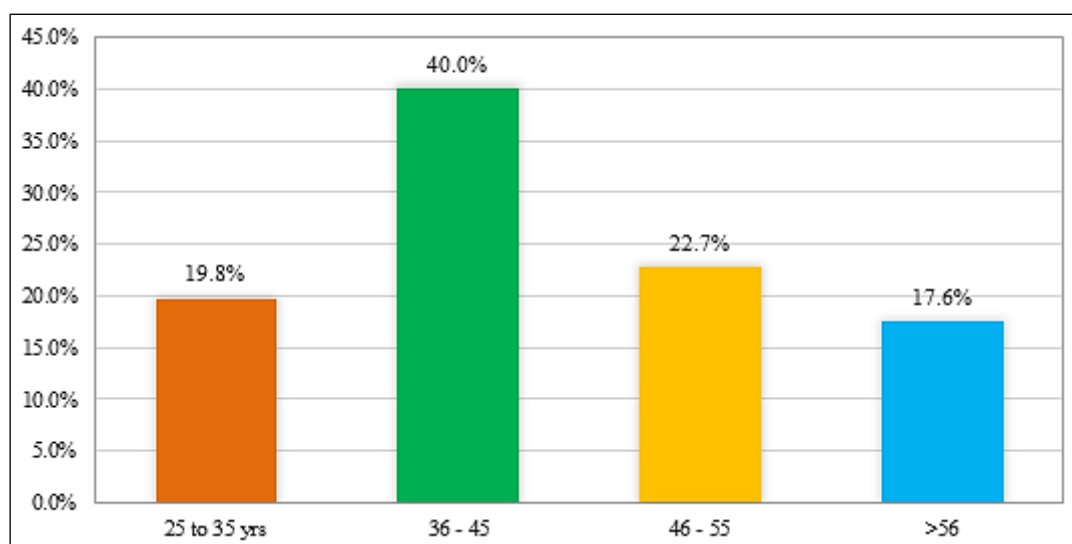


Fig. 3: Age.

Designation

The designation of the respondents is taken as one of the variables for studying the use of INDEST e-resources by faculty of top seven

IIT's in the study. The designation wise breakup of responses is shown in Figure/chart 4. It observed that, majority of the respondents accounting to 174 (42.2%) are

professors, whereas 143 respondents representing 34.9 percent are assistant professors and associate professor represent 94 (22.9%) [6].

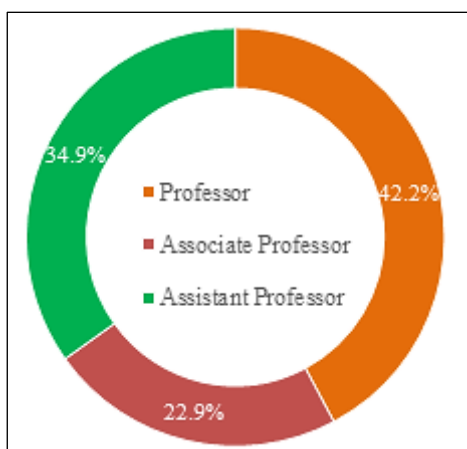


Fig. 4: Designation.

Core Purposes of using INDEST e-Resources

The core purpose of using INDEST e-resources is shown in Figure/chart 5 which provides the details of the mean score and standard deviation for the two attributes of ‘core purpose’. ‘Teaching’ represents the mean score of 3.89 with a corresponding standard deviation 0.97 followed by ‘research’ with a highest mean score of 4.77 with a corresponding standard deviation 0.52. ‘F8 core purpose’ has a mean score of 4.35 and the standard deviation is 0.64 (Table 1) [7].

Table 1: Core Purpose of Using INDEST E-Resources.

S/N	Attributes	N	Mean	SD
1	Teaching	411	3.89	0.97
2	Research	411	4.77	0.52
	Core purpose	411	4.35	0.64

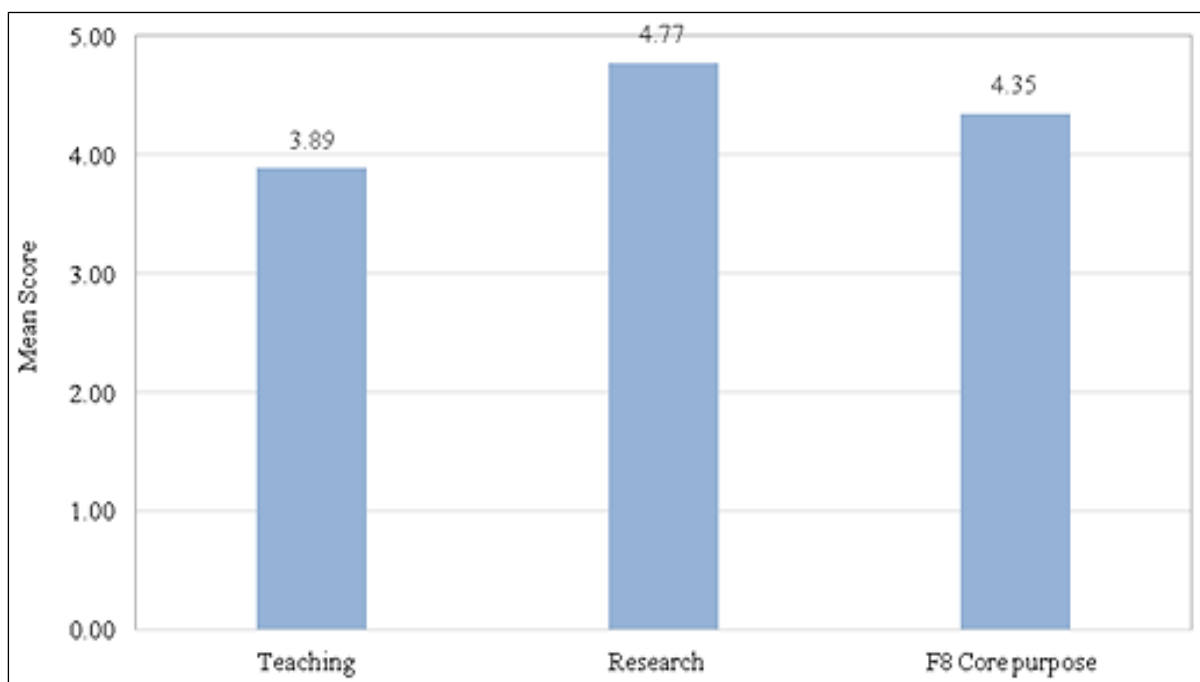


Fig. 5: Core Purpose of using INDEST E-Resources.

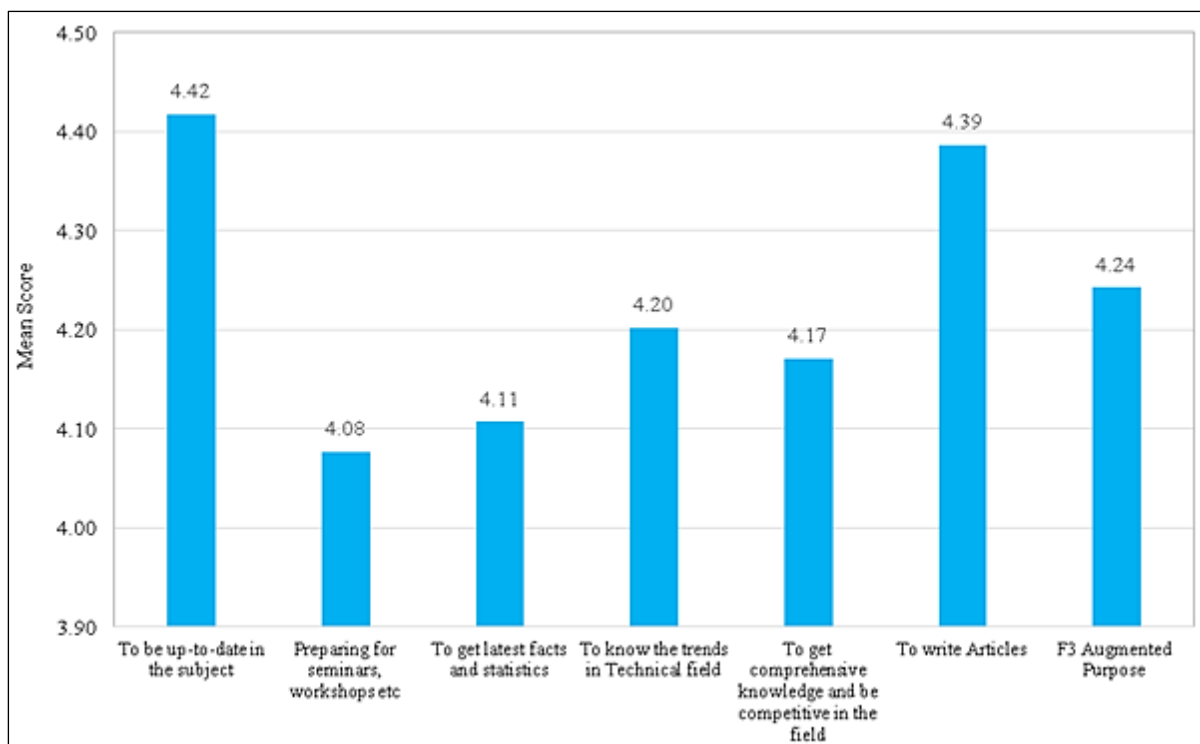
Augmented Purpose for using INDEST e-Resources

An attempt was made here to find out the augmented purpose in accessing INDEST e-resources by faculty of top seven IIT’s which shown in Figure/chart 6. It shows the details of the mean score and SD for the six attributes of augmented purpose. ‘To be up-to-date in the subject’ has the mean score of 4.42 and the SD is 0.93 followed by ‘to write

articles’, ‘to know the trends in technical field’, ‘to get comprehensive knowledge and be competitive in the field’, ‘to get latest facts and statistics’ and ‘preparing for seminars, workshops etc.’ with mean score of 4.39, 4.2, 4.17, 4.11 and 4.08 and their respective SD are 0.78, 1.09, 1.01, 1.01 and 0.97. ‘F3 augmented purpose’ has a mean score of 4.24 and the SD is 0.75 (Table 2).

Table 2: Augmented Purpose for using INDEST e-Resources.

S/N	Attributes	N	Mean	SD
1	To be up-to-date in the subject	411	4.42	0.93
2	Preparing for seminars, workshops etc.	411	4.08	0.97
3	To get latest facts and statistics	411	4.11	1.01
4	To know the trends in technical field	411	4.20	1.09
5	To get comprehensive knowledge and be competitive in the field	411	4.17	1.01
6	To write articles	411	4.39	0.78
	Augmented purpose	411	4.24	0.75

**Fig. 6: Augmented Purpose for using INDEST E-Resources.**

Availability and Accessibility of INDEST e-Resources

Availability and accessibility of INDEST e-resources is shown in the Figure/chart 7. It shows the mean score and the standard deviation for the four attributes of 'availability and accessibility'. 'Desktop availability' has the highest mean score of 4.29 and standard

deviation is 0.98. The mean score for 'prompt accessibility (7/24 h a day)', 'free access' and 'multiuser access' is 4.26, 4.06 and 3.49 and their respective standard deviation is 1.04, 1.04 and 1.24, respectively. 'F4 availability and accessibility' has a mean score of 4.03 and the standard deviation is 0.86 (Table 3).

Table 3: Availability and Accessibility of INDEST E-Resources.

S/N	Attributes	N	Mean	SD
1	Prompt accessibility (7/24 h a day)	411	4.26	1.04
2	Desktop availability	411	4.29	0.98
3	Free access	411	4.06	1.04
4	Multiuser access	411	3.49	1.24
	Availability and accessibility	411	4.03	0.86

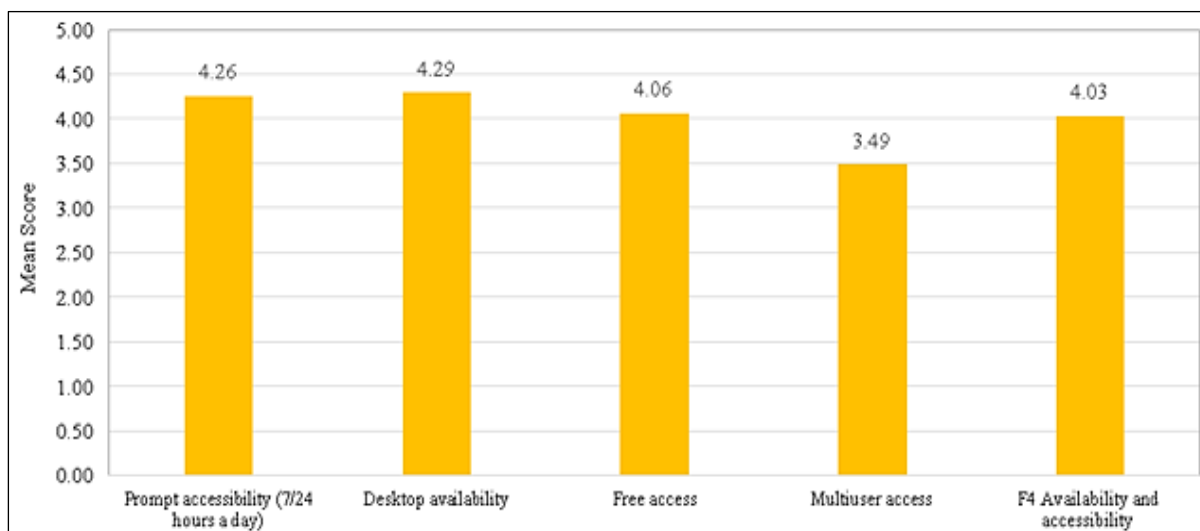


Fig. 7: Availability and Accessibility of INDEST E-Resources.

Basic Advantages in Accessing INDEST e-Resources

An attempt was made here to find out the basic advantages in accessing INDEST e-resources by faculty of top seven IIT’s which is shown in the Figure/chart 8. It provides the details of the mean score and standard deviation for the five attributes of basic advantages. The mean score for the ‘search ability/search

capabilities’ is 4.31 and the standard deviation is 0.79 followed by ‘convenience’, ‘currency (up-to-date information)’, ‘user-friendly interface’ and ‘retrieval possibilities’ with mean score of 4.31, 4.28, 4.25 and 4.25 and their respective standard deviation is 0.81, 0.8, 0.78 and 0.83. ‘F1 basic advantages’ has a mean score of 4.28 and the standard deviation is 0.66 (Table 4).

Table 4: Basic Advantages in Accessing INDEST E-Resources.

S/N	Attributes	N	Mean	SD
1	User-friendly interface	411	4.25	0.78
2	Retrieval possibilities	411	4.23	0.83
3	Search ability/search capabilities	411	4.31	0.79
4	Currency (Up-to-date information)	411	4.28	0.80
5	Convenience	411	4.31	0.81
	Basic advantages	411	4.28	0.66

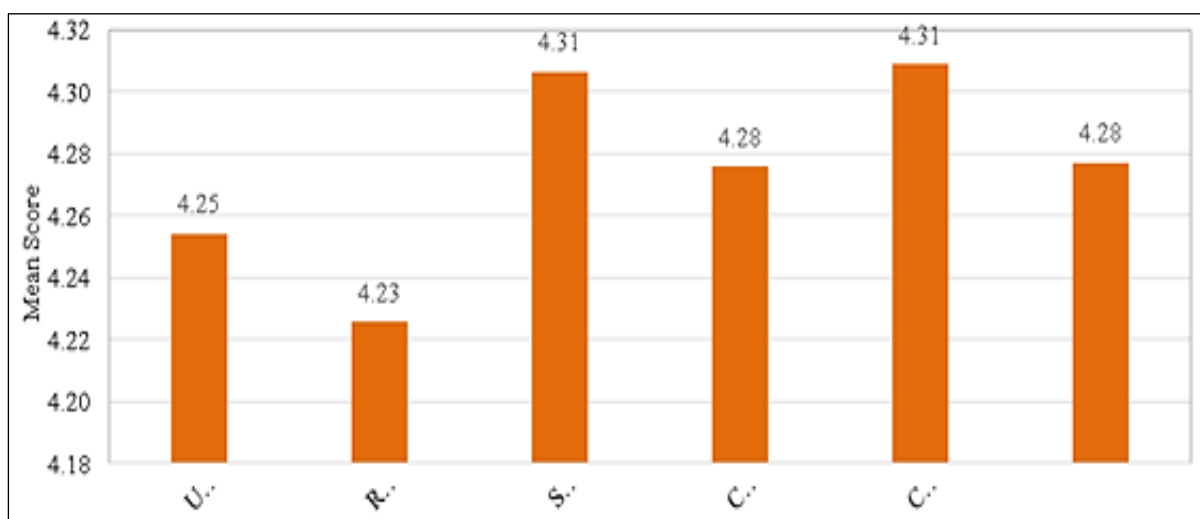


Fig. 8: Basic Advantages in Accessing INDEST E-Resources.

Disadvantages in Accessing INDEST e-Resources

An attempt was made here to find out the disadvantages in accessing INDEST e-resources by faculty of top seven IIT's which is shown in Figure 9. It shows the mean value and the standard deviation for the five attributes of disadvantages. 'Lack of standardized formats' has the highest mean score of 2.55 and standard deviation is 1.2 followed by 'format that a large proportion of e-journals use' and 'perishable citation' with mean score of 2.37 and 2.33 and their standard deviation is 1.03 and 1.06. 'Authenticity' has a mean score of 2.21 and the standard deviation is 1.11. 'Search engines ignores PDF files' has the lowest mean score of 2.04 and the SD is

1.06. The mean value and standard deviation for 'F2 disadvantages' is 2.28 and 0.92 (Table 5).

Expected Facilitation in Accessing INDEST E-Resources

The details below show the expected facilitation in accessing INDEST e-resources. Figure 10 shows the mean score and standard deviation for the two attributes of 'expected facilitation'. 'Requiring special equipment' has the highest mean score of 2.18 and the standard deviation is 1.16 followed by 'requiring training' with mean score of 2.15 and the standard deviation is 1.05. 'F7 expected facilitation' has a mean score of 2.16 and the standard deviation is 1.02 (Table 6).

Table 5: Disadvantages in Accessing INDEST E-Resources.

S/N	Attributes	N	Mean	SD
1	Perishable citation	411	2.33	1.06
2	Format that a large proportion of e-journal use	411	2.37	1.03
3	Lack of standardized formats	411	2.55	1.20
4	Authenticity	411	2.21	1.11
5	Search engines ignores PDF files	411	2.04	1.06
	Disadvantages	411	2.28	0.92

Table 6: Expected Facilitation in Accessing INDEST E-Resources.

S/N	Attributes	N	Mean	SD
1	Requiring special equipment	411	2.18	1.16
2	Requiring training	411	2.15	1.05
	Expected facilitation	411	2.16	1.02

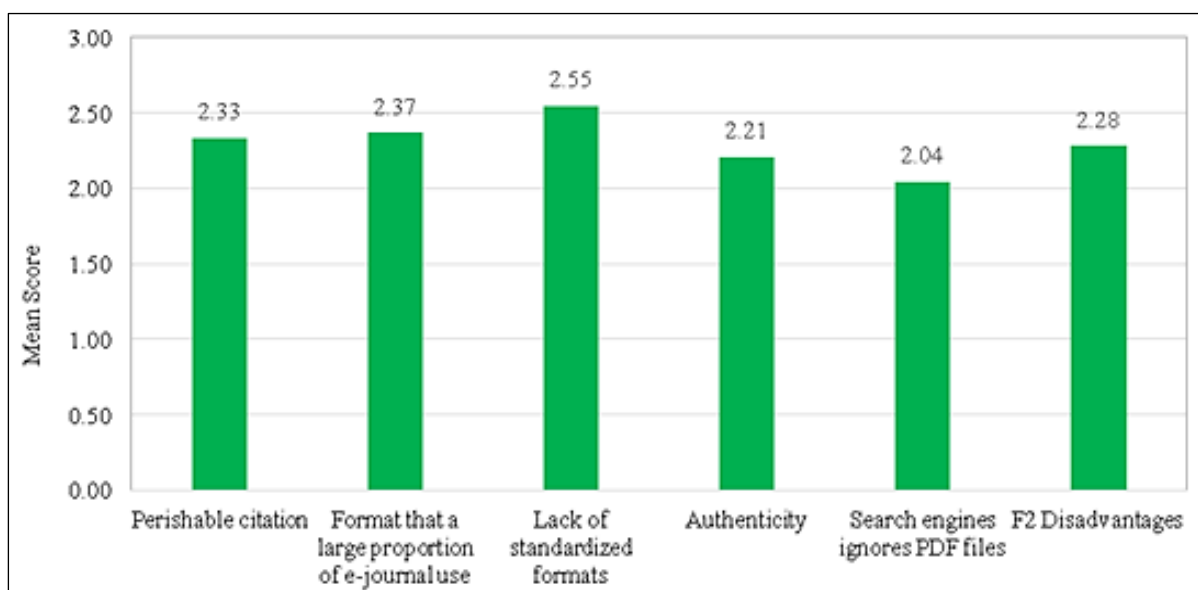


Fig. 9: Disadvantages in Accessing INDEST E-Resources.

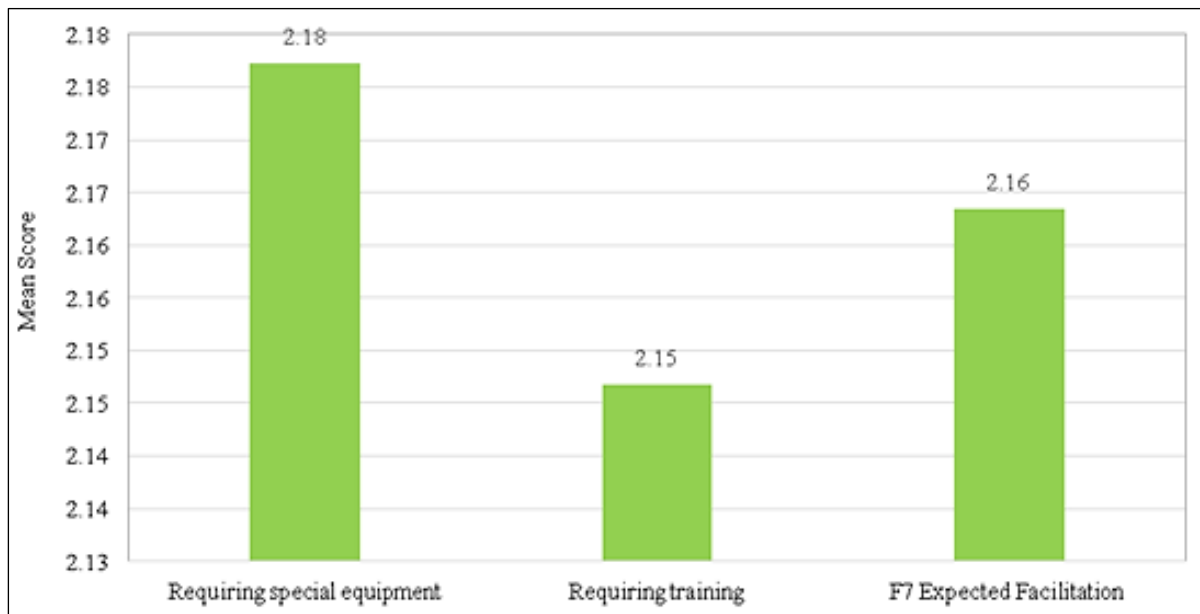


Fig. 10: Expected Facilitation in Accessing INDEST E-Resources.

Value Addition in Accessing INDEST E-Resources

The below Figure 11 provides the details of the mean score and standard deviation for the two attributes of ‘value addition’. ‘Full text retrieval’ has the highest mean score of 4.44 and the standard deviation is 0.76 followed by ‘downloading possibilities’ with mean score of 4.40 and standard deviation is 0.67. ‘F9 value

addition’ has an average mean score of 4.42 and the standard deviation is 0.66 (Table 7).

Table 7: Value Addition in Accessing INDEST E-Resources.

S/N	Attributes	N	Mean	SD
1	Downloading possibilities	411	4.40	0.67
2	Full text retrieval	411	4.44	0.76
	Value addition	411	4.42	0.66

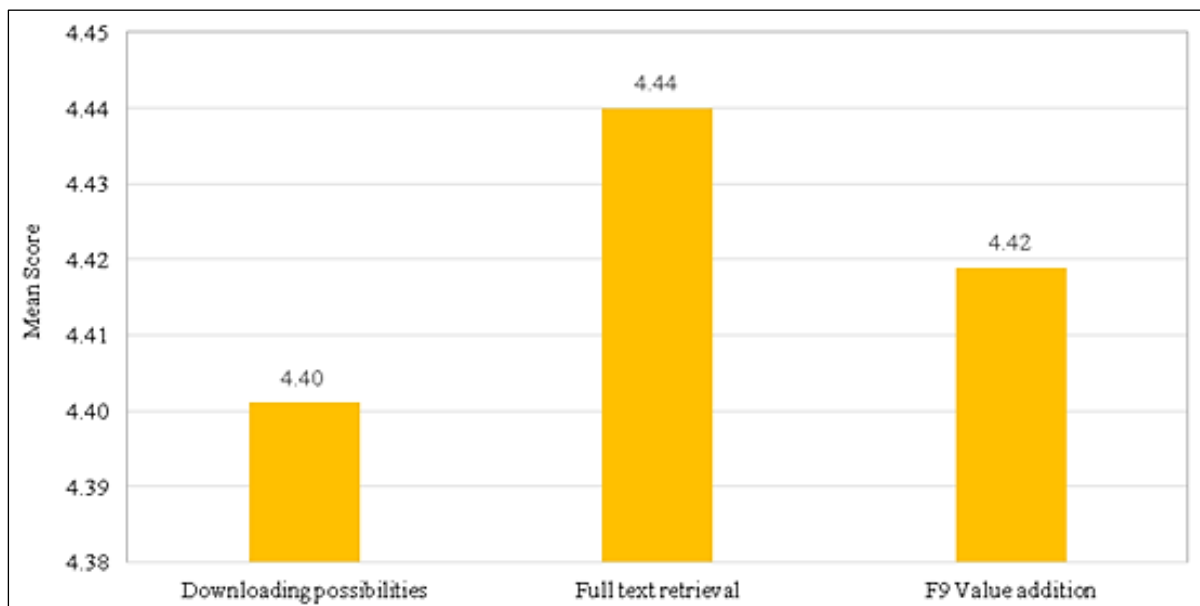


Fig. 11: Value Addition in Accessing INDEST E-Resources.

Satisfaction of Using INDEST E-Resources

The satisfaction of using INDEST e-resources is shown in the Figure 12 which provides the details of the mean score and standard

deviation for the seven attributes of ‘satisfaction’. The highest mean score is for ‘infrastructure available to access INDEST e-resources’ 4.15 and the standard deviation is

0.9. 'Required INDEST e-resources subscribed by the library' has a mean score of 4.01 and the standard deviation is 0.98 followed by 'satisfaction obtained from using INDEST e-resources', 'subject coverage of available INDEST e-resources in your library', 'number of INDEST e-resources available in library', 'how far INDEST e-resources

available in library enable you to meet your needs' and 'back volumes of INDEST e-resources available in library' with mean score of 3.96, 3.86, 3.78, 3.78 and 3.58 and their respective standard deviation is 0.8, 0.99, 0.99, 1.07 and 1.07 respectively. 'Satisfaction' has an average mean score of 3.88 and the standard deviation is 0.85 (Table 8).

Table 8: Satisfaction of Using INDEST E-Resources.

S/N	Attributes	N	Mean	SD
1	Required INDEST e-resources subscribed by the library	411	4.01	0.98
2	Subject coverage of available INDEST e-resources in your library	411	3.86	0.99
3	Number of INDEST e-resources available in library	411	3.78	0.99
4	Back volumes of INDEST e-resources available in library	411	3.58	1.07
5	How far INDEST e-resources available in library enable you to meet your needs	411	3.78	1.07
6	Satisfaction obtained from using INDEST e-resources	411	3.96	0.80
7	Infrastructure available to Access INDEST e-resources	411	4.15	0.90
	Satisfaction	411	3.88	0.85

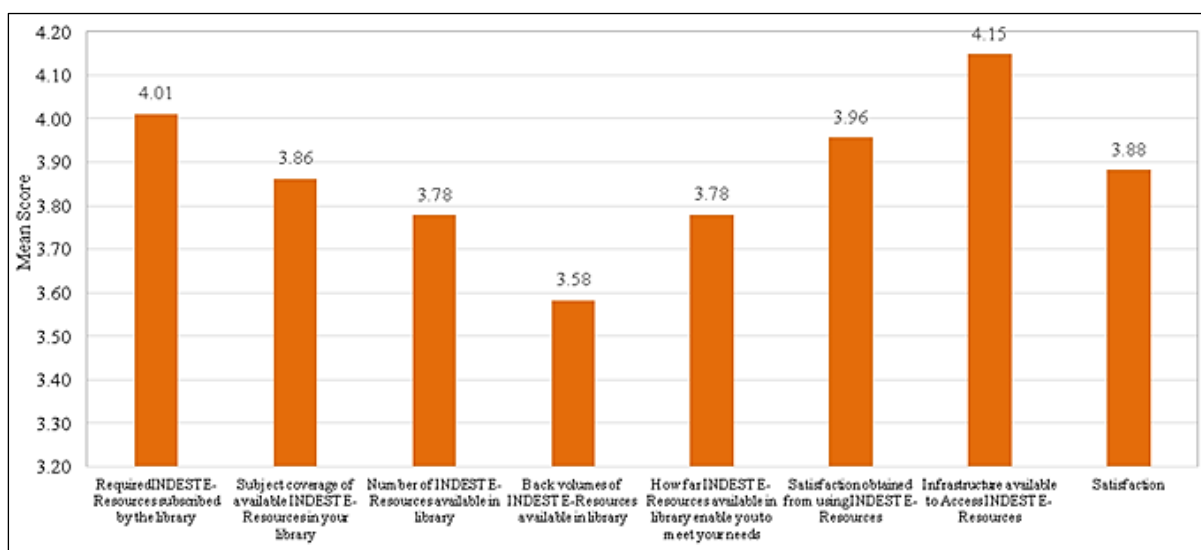


Fig. 12: Satisfaction of using INDEST E-Resources.

CONCLUSION

The growth in electronic library systems has forced to review the library services. The advent of e-publishing has brought a revolution in journals publication, subscription as well as access to the scholarly literature. The study clearly indicates that INDEST e-resources are highly useful for the research, to be up-to-date in the subject, to write articles and learning processes. It is interesting to note that majority of IIT faculty is very much satisfied with required INDEST e-resources subscribed by the library and infrastructure

available to access INDEST e-resources. The analysis found that faculty has positive attitudes about the use of INDEST e-resources and they are satisfied by using INDEST e-resources to full fill their purpose.

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