

What is the Knowledge Attitude and Practise on Use of INFLIBNET by Indian Subject Experts in Biological Sciences?

Authors

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Concept for this article

Interaction between staff members from biological Science Institution
Introducing Plagiarism Deduction Service (PDS) at RGCA

Reviews

Periodical assessment is require to **enhance service/utilization**, rare **subject specific studies**

Simmonds & Andaleeb (2001) Emergence of Technology/competition between information source, raising cost, etc., necessitate to **redefine the role of academic libraries in present times.**

Vijayakumar et al., (2007) study in 27 Indian universities found that **39% of the doctoral research supervisors & 43% of Doctoral students** across disciplines were unaware of INFLIBNET.

Sethi & Panda's (2012) 64 life scientists and faculty members from Sambalpur University reported that **only 1.56% of the respondents were frequent users of the ETDs in the disciplines of biotechnology and biochemistry.**

Goharinezhad et al., (2012) 150 medical scientists in Tehran University, Iran, found that **36% did not have knowledge of their ETD database.**

Bhat & Ganai (2017) KrishiPrabha full-text database of Indian Agricultural Science doctoral dissertations, **e-theses are not quite adequate to meet** their requirements

Tom & Balachandran (2018) study of 144 faculty of Kerala University, found that 44% had no knowledge of INFLIBNET.

Sinha & Purkayastha (2018) 24% of respondents were not able to use the ETD databases on account of a lack of awareness and Training programmes.

Siwach & Malik (2019) investigated the use of electronic resources by 668 science faculty and research scholars in five universities in northern India, observed that awareness of e-resources mainly came through self-learning.

Veeramallu et al., (2021) 61% stated that to solve the problem of the non-availability of dissertations

Ankita (2021) four of the top ten contributing universities to the Shodhganga were from Tamil Nadu **Roy (2017)** studied the development of the electronic theses and dissertations (ETDs) movement in India and narrated a brief history of ETDs, and similar major initiatives across the world. **Gupta & Gupta (2014)** Indian universities need to work on the organisational task of accessing current ETDs.

Almost all studies were suggested for **training & awareness programmes** on different streams to enhance usage

The problem was identified as

“What is the Knowledge Attitude and Practise on Use of INFLIBNET by Indian Subject Experts in Biological Sciences?”

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RESEARCH OBJECTIVES

1. To investigate the demographic background of the biological and biotechnological subject experts in India
2. To assess the level of awareness of INFLIBNET resources
3. To assess user satisfaction with INFLIBNET
4. To appreciate the differences between users and those who are not aware of INFLIBNET
5. To appreciate the attributes of non-users and their self-perception regarding digital information access
6. To explore extension programme strategies targeting biological scientists and biotechnologists for increasing awareness and usage of INFLIBNET resources.

Methodology

- ❖ A (KAP) survey is a study of a representative sample of a targeted population, to collect information on what is known, believed and acted upon: for an **implemented/delivered programme**.
- ❖ Here the representative sample were **biological scientists and biotechnologists** and the implemented/delivered programme studied was INFLIBNET
- ▶ Knowledge Attitude Practise (KAP) survey of INFLIBNET
- ▶ Data for this KAP survey was collected using a structured, standardised questionnaire schedule
- ▶ Scientific professionals and faculty members of **biological sciences and biotechnologies, including biology, microbiology, botany, zoology, biotechnology, fisheries, and aquaculture disciplines**
- ▶ Online collection method, 30/600 responses were received, 14 responses were validated for the study.

ANALYSED DATA (for age)

Statistical parameter	Total	Users	Not Aware
Population (n)	14	8	6
Mean (\bar{x})	35.79	33	39
Median	37	30	40
Mode	29	29	None
Arithmetic Deviation	5.79	5	4.5
Variance (σ^2)	43.21	32	37
Standard Deviation (σ)	6.57	5.7	6.1
Coefficient of Variation(C.V.)	18%	17%	16%
Coefficient of Skewness (Pearson)	1.06	0.8	6.5 (empirical mode)

ASSESSING THE PROBABILITY DISTRIBUTION OF THE DEMOGRAPHIC VARIABLE OF AGE OF RESPONDENT

- ▶ As per an empirical property of the Normal Gaussian curve:
- ▶ Mean \pm one standard deviation = around 68%.of the observations
- ▶ Mean \pm two standard deviation = around 95%.of the observations
- ▶ Mean \pm One Standard deviation = $36 \pm 7 = 29$ to 43years (71% of the total number of respondents) Mean \pm Two Standard deviation = $36 \pm 14 = 22$ to 50 years (100% population)
- ▶ We can possibly infer that the probability distribution of the demographic variable of age of respondents appears to follow the Normal (Gaussian) curve?

Small sample test for testing significance of difference of age

Null Hypothesis:

*H₀: There is **NO** significant difference in age between respondents who are aware and not aware of INFLIBNET.*

The alternative hypothesis

*H₁: There is a **SIGNIFICANT DIFFERENCE** in age between respondents who are aware and not aware of INFLIBNET*

Result of Test of Significance of Difference of Sample Means

Difference in means is significant at 0.20 level of significance. We can thus reject the null hypothesis, and make a probabilistic conclusion **TO ACCEPT H₁**

Use and Ranking of INFLIBNET Services

Use of INFLIBNET

Services offered	Number accessed (out of 8)	Overall Ranking
Shodhganga	8 (100%)	First
Shodhgangotri	3 (37%)	Third
IR @ INFLIBNET	3 (37%)	Second
INRIS	5 (63%)	Fourth
VIDWAN	3 (37%)	Fifth
Shodhsindhu	4 (50%)	Sixth

Ranking of search options

Search Option	Number responded (out of 8)	Overall Ranking
Key words	7 (87%)	First
Year	5(63%)	Fourth
Institution	5(63%)	Second
Subject	7(87%)	Third

Results

- ▶ 57% of the respondents reported usage of INFLIBNET
- ▶ Shodhganga (ETD) was ranked first and used by all respondents
- ▶ The preferred search option was “key words”
- ▶ 40-45 % of the respondents were showed lack of awareness on INFLIBNET
- ▶ Non-users were usually male, more than 37 years of age, with more than ten years of work experience, with a doctoral degree

Attributes of Non-users of INFLIBNET

Attribute	Description	Remarks
Gender	Male	All non-users were male
Age	Usually >37 years of age	Significant difference in age
Work experience	Usually more than ten years	Almost all the non-users(5/6) had more than ten years of work experience
Education institution affiliation	Tamil Nadu Government Fisheries colleges, Central Govt. Funded fisheries/aquaculture Institutes,	Respondents from both State Government funded fishery colleges in Tamil Nadu and half of Central Government funded respondents were not users
Education	Usually a doctorate	4/6 respondents were doctorates
Digital infrastructure at work space (non RGCA)	Unsatisfactory – obsolete computers, erratic power supply. In one case, the institution did NOT have digital access in the work space	A problem in State Government funded institutes
Not possessing personal digital device (computer/laptop/etc.)	Possible	1/6 did not possess personal computer – in Central Govt. Funded

Conclusion

- ❑ A targeted extension programme, using librarians working within (in situ) these biology/biotechnology institutions has been recommended for increasing awareness and usage of INFLIBNET including ETD (Shodhganga)
- ❑ Library professionals are well aware of INFLIBNET resources and they are acting as nodal officers in between higher educational institutions and INFLIBNET, could be assigned to create awareness for effective use among Biological Science professionals