CONCEPTUAL UNDERSTANDING OF PLAGIARISM IN RELATION WITH THE USE OF ELECTRONIC INFORMATION RESOURCES BY RESEARCH SCHOLARS: A STUDY

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ABSTRACT -

The present survey intends to explore the understanding of plagiarism in relation to the use of electronic information resources among the research scholars of state and private universities in Bengaluru and Mysuru cities of Karnataka, India. This survey aims to elucidate the data from the 502 research scholars of 14 different universities of Karnataka by utilizing a well-structured questionnaire. Results revealed that the majority, 74.1%, of the respondents use e-journals, 57.8% e-databases, and 50.2% are e-books regularly. The majority, 75.7% (N=380), are highly knowledgeable on what strictly plagiarism is? and the plagiarism-related aspects.

Keywords - Plagiarism, Information sources, Electronic information resources, Research Scholars, Higher Education Institutions.

INTRODUCTION

Many individual talks about information as a product of the process they are constantly engaged with, a newly discovered, mysterious, and natural phenomenon. People recognize the value of information sometimes instead in unusual ways, and in the last centuries, a shift in people's attitude toward knowledge has taken place. Nowadays, producers of information materials are grappling with technology and producing a mix of traditional and electronic information products. These days, writers have been predicting a paperless society, and despite these predictions, printed materials are still very much with us[1]. One of the first forays into the digital world that is still widely in use is the CD-ROM product which then moves to internet/web-based products. These products can be E-journals, E-books, E-databases, ETDs, E-Reference sources, etc. the usefulness of these forms of sources can be listed as they provide better access to information, users can read at their desks, are quick and convenient to access, saves paper, can refer anytime and anywhere, ease of access and user flexibility.

Because of the above usefulness, nowadays, users prefer more of the electronic version of information rather than the print version. With this idea in mind, the present study intends to know the awareness and use frequency of e-sources of information among research scholars concerning plagiarism - an ongoing phenomenon at almost every academic.

OBJECTIVES OF THE STUDY

1. To examine the preferred electronic sources of information by research scholars.
2. To assess the participant's attitude toward acknowledging the materials they have referred to.
3. To analyze the theoretical and conceptual understanding of plagiarism among the respondents of the study.
4. To analyze the research scholars' knowledge of different types of plagiarism.
5. To know the researcher's preference to clarify the doubts on plagiarism and related aspects.

REVIEW OF LITERATURE

Ozegalska-Trybalska (2021)[2] explored the facts and myths on plagiarism and self-plagiarism. These two concepts are becoming more and more vital in the context of discussions, especially in science, rather than the results obtained by the research. The study briefly describes various circumstances of plagiarism, self-plagiarism and how plagiarism will come under copyright infringement as of the Copyright Act. Kumar, Dipongkor et al. (2021)[3] illuminated the framework for plagiarism detection among academic and scientific writing by using newly developed plagiarism detection software, namely AcPgChecker. The study explains in detail about steps and techniques of plagiarism detection and how the results show the end-users. Josef & Lucie (2021)[4] investigated the attitude towards and perception of plagiarism among students of the Faculty of Regional Development and International Studies at Mendel University. After analyzing the respondent's opinions, the study suggests that the faculty of the university conduct classes on common mistakes, citations, references, etc. Perkins, M., Gezgin, U. B., & Roe, J. (2020)[5] examined the introduction of intervention programs at the university level to reduce plagiarism and improve academic integrity. An intervention program called Academic English Master (AEM) was used and identified the differences in academic writing. As a result, the study suggested that to reduce plagiarism, similar kinds of other interventions may be adopted to bring out the potential academic integrity in the institutions. Keefer, L A; Brown, M & Rothschild, Z K (2020)[6] explored the study "Framing plagiarism as a disease heightens student's valuation of academic integrity," in which 365 undergraduate students were considered as participants. For effective motivation among the students and to improve academic integrity, institutional policy support and serious punishable actions play a vital role. Sureda, Comas & Oliver (2020)[7] analyzed the phenomenon of academic plagiarism among secondary education and high school students; the questionnaire was used to draw the data from the students (n=2749). Based on the result, the study suggests that the teachers need to take care and must be provided improved IT and library facilities to the students and also create an awareness program among the students about the disadvantages of plagiarism.

METHODOLOGY

Karnataka is one of India's pioneer states in implementing higher education reforms, and the study is confined to collecting data from research scholars of Karnatak's state and private universities located in Bengaluru and Mysuru. It is found that there are 14 higher education institutions coming under the study area. As the present research work is based on the survey method, it employs a questionnaire as a tool to collect the data from the research scholars. A total of 2538 research scholars are presently involved in their research work. Among them, 597 research scholars were considered as respondents by adopting a stratified sampling method and distributing the questionnaires to those scholars. As a return, 502 wholly filled questionnaires were received, which led to an 84% of response rate.

Analysis and Interpretation of Data:

Demographical details of Research Scholars by gender and age groups:

The study population is comprised of 502 participants; among them, 58.6% of them are male, and 41.4% of them are females. Further, there are 83.3% of the participants belong to the age group of 23-35 years. There are, 9% of the respondents are in the age group between 36-45 years, followed by 7.85% of the Research Scholars within the age group of 46-55 years, and there are no Research Scholars in this age group above 56 years; this is obvious to know, as they are pursuing their research studies.

Distribution of Research Scholars by their Status in Registration of research

Table 1: Distribution of Research Scholars by their Status in Registration of research

Research Scholars	Frequency	Percentage (%)
PDF	03	0.6
JRF/SRF	48	9.6
Full Time	302	60.2
Part-Time	149	29.6
Total	502	100

As a prerogative for registration of research, there are many options available such as UGC-JRF, CSIR-Fellow, ICCR (Foreign Students), UGC-NET, etc. Accordingly, respondents of the study are asked to state the mode of their registration for their research. Table 2 shows that 60.2% of the Research Scholars are Full-time, while 29.6% of them are part-time. Researchers. Further, 9.6% of them have qualified with JRF/SRF, while 0.6% of them have been working as Post-doctoral Fellows (PDF). It shows only 0.6% of the researchers have been pursuing Post-doctoral Fellows. This shows that the majority of the Ph.D. holders have settled in their areas, and only a few of them are showing interest in continuing their research. It is inferred that the majority of the respondents are from the science faculty, which means their research might be lab-oriented and avail of different fellowships. Hence the highest number of them are full-time scholars.

Membership to Professional Bodies and Discussion Forums

The digital era has created many Web-based discussion groups/forums and User groups for mutual interactions and exchanging and sharing knowledge. These online forums and discussion groups are the platforms to communicate scientific information among their communities. In this context, data has been collected, and the results show that 43% of Research Scholars are members of professional associations and web-based discussion forums.

Use of Print and Electronic Sources of Information:

The study intends to analyze the respondent's preference and use of electronic information sources. Table 2 present the participants' most preferred and most used sources of information.

Table: 2 Use of Electronic Information Sources

Most preferred and used electronic source information	Responses					Total
	N	**R**	**O**	**F**	**MF**	
E-Books	00 (0.0%)	00 (0.0%)	52 (10.4%)	252 (50.2%)	198 (39.4%)	502 (100%)
E-Journals	01 (0.2%)	00 (0.0%)	14 (2.8%)	115 (22.9%)	372 (74.1%)	502 (100%)
Database	17 (3.4%)	16 (3.2%)	72 (14.3%)	107 (21.3%)	290 (57.8%)	502 (100%)
E-Reference Sources	00 (0.0%)	14 (2.8%)	83 (16.5%)	244 (48.6%)	161 (32.1%)	502 (100%)
Electronic Thesis and Dissertation	12 (2.4%)	32 (6.4%)	185 (36.9%)	168 (33.5%)	105 (20.9%)	502 (100%)
E-Magazine and E newspaper	33 (6.6%)	22 (4.4%)	237 (47.2%)	145 (28.9%)	65 (12.9%)	502 (100%)
E-Patents	90 (17.9%)	92 (18.3%)	154 (30.7%)	135 (26.9%)	31 (6.2%)	502 (100%)

N- Never, R- Rarely, O-Occasionally F- Frequently, MF- Most Frequently

Table 2 shows the distribution of data on the usage of electronic resources by respondents. It is found that e-books are frequently used by 50.2% of the Research Scholars, while 10.4% of them responded 'occasionally.' E-Journals are most frequently used by the majority of 74.1% of the Research Scholars and 2.8% occasionally. For referring to e-databases, 57.8% of them

responded 'most frequently' while 3.2% of them responded 'rarely.' For the use of electronic reference sources, 48.6% of them responded 'frequently' while 16.5% of them responded 'occasionally.' Electronic thesis and dissertations have been referred to by 36.9% of the respondents' occasionally' while 6.4% of them responded 'rarely.' There are 30.7% of the participants responded 'occasionally' while 6.2% of them responded 'most frequently' to refer e-Patents as their source of information. In using Online Magazines and newspapers, it is observed that 47.2% of the Research Scholars responded 'occasionally' while 6.6% of them responded 'never' and 12.9% responded 'most frequently.'

Distribution of respondents with regard to the awareness of Referencing:

Giving credit to the authors and acknowledging the resources in the form of references/citations is one of the major research ethics. The study extends to know whether the respondents are aware that the information sources they are using are protected by copyright, and the responses have been presented under Table 3

Table: 3 Distribution of responses with regard to the awareness of Referencing

Statements	Responses	Research Scholars	Total
Are you aware that the above sources are copyrighted materials with legal Provisions to use them?	Yes	480 (95.6%)	502 (100%)
	No	22 (4.4%)	
If No, have you been enlightened about this aspect by your library or by others?	Yes	20 (90.9%)	22 (100%)
	No	02 (9.1%)	

Table 3 reveals that 95.6% of the Research Scholars are aware that sources that they are referencing are protected with legal rights. At the same time, 4.4% of the Research Scholars responded 'No' to the query. It is good to know that 90.9% of the Research Scholars have been enlightened about this with the help of their library or from others. It is clear from the analysis that the majority of the Research Scholars are updating themselves with the current knowledge on the protection of information sources.

Awareness and Knowledge of Plagiarism

Meaning of Plagiarism

A previous study by Mahmood[8] (2010) examined academic integrity among respondents by evaluating their awareness of various concepts in relation to plagiarism. The findings reveal that the majority of the respondents had a misconception about plagiarism and were unaware of the consequences of plagiarism. In this context, participants were asked to state their opinion about the plagiarism meaning, and the responses are tabulated under Table 4.

Table: 4 Distribution of respondents by responses on the meaning of Plagiarism.

Plagiarism means	Respondents
Using the copyrighted work without permission and citing appropriately	78 (15.5%)
Unknowingly using the other's work	11 (2.2%)
Translating from other languages and presenting as one's own	47 (9.4%)
All the above	380 (75.7%)
Total	502 (100%)

The analysis of Table 4 reveals that 75.7% of the Research Scholars have responded with the right answer of "All the above." According to Merriam-Webster online dictionary[9] Plagiarism is "..to steal and pass off the ideas or words of another as one's own", "to use another's production without crediting the source," "to commit literary theft," and "to present as new and original an idea or product derived from an existing source" The above meaning established the answer "all the above" means the same.

Techniques of Plagiarism

Table: 5 Statistical analysis of responses on the techniques of Plagiarism.

Statements on Plagiarism	Responses				
	SD	D	UC	A	SA
Converting someone else's work as your own and giving no credit to the author is an act of plagiarism	18 (3.6%)	07 (1.4%)	17 (3.4%)	211 (42.0%)	249 (49.6%)
Copying from several sources and tweaking the content is plagiarism	17 (3.4%)	08 (1.6%)	42 (8.4%)	280 (55.8%)	155 (30.9%)
Falling to put quotation marks amounts to plagiarism	09 (1.8%)	19 (3.8%)	141 (28.1)	236 (47.0%)	97 (19.3%)
Use of his/her own work without citation is plagiarism	09 (1.8%)	47 (9.4%)	114 (22.7)	186 (37.1%)	146 (29.1%)
Providing incomplete information about the sources so one cannot trace the original source is an act of plagiarism	12 (2.4%)	20 (4.0%)	126 (25.1)	236 (47.0%)	108 (21.5%)

SD- Strongly disagree D- Disagree   UC- Uncertain   A- AgreeSA- Strongly agree

Table 5 presents the statistical analysis of the responses on the different techniques of committing Plagiarism. Among Research Scholars, 49.6% of them Strongly Agree, while 1.4% disagree, and 3.4% of them are uncertain that converting someone else's work as your own and giving no credit to the author is an act of plagiarism. It is observed that 55.8% of the respondents agree while 1.6% of them disagree and 3.4% of them strongly disagree with the statement "Copying from several sources and tweaking the content is plagiarism"

Nearly 47% of Research Scholars agree, while 3.8% of them disagree, and 28.1% are uncertain that "Falling to put quotation marks amounts to Plagiarism." Further, 37.1% of the Research Scholars agree, while 1.8% of them strongly disagree with the statement "Use of his/her own work without citation is plagiarism." The majority, 47% of Research Scholars, agreed, while 2.4% strongly disagreed with the statement. "Providing incomplete information about the sources so one cannot trace the original source is an act of plagiarism."

Types of Plagiarism

Table: 6 Frequency and percent distribution of Research Scholars by responses on 'awareness of types of plagiarism'

Statements on Plagiarism	Types of Plagiarism	
	Intentional Plagiarism	Unintentional Plagiarism
Failing to put quotation marks	202 (40.2%)	300 (59.8%)
Mixing of information from different sources	324 (64.5%)	178 (35.5%)
Provide incomplete information about the original source through it becomes difficult to find the original source.	365 (72.7%)	137 (27.3%)
Taking some material from the Internet or electronic database without proper citation or permission	401 (79.9%)	101 (20.1%)

Table 6 indicates that, among Research Scholars, 40.2% of them have responded to 'intentional plagiarism' while 59.8% of them have responded to 'unintentional plagiarism' for "Failing to put quotation marks." For the second statement, "Mixing of information from different sources," 64.5% of them responded 'intentional

plagiarism,' and 35.5% responded 'unintentional plagiarism. There are 72.7% of Research Scholars have responded to 'intentional plagiarism' while the remaining 27.3% of Research Scholars have responded to 'unintentional plagiarism' for "Providing incomplete information about the

original source through it becomes difficult to find the original source." About 79.9% of Research Scholars have responded 'intentional plagiarism' while 20.1% of Research Scholars have responded 'unintentional plagiarism' to the statement "Taking some material from the Internet or electronic database without proper citation or permission."

5.5.4 Preferred Reference to contact to get Clarity on Copyright, and Plagiarism. In order to find out respondents' preferred contacts or to get clarity about the Copyright, plagiarism, and related doubts, the participants are asked to respond between 'Yes' or 'No.'

Table 7: Distribution of Participants by responses on Preference of Reference to contact to get Clarity on, Copyright, and Plagiarism

Preferred Reference to contact to get Clarity on IPR, Copyright, and Plagiarism	Responses	
	Yes	No
Your Teachers	332 (66.1%)	170 (33.9%)
Experts	316 (62.9%)	186 (37.1%)
Colleagues	164 (32.7%)	338 (67.3%)
Library staff	141 (28.1%)	361 (71.9%)
Friends	168 (33.5%)	334 (66.5%)
Online Discussion forums	191 (38.0%)	311 (62.0%)
Internet, Websites, wikis	386 (76.9%)	116 (23.1%)

The analysis of responses revealed that 66.1% of Research Scholars are contacting their teachers. 62.9% of Research Scholars are communicating with experts. About 32.75% of the Research Scholars discussed with their Colleagues. Only 28.1% of Research Scholars are in touch with library staff. Further, nearly 38% of the Research Scholars are following Discussion forums. They were followed by 66.5% of Research Scholars who are not communicating about these issues with their friends. It is also seen that 76.9% of Research Scholars are getting clarifications through the internet, and related websites.

It is inferred that Research Scholars are clarifying their doubts with the help of the internet, wikis, and other related websites. It is very obvious to know since most academia is now ICT literate.

FINDINGS AND CONCLUSION

It is found from the survey that the majority, 74.1% of the respondents referring e-journals, and 57.8% of them are using e-databases

most frequently. More than 50.2% are using e-books, and 48.6% are consulting e- reference sources often. Among the respondents, 47.2% of them read e-magazines & e-newspapers, followed

by 36.9% referring to ETD, and 30.7% talking about e-patents occasionally to fulfill their day-to-day information needs. It is good to know that the majority, 95.6% (N=480) of the respondents, are aware that the various information sources they are referring to are copyrighted (rights have been protected) materials with a legal provision to use them, along with that, 75.7% of them have better knowledge on what leads to committing plagiarism.

An average of 64.32% of the survey participants are aware of different types of plagiarism, and the highest numbers, 76.9% of research scholars, are clarifying their doubts on copyright, and plagiarism through the internet, wikis, and other related websites. It is identified from the survey that N=480 (95.6%)of the total participants are highly knowledgeable about acknowledging the resources they have referred to fulfill their information needs. Hence, the study recommends that higher education institutions need to organize regular awareness programs on current updates to make that 100% and to follow academic integrity.

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