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Awareness about Media and Information Literacy among Research Scholars of Pondicherry University: A Survey

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ABSTRACT

Media and Information Literacy (MIL) emphasises a critical approach to literacy to enables people to question critically what they have read, heard and learned. It is requireed in all levels of education and more so to reserach scholars. The aim of the study is to find the awareness and use of MIL tools by research scholars of Pondicherry University. The objectives are: a) to identify the level of awareness in MIL among research scholars; b) to assess the usefulness and relevance of MIL among research scholars; c) to identify the training needs of research scholars in MIL; d) to determine the problems faced by the researches scholars of Pondicherry University while using MIL tools; and e) to suggest the best methods of delivering MIL training to the research scholars of Pondicherry University. The survey method and quesionanire tool are used in conducting this study. Of the total 13 schools, due to time limiation research scholars working in 10 schools were taken as sample. A majority of the respondents are aware of the term MIL and that enables them to save time. Most of the respondents use journals/papers followed by internet for conducting research. The majority (75.49 %) of them preferred 1-2 weeks of workshop-based training on MIL. MIL syllabus may cover media literacy (75.49 %), information literacy (86.27 %), computer literacy (77.45 %), digital literacy (54.9 %), literary literacy (71.57 %), and news literacy (73.53 %). A majority (62.74 %) of the scholars do not know on MIL initiatives in India. Therefore, UGC may have to take necessary steps in implementing the same.

Keywords: Media and information literacy (MIL); Research scholars; Pondicherry university; Awareness about MIL; Delivering MIL training

1. INTRODUCTION

An information literate person is mindful of a need for information, and is capable to seek, access, process and use information competently and morally[19]. The quality of the information received regulates our choices and subsequent actions, comprising of our capability to enjoy fundamental freedom, capability for self-determination and growth[25]. Facilitated by technological developments in telecommunications, people can access and share massive amounts of information and knowledge between vastly separated geographical locations. Moreover, accessing relevant and reliable information without any obstacles to make full use of rights to freedom of expression and the right to information are other concerns. Thus, Media and Information Literacy (MIL) develops a civic education drive that integrates teachers as primary causes of change[6]. In developing countries, MIL deals with the human requirements to communicate in a multifaceted world that does not offer everyone equal opportunities[21].

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1.1 Background

1.1.1 What is Information Literacy?

Information literacy (IL) is a common and significant learning activity with higher education[5]. The Association of College and Research Libraries, a division of the American Library Association, defines IL as the ability to find, use, evaluate and communicate information effectively. Information literacy is the skills or steps taken by a student while locating and using information. It is defined as the ability to recognise a requirement for information, the skills used to locate and admittance information, as a method to assess information, and to process, organise and use information ethically and effectively[18]. It describes a person who is capable of identifying the information needed, and has the ability to locate, evaluate, and use the needed information effectively[2]. Information literacy knowledge and skills are required to underpin effective independent and life-long learning[1].

1.1.2 What is Media and Information Literacy?

Media and information literacy (MIL) stresses an extended meaning of literacy, comprising print, screen-based and electronic media. Media and information texts comprise

any form of communication including advertising, websites, video games, films and billboards. MIL is the creation of media technologies. The commercialisation and globalisation of media markets, the division of mass audiences and the rise of interactivity are all changing with young people[4]. Aufderheide (1992)[3] recognises MIL as a crusade, which is intended to help, to comprehend, produce and negotiate senses in a culture of images, words and sounds. Whereas, Duncan (2006)[8] stresses on the educational facet of media literacy which is concerned with developing a conversant and critical considerate of the nature of mass media, techniques used by them, and the impact of these techniques. According to Hobbs & Frost (2003)[15], media literacy education primarily encompasses a student's analysis of their own media use, identification of the author's drive and point of view, knowledge of production techniques, assessment of media representation of the world, and consideration of the economic structure of the media industry.

1.2 Statement of Problem

There is abundant information available in different forms and formats. Moreover, to access each information resource, a different method can be used. To identify, locate and access information, one should have the required skills and knowledge. Therefore, MIL is vital for all people, whether in an office, in a work-at-home environment, in school, or in any other social setting; but is even more critical for academicians. Therefore, this study attempts to examine "Media and Information Literacy among Pondicherry University research scholars".

1.2.1 Aim and Objectives

This paper aims to study the awareness and use of MIL tools by research scholars of Pondicherry University. The specific objectives of the study are: a) To identify the level of awareness in MIL among research scholars; b) To assess the usefulness and relevance of MIL among research scholars; c) To identify the training needs of research scholars in MIL; d) To determine the problems faced by the research scholars of Pondicherry University while using MIL tools; and e) To suggest the best methods of delivering MIL training to the research scholars of Pondicherry University.

1.3 Scope and Limitations

This study's scope covers all the research scholars in Pondicherry University so that the same results could be applied to other Indian Universities.

The limitations of this study are: a) Since the total population of research scholars in Pondicherry University is over 1000; so it is difficult to survey all the scholars within a short period. Therefore, the study was carried out with a sample of 10 per cent of the total population; b) Though Pondicherry University has 13 schools, due to paucity of time, this study was limited to 10 schools, the names of which are given in Table 1.

2. LITERATURE REVIEW

Information literacy skills enable students to choose the best and most relevant information for making important decisions in their day-to-day life. IL is a set of skills and knowledge that helps in finding, evaluating, and using the information we need and filtering out the information that is not required[9]. IL skills are the necessary basic knowledge required to navigate the present and future landscape of information successfully. Eisenberg (2008)[9] explained IL in three contexts for successful learning and teaching: (i) the information process itself, (ii) technology in context, and (iii) implementation through real needs in real situations. He emphasises the need for careful retrieval and selection of information available in the workplace, at school, and in all aspects of personal decision-making, especially in citizenship and health. IL education emphasises critical thinking, meta-cognitive, and procedural knowledge, that used to locate information in specific domains, fields, and contexts. The main emphasis is on recognizing the quality, authenticity and credibility of that information. Franklin (2005)[11] conducted a study to examine the opinions about the importance of MIL competencies in their research. The study findings revealed that students considered IL competencies as "important" or "very important" for achieving a successful outcome to a research project or course assignment. Multiple regression analysis of student demographic characteristics, information-seeking behaviours, and teaching and research experience predicted their competencies. (In text initials of cited authors are not given)

Aufderheide (1992)[3] identifies MIL as an action that is envisioned to help comprehend, produce, and negotiate senses in a culture of images, words, and sounds. While Duncan (2006), stresses the educational aspect of media literacy which is concerned with developing a familiar and critical understanding of the nature of mass media, skills used, and the impact of these techniques on teaching and research. The European Commission (2007) adopted ML for commercial communication, particularly in advertising. The new communication technologies are powerful tools that can liberate or dominate, and manipulate or enlighten, and educators must teach their students how to use and critically analyse these media. Hobbs & Frost (2003)[15] conducted a study by embedding media literacy instruction into a year long high school English course. The outcomes resulted in better critical thinking skills, the ability to identify omitted information, more awareness of the blurring of information, entertainment, and economics. Consequently, they suggested that ML can be an effective tool in enhancing IL[15]. Media literacy is a complex construct that needs to be conceptualised by amalgamating several literacies, so that students can perform a range of analyses to be considered literate[23]. Media literacy should go beyond textual analysis; into ideological, political, economic issues that challenge how ML is taught today[20]. They argued that media literacy needs to move beyond educating people; motivating them to take an active role in changing institutions, making those institutions more democratic, and allow greater participation from a wide range of people. Fake news is another recent phenomenon that is coming into scrutiny when speaking about media. The term indicates a direct definition of false or misleading information presented as news[26,16] said the propagation for teaching of MIL can be done through self-teaching or from workshops outside the school system such as civil society associations, media groups and internet platforms.

Table 1. Survey sample distribution

School Name	Total No. of RS	No. of RS responded
School of Humanities	69	20
School of Performing Arts	07	07
School of Management	80	24
School of Life Science	95	10
School of Physical, Chemical & Applied Science	85	07
School of Mathematical science	18	08
School of Media & Communication	18	13
School of Education	15	02
School of Engineering & Technology	30	08
School of Social Sciences & International Studies	68	03
Total	485	102

Table 2. Personal profile of the participants

Gender	No. of respondents	% of respondents
Male	70	68.63
Female	32	31.37
Age group in years		
20-25	15	14.70
26-30	78	76.47
31-35	09	08.82
Above 40	00	00
Academic qualification		
Phd	92	90.19
M.Phil.	10	09.80
Research experience		
Less than 1 year	07	06.86
1 Year	30	29.41
2 Years	31	30.39
3 Years	13	12.74
4 Years and above	21	20.58

They further stated that numerous motives may contribute to the disconnect to MIL learning. The university teaching system lags and can be detached from the school system's new realism, so that teacher training departments remain focused on disciplines. Also some departments are reluctant to introduce MIL along with regular teaching[16]. Thomas (2013)[24] suggested that it is imperative to have a specific teacher to teach MIL courses at the university level. Nevertheless, media education should foster a critical spirit while encouraging collaboration with professionals and agencies in both fields[17].

3. METHODOLOGY

Survey method and questionnaire tool were chosen for this study because they are the most convenient to collect data from a heterogeneous group of population. The survey method is one of the best methods in situations without adequate resources like money, manpower and time. The survey method is practical, costs the least and can represent a large population effectively, hence it is suitable for the university environment. A questionnaire tool was used because it can collect a reasonable amount of data and information over a short period of time. The questionnaire was designed in a simple, clear and neat layout that enables the respondents to read, understand and complete the questionnaire.

The study population covers research scholars (RS) of Pondicherry University registered in 10 Schools and 65 departments who are pursuing their Ph.D. degree. Proportionate stratified random sampling is used in the study.

A total of 130 questionnaires were distributed to research scholars in 10 schools of Pondicherry University, covering the major subject areas listed in Table 1. Of the total 130 structured questionnaires distributed; 102 scholars responded with a response rate of 78.4%. This survey was carried out during 20 March and 2 April 2018.

4. DATA ANALYSIS

MS-Excel software was used to analyse the collected data. Descriptive statistics including percentages and graphic representations were used for the analysis and presentation of data. The data was collected through a structured questionnaire from research scholars of Pondicherry University and analysed based on the objectives of the study using MS-Excel software and is presented here in the form of tables and graphs along with a detailed discussion.

4.1 Demographics

The respondents were categorised based on gender, age groups, departments, academic qualification, research experience and subject background. Those details are presented below in Table 2.

Gender is an essential variable in any research, particularly in a co-education environment. From Table 2, it is evident that 70 participants were male (68.63 %) and the remaining were female (31.37 %). Of the total, a majority (76.47 %) of the respondents belonged to 26-30 years age group and 8.82 per cent belonged to 31-35 years age group. The study respondents were pursuing Ph.D. courses from different departments under different schools, as shown in Table 1. Of the total, 30.39 per cent of the respondents have 2 years of research experience, 29.41 per cent have 1 year of experience, 20.58 per cent have 4 years and above of experience, 12.74 per cent have 3 years of experience, and 6.86 per cent have less than 1 year of experience.

4.2 Awareness of Media and Information Literacy

Of the total, three-fourths (75.49 %) of respondents are aware of MIL, less than half (45.10 %) have a level of awareness of somewhat aware, 30.33 per cent are moderately

Table 3. Level of awareness

Mil	No. of respondents	% of respondents
Yes	77	75.49
No	25	24.51
Level of awareness	**No. of respondents**	**% of respondents**
Not at all aware	25	24.51
Somewhat aware	46	45.10
Moderately aware	24	23.53
Somewhat fully aware	05	04.90
Fully aware	02	01.96
Total	102	100

Table 4. Types of literacy and their awareness

Types of literacy	Low	Medium	High
Media literacy	40	51	9
Information literacy	18	62	20
Computer literacy	18	50	32
Freedom of expression and information literacy	37	45	18
Digital literacy	26	57	17
Cinema literacy	32	49	19
Library literacy	25	50	25
News literacy	38	40	22
Gaming literacy	44	37	19
Television literacy	40	41	19
Advertising literacy	41	45	14
Internet literacy	26	44	30

to fully aware about MIL. This shows that 69.61 per cent of them are either not aware or somewhat aware about MIL as shown in Table 3.

4.2.1 Level of Awareness about Various Types of Literacies

Table 4 shows that most (98.04 %) of the respondents are aware of the different types of literacies, but their awareness level varies with each type of literacy. Of the total, less than two-thirds (60 %) have a medium to high level of awareness about ML, and a substantial percentage (40 %) of them need to update their media literacy skills. The majority (82 %) have a medium to high level of awareness about both IL and computer literacy. Overall, less than two-thirds (62 %) have a medium to high level of awareness about Freedom of Expression and IL. About three-fourths (74 %) of respondents have a medium to high level of awareness about Digital Literacy. Over two-thirds (68 %) have a medium to high level of awareness about Cinema Literacy, which is common in the youth. Surprisingly, a quarter of these students indicated that their Library Literacy is low, and the remaining have a medium to high level of awareness. In this era of the Internet, both print and electronic news are easily available, but over a third (38 %) have a low level of awareness about News Literacy, implying that there is a problem with their reading habits, particularly after the introduction of WhatsApp and other social media tools; and less than two thirds (62 %) of them have medium to high level of awareness. It is good to know that a considerable percentage of students have low literacy skills regarding Gaming Literacy (44 %), Television Literacy (40 %), and Advertising Literacy (41 %), which may be a good sign, as they are not spending too much of their time on these unproductive areas. But one of the latest tools to teach students is game theory-based education, which has not yet started in India. Though all students in the University used the Internet daily for teaching, learning and personal communication, 26 per cent indicated having a low level of awareness about Internet literacy, and the remaing three-fourths (74 %) have a medium to high level of awareness.

4.2.2 Format of Information Resources Used for Research

It is found that about three-quarters (73.52 %) of the respondents do not know about the UNESCO's Open Educational Resources (OER), which is a helpful resource for all research scholars, to learn about MIL, irrespective of their subject background information. About the format of the information resources used for research, over two-thirds (69.61 %) of the respondents use both electronic and print media for their research. As expected, the use of printed information resources for research is going down drastically. It follows

Table 5. Type of information sources for research

Type of information resources	No. of respondents	% of respondents
Internet	65	63.72
Journals/papers	95	93.14
Videos	28	27.45
Audios	4	03.92
Conference proceedings	27	26.47
Textbooks	61	59.80
Reference books	35	34.31
Online information sources	**No. of respondents**	**% of respondents**
E-books	69	67.65
Institutional websites	54	52.94
E-newspapers	13	92.16
E-journals	94	21.57
E-magazines	22	25.57
Blogs	26	25.49

Table 6. Usefulness and relevance of MIL to research

Rate/ Statement	Very good (%)	Good (%)	Moderate (%)	Poor (%)	Very poor (%)
Saves time	38 (37.35)	45 (44.12)	14(13.72)	2(1.96)	3(2.94)
Improves quality of my work	25(24.51)	57 (55.88)	15(14.70)	2 (1.90)	3(2.94)

Table 7. Importance of MIL for research

MIL for research	No. of respondents	% of respondents
Not so important	03	02.94
Less important	06	05.88
Average	31	30.39
Important	38	37.25
Most important	24	23.53
Total	102	100

Table 8. Mode and duration of training

Mode of training	Number of respondents	Percentage (%) of respondents
Taught course	29	28.43
Workshop-based training	77	75.49
Online course	29	28.43
Duration of training		
1 Week	21	20.59
2 Weeks	33	32.35
3 Weeks	19	18.63
One month	18	17.65
One semester	04	3.92
MIL skills		
Formal education	50	49.02
Training offered by faculty/ department	32	31.72
Attending it programs	08	07.84
Attending workshops/seminars	36	35.29
Self-study	46	45.10
Friends	28	27.45
Teachers	28	27.45

that a majority of e-journals have almost completely replaced printed titles, in most higher educational institutions.

4.2.3 Type of Information Resources for Research

Table 5 shows the types of information resources used for research by the research scholars. Of the total respondents, most (93.14 %) use journals/papers for their research. Followed by 63.72 per cent depend on Internet resources, and over half (59.80 %) using textbooks. Over a third use reference books (34.31 %), which is higher than the use of videos (27.45 %) and conference proceedings (26.47 %). Online information sources are the most frequently used resources. Of the total, 92.16 per cent of scholars use E-Newspapers; followed by E-Books (67.65 %), E-Magazines (25.57 %), Blogs (25.49 %), and E-Journals (21.57 %).

4.3 Usefulness and Relevance of MIL to Research

The usefulness of MIL to their research was asked and the scholars responses are given in Table 6. All of them agree that MIL enables them to save their time; so a majority (81.47 %) responded as Very Good or Good, 13.72 per cent responded as Moderate, and a small percentage (4.9 %) responded as Poor or Very Poor. Respondents also felt that MIL improves the quality of their research work. In this regard, a majority (80.39 %) responded as Very Good or Good, 14.70 per cent responded as Moderate, and a small percentage (4.84 %) responded as Poor or Very Poor.

Concerning the importance of MIL for research, less than two-thirds (60.78 %) responded as Important or Most Important; and a small percentage (8.82 %) responded as 'Not so important' or 'Less Important'. Overall, most of them (91.18 %) felt that MIL is essential for their research, so their choices varied between Average to Most Important.

Of the total, a majority (87.25 %) of the respondents felt that MIL would enhance their knowledge, and less than three-fourths (72.55 %) mentioned that MIL provides fundamental knowledge; however, 69.61 per cent of the respondents require skills to evaluate the performance of MIL.

4.4 Training Needs in MIL

Most (93.14 %) of the respondents have felt that the university should provide basic training on MIL, hence the university should take necessary steps in providing the required training, particularly to research scholars, and also for faculty, so that they can also educate themselves and improve the quality of their teaching and research. The training modes that were favoured include workshop-based training (75.49 %) and teaching (28.43 %) and online courses. Of the total, a majority responded that the training period could vary from 1-4 weeks, and a small percentage want one full semester, as shown in Table 8. Over two-thirds of the respondents (69.61 %) mentioned that MIL training is essential to conduct/perform their research.

Table 8 indicates that half of the respondents acquired their MIL skills through formal education (49.02 %), followed by 45.10 per cent through self-study, attending workshops/ seminars (35.29 %), training offered by their faculty/departments (31.72 %), both friends and teachers have an equal percentage

of (27.45 %) respondents, and the least number of respondents (7.84 %) acquired MIL skills by attending IT programs.

4.4.1 MIL Training from Outside the University

Media information literacy is an essential component of the education system, hence the university should offer IL and MIL courses to students and scholars. Since this a new area, it might benefit to get experts from other institutions to instruct/ train on the required training for MIL. In this regard, a majority (88 %) of respondents have indicated that they obtained MIL training from outside the university, thus they recommended the same. UNESCO has introduced MIL in all levels of education in many developed countries, hence over three-fourths (77.45 %) of the respondents feel that MIL is an essential component of the education system to achieve the necessary competencies in knowledge, skills and attitudes. Therefore, it should be introduced in all levels, especially at the PhD level. In this regard, a majority (80.39 %) of respondents have mentioned that universities should offer IL & MIL as a part of their Ph.D. coursework.

The main goal of MIL is to empower people in nurturing equitable access to information and knowledge, and promoting free, independent and pluralistic media and information systems (Grizzle (n.d.)). It is found that a majority (80.39 %) of the respondents think that all people should have an equal opportunity to access information and knowledge.

4.5 Methods of Delivering MIL

4.5.1 MIL Topics to be Taught to Research Scholars

The respondents were asked to mention MIL topics that should be included for research scholars in Pondicherry University and their responses are presented in Table 9. Of the total, a majority indicated that Media Literacy (75.49 %), Information Literacy (86.27 %), Computer Literacy (77.45 %), Library Literacy (71.57 %), News Literacy (73.53 %) and Internet Literacy (79.41 %) should be taught. On the other hand, around two-thirds of research scholars do not want Gaming literacy (57.84 %), Television literacy (67.65 %), Advertising literacy (67.65 %), Cinema Literacy (72.55 %) and Freedom of expression and Information Literacy (58.82 %) to be taught as it would not be conducive to their research. Even though all research scholars in Pondicherry University are computer literate, over half (54.90 %) want extra training on Computer Literacy.

Table 9. MIL topicstobe taught to research scholars

MIL concepts to research scholars	Yes (%)	No (%)
Media literacy	77 (75.49)	25 (24.51)
Information literacy	88 (86.27)	14 (13.72)
Computer literacy	79 (77.45)	23 (22.54)
Freedom of expression and information literacy	42 (41.18)	60 (58.82)
Digital literacy	56 (54.90)	46 (45.10)
Cinema literacy	28 (27.45)	74 (72.55)
Library literacy	73 (71.57)	29 (28.43)
News literacy	75 (73.53)	27 (26.47)
Gaming literacy	43 (42.16)	59 (57.84)
Television literacy	33 (32.35)	69 (67.65)
Advertising literacy	33 (32.35)	69 (67.65)
Internet literacy	81 (79.41)	21 (20.59)

4.5.2 Types of MIL Tools Used

Out of the total respondents, about two-thirds (63.72 %) answered that they used television, 84.31 per cent mentioned print media, and 85.29 per cent stated that they used the Internet as a tool to obtain information for their research. Contrary to this, a majority indicated that they have not used the radio (50.98 %), recorded media & music (68.63 %), and films (64.70 %) as a tool to acquire information. Since audio-visual media and films are also important components, the importance of these media should be taught, and scholars should be encouraged to use them for their research. The awareness about MIL will certainly benefit these scholars in using different media and gaining the best inputs into their research and development.

MIL is an essential area, hence it should be taught as a subject at the university level. Therefore, we asked them to give their views on the same. Of the total, over two-thirds (70.59 %) of the respondents informed that MIL should be taught as a special subject as shown in Table 10.

Table 10. Types of MIL tools used

MIL tools	Yes (%)	No (%)
Television	65 (63.72)	37 (36.27)
Radio	50 (49.01)	52 (50.98)
Recorded media & music	32 (31.37)	70 (68.63)
Print media	86 (84.31)	16 (15.69)
Internet	87 (85.29)	15 (14.70)
Film	36 (35.29)	66 (64.70)

Table 11. Who should train research scholars on MIL

Faculty options	No. of respondents	% of respondents
Department of Electronic Media and Mass Communication (DEM&MC)	34	33.33
Department of Library and Information Science (DLIS)	35	34.31
Subject teachers	9	8.82
Collaboration of all	23	22.55

4.5.3 Which Faculty should Train Research Scholars on MIL

From Table 11, it is clear that a third (33.33 %) feel that

DLIS, and 34.31 per cent mentioned DEM&MC should teach MIL to scholars, and 22.55 per cent suggested that both the departments should collaborate, and a small percentage (8.82 %) proposed that only subject teachers should teach MIL to their research scholars. DLIS has a strong information literacy base and DEM&MC has a strong media literacy base; thus, both these departments in combination offering this program would give optimum results. Since both these departments come under the School of Media and Communication, the responsibility may be handed to the Dean of the School to run this course, as it is also their administrative responsibility.

4.5.4 Initiative on MIL in India

Though UNESCO is carrying out a lot of work in this area, it has not yet become popular and is yet to reach to all countries. The same is the case in India, thus less than two-thirds of the respondents (62.74 %) do not know about MIL initiatives being carried out in India. Therefore there is a need to take up this initiative in a considerable way. Only a small percentage of respondents have indicated that initiatives have taken place in MIL. This includes 14.70 per cent of the respondents indicating that they know UNESCO activities, followed by 13.72 per cent pointing out the Government of India's activities, and a small percentage (7.84 %) who specified initiations of Indian universities on of MIL. UNESCO should take the lead to urge/ advise all universities to include MIL as a compulsory course, at least for research scholars.

4.6 Problems faced by Research Scholars

4.6.1 Required Information for Research

It is found that 69.61 per cent of the total respondents mentioned that they can acquire the required information for their research; however, scholars encountered many problems in accessing the required information as listed in Table 12.

Table 12. Problems in accessing the required information

Difficulties in accessing required information	Number of respondents	% of respondents
Misinformation by media	43	42.16
Fake news	50	49.02
Sensationalism	38	37.25
Alternative facts	26	25.49
Types of problems faced by research scholars		
Lack of awareness	54	52.94
Lack of knowledge	62	60.78
Lack of skills	16	15.69
None of the above	06	05.88

After the introduction of 4G and 5G communication technologies and due to widespread use of the Internet of Things (IoT) at workplaces, there was manyfold increase in the amount and number of digital information and media produced in India. The production and consumption of digital content and media has grown tremendously over the past few years in India (Deloitte Touche Tohmatsu India, 2015). After the introduction of smartphones, communication, reading, education and entertainment activities are now taking place mainly in digital mode. Though it has helped the people a lot, but it has also caused many problems, due to the misuse of these technologies by many people. In this study, the respondents mentioned the various difficulties faced by them in acquiring the required information due to misinformation by media (42.16 %), fake news (49.02), sensationalism (37.25 %), and alternative facts (25.49 %). These results show that research scholars face many problems to obtain the correct information. The major types of problems faced by research scholars include lack of awareness (52.94 %), lack of knowledge (60.78 %), and a small percentage also faced problems due to deficiency of required skills.

4.6.2 Problems in Securing MIL Training

Out of the total respondents, 54.90 per cent faced problems in securing MIL training. From Table 12, it is evident that 52.94 per cent of the respondents mentioned a lack of awareness as the problem faced by research scholars related to MIL training, and 60.78 per cent mentioned a lack of knowledge, and 15.69 per cent mentioned a lack of skills.

5. FINDINGS AND DISCUSSION

The study has been conducted with a heterogeneous group of research scholars who comes from different subject backgrounds, age groups, genders, and research experience. This study examined their perception about/and awareness of MIL, the level of awareness about MIL, the types of literacies and their awareness, the usefulness and relevance of MIL to their research, the mode and duration of MIL training required, the methods of delivering MIL and the problems faced by research scholars. The summary of all significant findings is given below.

Male respondents outnumbered female respondents (68.63 %), a majority (76.47 %) of the respondents belong to 26-30 years age group and are doing Ph.D. (90.19 %), and about one-third (30.39 %) have atleast 2 years of research experience.

A majority (75.49 %) of the respondents are aware of the term MIL. Around half of them have a medium level of awareness about Media Literacy (51 %), Library Literacy (50 %), Computer Literacy (50 %); close to two-thirds (62 %) have a medium level of awareness about Information Literacy; more than half have a medium level of awareness about Digital Literacy (57 %); and close to half have a medium level of awareness about Freedom of Expression and IL (45 %), Cinema Literacy (49 %), News Literacy (40 %), Gaming Literacy (44 %), Television Literacy (41 %), Advertising Literacy (45 %) and Internet Literacy (44 %). However, less than half of the respondents are somewhat aware about MIL (45.10 %). Overall, the respondents are aware of the different types of literacies. These results are in line with Ghosh, Bagchi, & Das (2015), where 92 per cent of respondents were familiar with the term media literacy and 76 per cent knew about the concept of MIL. Oluwaseye & Oyetola (2018) studied information literacy skills and social media use by students and found that

a majority of them were aware of Google+ (80.6 %), Twitter (68.6 %), Facebook (68.6 %), YouTube (68.6 %) and Flicker (65.2 %).

Concerning the types of information sources used for research, most (93.14 %) of the respondents use Journals/ Papers for their research; a majority (63.72 %) use the Internet for conducting research, followed by Textbooks (59.80 %), Reference Books (34.31 %), Videos (27.45 %), Conference Proceedings (26.47 %) and a small percentage use Audio sources (3.92 %). Of the total, 92.16 per cent of scholars use E-newspapers, followed by E-books (67.65 %), Institutional Websites (52.94 %), E-magazines (25.57 %), E-journals (21.57 %) and Blogs (25.49 %) for conducting research. In contrast, Ghosh, Bagchi & Das (2015) found that 80 per cent of the respondents used Printed Textbooks for acquiring the required information, and 60 per cent used E-journals, compared to E-books, E-indexes and Citation databases.

MIL enables research scholars to save time. Of the total, a majority (81.47 %) of them rated as 'Very Good' (37.35 %) and 'Good' (44.12 %). Respondents felt that MIL skills improve the quality of work, thus a majority of them (80.39 %) rated as 'Very Good' (24.51 %) or 'Good' (55.88 %). Considering the importance of MIL for research, less than two-thirds (60.78 %) of them responded as 'Important' (37.25 %), or 'Most Important' (23.53 %). However, over a third of them responded as 'Average' (30.39 %) and a small percentage responded as 'Less Important' or 'Not so Important' (8.82 %) to them.

Regarding the mode and duration of training required on MIL skills, a majority (75.49 %) of the respondents preferred workshop-based training, while more than a quarter preferred taught course (28.43 %) and online course (28.43 %) each. Of the total, 52.94 per cent preferred 1-2 weeks of training, 36.28 per cent preferred 3-4 weeks and only a small percentage (3.92 %) preferred one-semester of training on MIL. MIL skills were acquired by scholars in different ways including through formal education (49.02 %), through self-study (45.10 %), by attending workshops/seminars (35.29 %), from faculty of various departments (31.72 %), through friends (27.45 %), through teachers (27.45 %), and a small percentage (7.84 %) by attending IT programs. A majority (88 %) attended MIL training outside the university to achieve essential competencies in knowledge, skills and attitudes (77.45 %); therefore, a majority (80.39 %) of the respondents specified that universities should offer IL & MIL as part of their Ph.D. course work. Hogg & Terry (2000) proposed that MIL teaching can be done through self-taught programs or workshops outside the school system, such as civil society associations, media groups and internet platforms. He also specified numerous other motives to teach MIL, where the university system lags behind in providing required training. Some departments are also reluctant to introduce MIL teaching (Hogg, M. A., & Terry, D. I., 2000) and hence they have suggested that it is imperative to have a seperate faculty to teach the MIL course (Thomas, S., 2013).

About the topics of MIL to be taught, a majority of them stated that topics that should be taught should include Media Literacy (75.49 %), Information Literacy (86.27 %), Computer Literacy (77.45 %), News Literacy (73.53 %), Literary Literacy (71.57 %), and Digital Literacy (54.9 %). At the same time, they do not want Internet Literacy (79.41 %), Cinema Literacy (72.55 %), Television Literacy (67.65 %), Advertising Literacy (67.65 %), Freedom of Expression and Information Literacy (58.82 %), and Gaming Literacy (57.84 %).

Respondents were asked to specify the various types of MIL tools used and the findings show that 63.72 per cent of the respondents used the television, 84.31 per cent used print media and a majority (85.29 %) used the internet as tools to obtain information. Whereas, half (50.98 %) have not used the radio, followed by 68.63 per cent recorded media and music, and 64.70 per cent films as tools to acquire information. Concerning which department to teach MIL for research scholars, one third (33.33 %) indicated that DLIS, another third (34.31 %) suggested DEM&MC, 22.55 per cent suggested collaboratively between both these departments, but a small percentage (8.82 %) proposed that subject teachers should teach MIL to their scholars. With regard to initiatives on MIL in India, a majority (62.74 %) do not know, so UGC need to taake necessary action in implementing the same. Carlsson (2019) advocates that several conditions are necessary for the emergence of a coherent and comprehensive curriculum on MIL. Unfortunately, MIL is missing at initial teacher training and in-service training in most European countries and worldwide (Frau-Meigs, D, 2019).

Concerning the problems faced while accessing the required information, closed to half (49.02 %) of the respondents mentioned fake news caused them difficulties, followed by misinformation by media (42.16 %), sensationalism (37.25 %), and 25.49 per cent due to alternative facts. Further, more than half (52.94 %) indicated a lack of awareness, 60.78 per cent indicated a lack of knowledge, and 15.69 per cent indicated a lack of skills, that resulted in problems among research scholars related to MIL. This study supports the Wilson (2019) study where fake news has become common in today's terminologies while speaking about the media. The term itself signposts false or misleading information which is presented as news. Oluwaseye & Oyetola (2018) study findings revealed that 62.5 per cent of the respondents indicate that their timetable does not give them space to use social media; 66.2 per cent of them specified that they are not allowed to use social media because their profession deals with confidential information (58.7 %), and 59.7 per cent of them pointed out that social media URLs are blocked on their internet servers. Nevertheless, 57.2 per cent of the respondents voiced that they do not have sufficient access to the internet and internet data. Fortunately, a majority (62.7 %) of them have not experienced any cyber oppression on social media.

6. CONCLUSIONS AND RECOMMENDATIONS

This study looked into the awareness of MIL, the level of awareness about various types of literacies, the format of information resources used for research, the types of information resources used for research, the usefulness and relevance of MIL to research, the training needed for MIL, MIL training received from outside the university, topics of MIL that should be included for research scholars, the types of

MIL tools used, who should train research scholars about MIL, the several initiatives taken by India on MIL and examined the various problems faced by research scholars while using MIL. This study has certain limitations. Due to limited resources, manpower and time constraints, this study could not cover all schools in the university. Only 10 schools were considered for this study, thus this research outcome may not be truly representative of all the schools. Therefore, this study's results may not be generalised to other universities in India. Moreover, the situation between state and central universities' varies to a greater extent; hence to generalise, a bigger sample covering several universities including state, central, private and autonomous institutions, is required for this study. In the future, studies may be conducted to ascertain the awareness of MIL, types of literacies and their awareness. Similar studies could be done with faculties and masters' students, along with research scholars. Future research could also look into the relationship between the intention of using different media and their outcome on both teaching and research.

REFERENCES

1. ACRL standards: Information literacy competency standards for higher education. *ACRL College Res. Libr. News*. 2000, **61**(3), 207-215. doi: 10.5860/crln.61.3.207.
2. American library association. Presidential committee on information literacy: Final report. Association of college and research libraries, 1989. http://www.ala.org/ala/mgrps/divs/acrl/publications/whitepapers/presidential.cfm. (Accessed on 15 September 2009).
3. Aufderheide, P. Media literacy. A report of the national leadership conference on media literacy. Aspen institute, communications and society program, Washington, 1992.
4. Buckingham, D. Media education: Literacy, learning and contemporary society, 2003.
5. Budd, J.M. & Lloyd, A. Theoretical foundations for information literacy: A plan for action. *Comput. Sci.*, 2015, **51**(1), 1-5.
6. Carlsson, U. Understanding media and information literacy (MIL) in the digital age: A question of democracy. UNESCO, Göteborg, 2019.
7. Deloitte Touche Tohmatsu India. Digital India unleashing prosperity. Deloitte Touche Tohmatsu India Private Limited, 2015. p4.
8. Duncan, B. Media literacy: Essential survival skills for the new millennium. School Libraries. *School Libr. Can.*, 2005. **35**(2), http://accessola2.com/SLIC-Site/slic/SLICVol25issue4. pdf#page=31. (Accessed on 15 July 2017).
9. Eisenberg, M.B. Information literacy: Essential skills for the information age. *DESIDOC J. Libr. Inf. Technol.*, 2008, **28**(2), 39-47.
10. European commission. A European approach to media literacy in the digital environment. EC, 2007. http://ec.europa.eu/avpolicy/media_literacy/docs/com/en.pdf (Accessed on 15 July 2017).
11. Franklin, K.Y. The importance of information literacy: Insights from the next generation of scholars. *In* Association of College and Research Libraries National Conference, Minneapolis, 2005.
12. Frau-Meigs, Divina. A curriculum for MIL teaching and learning. *In* Understanding Media and Information Literacy (MIL) in the Digital Age: A Question of Democracy. Edited by Ulla Carlsson. UNESCO, 2019. p57-65
13. Ghosh, S.; Bagchi, A. & Das, P.S. The awareness of media literacy and Media education among the users of University library in India: a Case study. *Int. Res.: J. Libr. Inf. Sci.,* 2015, **5**(2), 329-340.
14. Grizzle, Alton (n.d.). UNESCO - Media and information literacy. http://www.unesco.org/new/en/ communication-and-information/media-development/media-literacy/mil-as-composite-concept/browse/4/. (Accessed on 20 January 2020)
15. Hobbs, R. & Frost, R. Measuring the acquisition of media-literacy skills. *Reading Res. Q.*, 2003, **38**(3), 330-355.
16. Hogg, M.A. & Terry, D.I. Social identity and self-categorisation processes in organisational contexts. *Acad. Manage. Rev.*, 2000, **25**(1), 121–140.
17. Huguier, M. Involving the media in media education. In C. Bazalgette, E. Bevort, & J. Savino (Eds.), New directions in media education worldwide. London: British Film Institute, 1992, 220–223.
18. Lanning, S. Concise guide to information literacy. Santa Barbara: Libraries Unlimited, 2017.
19. Laretive, J. Information literacy, Young learners and the role of the teacher librarian. *J. Aust. Libr. Inf. Assoc.*, 2019, **68**(3), 225-235.
20. Lewis, J. & Jhally, S. The struggle over media literacy. *J. Commun.*,1998, **48**(1), 1-8.
21. Lublinski, J. & Reineck, D. Media and information literacy: A human rights-based approach in developing countries. 2017. https://www.comminit.com/global/content/media-and-information-literacy-human-rights-based-approach-developing-countries. (Accessed on 23 March 2021).
22. Oluwaseye, A.J. & Oyetola, M.K. Information literacy skills and social media use by students in selected private secondary schools in Ibadan, Nigeria. *Covenant J. Libr. Inf. Sci.*, 2018, **1**(2), 18-31.
23. Potter, W.J. Theory of media literacy: A cognitive approach. California: SAGE Publications, 2004.
24. Thomas, S. Making a space: Transliteracy and creativity. *Transdisciplinary Learn. Digital Creative Pract.*, 2013, **24**(3), 182-190.
25. UNESCO. UNESCO launches online course in Media and Information Literacy and Intercultural Dialogue. UNESCO, 2013. https://en.unesco.org/news/unesco-launches-online-course-media-and-information-literacy-and-intercultural-dialogue. (Accessed on 23 March 2020).
26. Wilson, C. Media and information literacy: Challenges and opportunities for the World of Education. Ottawa: Canadian Commission for UNESCO, 2019.

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