



## Infodemic during the COVID-19 pandemic: A study of University of Delhi LIS students

Margam Madhusudhan<sup>a</sup> and Nidhi<sup>b</sup>

Department of Library & Information Science, University of Delhi, Delhi – 110007, India

<sup>a</sup>Email: mmadhusudhan@libinfosci.du.ac.in

<sup>b</sup>Email: nidhiyadav1703@gmail.com

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Fake news, misinformation and cybercrimes were rampant during the pandemic. To understand the perception of LIS students about infodemic, we carried out an online survey of 146 University of Delhi LIS students who enrolled during 2020-2021. We received one hundred and thirty-three responses. It was found that most of the students came across fake news on social media platforms. The study suggests that obtaining information from authentic sources, cross-checking websites and other information sources are some of the ways to deal with fake news.

**Keywords:** Fake news, Social media, Infodemic, COVID-19, LIS students, University of Delhi

### Introduction

The COVID-19 pandemic has prompted a shift from traditional pedagogy to the online pedagogy. The online learning is based on various digital devices and platforms, attending open book exams, webinars/online workshops, online internship programmes, and so on. It is known that the COVID-19 pandemic triggered an infodemic as well. The infodemic includes misinformation, disinformation, fake news and so on.

"The mainstream social media platforms such as Twitter, Facebook and YouTube are crowded with people and have little control over the content posted resulting in the rapid spread of misinformation through social media"<sup>1</sup>. Fake news "refers to misinformation on social media but can sometimes be found in conventional media"<sup>2</sup>. Fake news—also known as 'junk news', is the deliberate spread of information or misinformation through online mediums". The "misinformation can be of several types: (i) it can be completely inaccurate, (ii) it can be a belief disseminated without any authentic proof, or (iii) it can carry biased information where selective facts are shared to achieve some mischief propaganda"<sup>3</sup>.

"Digital information literacy is the ability to use information and communication technologies to find, evaluate, create, and communicate information, requiring both cognitive and technical skills"<sup>4</sup>. Digital information literacy teaches students to test the authenticity and reliability of the information as they

use social media and online information sources. The use of digital tools in education makes it necessary for the students to be digitally literate.

The main goal of the present study is to examine the perception of University of Delhi LIS students about fake news and misinformation and also find how they handled the fake news and misinformation.

### Review of literature

Adekoya and Fasae<sup>5</sup> found that social media tools were highly used during the COVID-19 pandemic, especially WhatsApp and Twitter. The study findings reveal that misinformation spreads on social media. Al Zaman<sup>6</sup> stated that massive circulation of fake news on social media platforms can affect health, religiopolitical, political, crime, entertainment, religious, etc. Tsao *et al*<sup>7</sup> stated that "the positive impact of social media platforms helped disseminate health-related information during COVID" and allowed people to connect with like-minded individuals around the world. Yas *et al.* (2021)<sup>8</sup> found that people used social media as a source of information, news, and psychological nourishment. The findings indicated that most participants used social media as a source of vital information during the COVID-19 pandemic.

Talwar *et al.* (2020)<sup>9</sup> reveal that "authenticating news before sharing did not affect sharing fake news due to lack of time and religiosity". Zhou and Zafarani (2020)<sup>10</sup> explain "about fake news and

evaluate methods that can detect fake news from four perspectives: the false knowledge it carries, its writing style, its propagation patterns, and the credibility of its source". Geeng, Yee and Roesner (2020)<sup>11</sup> reveal "how people interact with fake news post on Twitter and Facebook through both observation and self-reports, using a browser extension to modify post in participants' social media feeds to look like fake news".

Radwan, Radwan and Radwan (2020)<sup>12</sup> explain that "social media has a significant impact on spreading panic about COVID-19 among school students, with a potential negative impact on their mental health and psychological wellbeing". De Paor and Heravi (2020)<sup>13</sup> "outline the current efforts and initiatives exercised by libraries to refute the spread of fake news and educate communities on how to navigate through an era of untruth and dis-information."

COVID-19 has hastened the technology penetration and the digitization. Tejedor et al. (2020)<sup>14</sup> explains "the importance of digital literacy and explains the process of higher education among Spain, Italy, and Ecuador during the pandemic". Igninovia, Okuonghae and Adebayo (2020)<sup>15</sup> "examined the effect of Information Literacy Competency (ILC) in curtailing the spread of fake news among Library and Information Science undergraduates in Nigeria. It was found that students had a high level of ILC and low prevalence level of COVID-19 pandemic fake news among them".

The literature review established that is no study on the perception of Indian LIS students to fake news and misinformation. The present study attempts to fill the gap.

### Objective of the study

- To examine the LIS students' perception to fake news and misinformation

### Methodology

The scope of the study is confined to students and research scholars of the Department of Library and Information Science, University of Delhi, who enrolled in the academic year 2020-2021. We prepared an online structured questionnaire and distributed it among 146 students and research scholars of the Department of Library and Information Science, University of Delhi, during July-August 2021. One hundred and thirty-three filled-in questionnaires were received, eliciting a response rate

of 91.09. All the 133 filled-in questionnaires were included for analysis. The reliability of the questionnaire was checked using Cronbach's alpha and found reliable with a value of 0.99. "The Cronbach's alpha value over 0.70 is considered reliable, and the value of alpha between 0.60 to 0.69 is regarded as moderately reliable"<sup>16</sup>. The value indicates that all questions have adequate consistency.

## Findings and discussions

### Demographic details

The gender information of the students is essential because it assists the researcher in understanding the use of digital devices and social media tools (Table 1). There were an almost equal number of male and female students. There were more MLISc students as compared to the BLISc students and a few MPhil students.

### Fake news/misinformation

Among the digital devices, 123 students (92.5%) used mobile phones, 85 (63.9%) used laptops and 20 students (15%) used tablets. The sudden shift to virtual platforms increased students' time spent on digital tools. It was also found that out of the three devices, students preferred to use mobile phones for a longer duration.

Table 2 reveals that 85.7% of students encountered misinformation during the pandemic, while 14.3% of students did not come across any misinformation. Table 2 also shows that 94.7% of misinformation were on social media, followed by websites and blogs (35.3%) and oral communication (33.1%). Interestingly, 31.6% of students reported television as a source of misinformation. Furthermore, 27.1% of students come across misinformation through telephonic conversation.

Table 1 — Demographic Details (n=133)

Status	No. of students (%)
Gender	
Female	69 (48.1)
Male	64 (51.9)
Age distribution	
Below 25	60 (45.1)
26-30	60 (45.1)
Above 30 years	13 (9.8)
Course distribution	
MLISc	60 (45.11)
BLISc	44 (33.08)
Ph.D.	16 (12.03)
M.Phil.	13 (9.78)

26.3% of students encountered misinformation on emails, while 7.5% of students reported that newspapers were a source of misinformation. Only 5.3% of students reported magazines as a platform for disseminating misinformation.

Particulars	No. of Students (%)
Encounter fake news/ misinformation:	
Yes	114 (85.7)
No	19 (14.3)
Sources of fake news/misinformation circulation*	
Social media	126 (94.7)
Websites and Blogs	47 (35.3)
Oral communication	44 (33.1)
Television	42 (31.6)
Telephonic conversation	36 (27.1)
Electronic Mails	35 (26.3)
Newspapers	10 (7.5)
Magazines	07 (5.3)

(\*Note: Multiple answers are permitted.)

*Fake news/misinformation on social media platforms*

Social media is one of the chief sources for circulating fake news. Most students used all popular social media platforms such as WhatsApp, Instagram, Twitter, YouTube, and Facebook. The students find most of the fake news and misinformation on WhatsApp (86.1%) followed by Facebook (67.8%), YouTube (56.5%), Twitter (53.9%) and Instagram (50.4%) [Fig. 1].

*Perception about fake news and misinformation*

About 65% of the students believe that fake news/misinformation circulation creates chaos among the public and a similar proportion of students believe that fake news circulation can trigger more fake news, creating a never-ending circulation chain. They further believe that misinformation makes it hard to trust information from any source (Fig. 2).

*Measures to avoid fake news/misinformation*

It is seen that majority of the students (91.7%) obtained information only from authentic and trusted

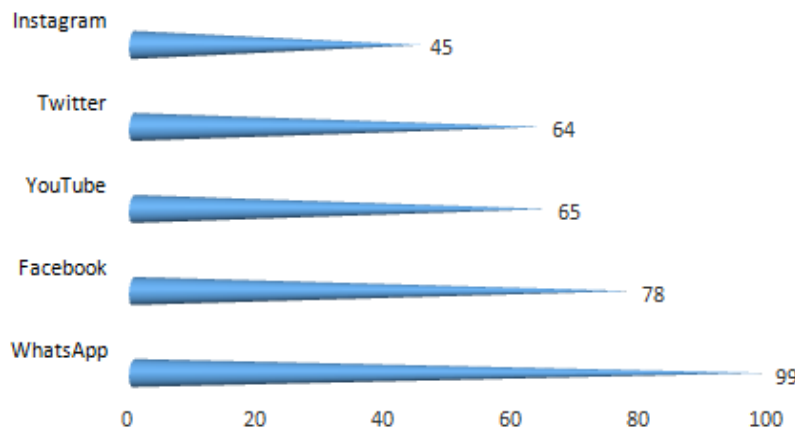


Fig. 1 — Circulation of fake news/misinformation on social media platforms (n=133)

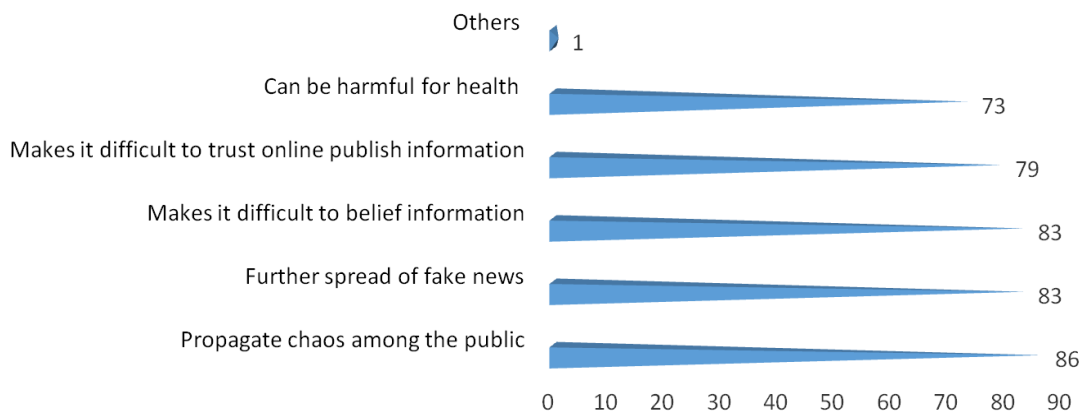


Fig. 2 — Perception about fake news/misinformation (n=133)

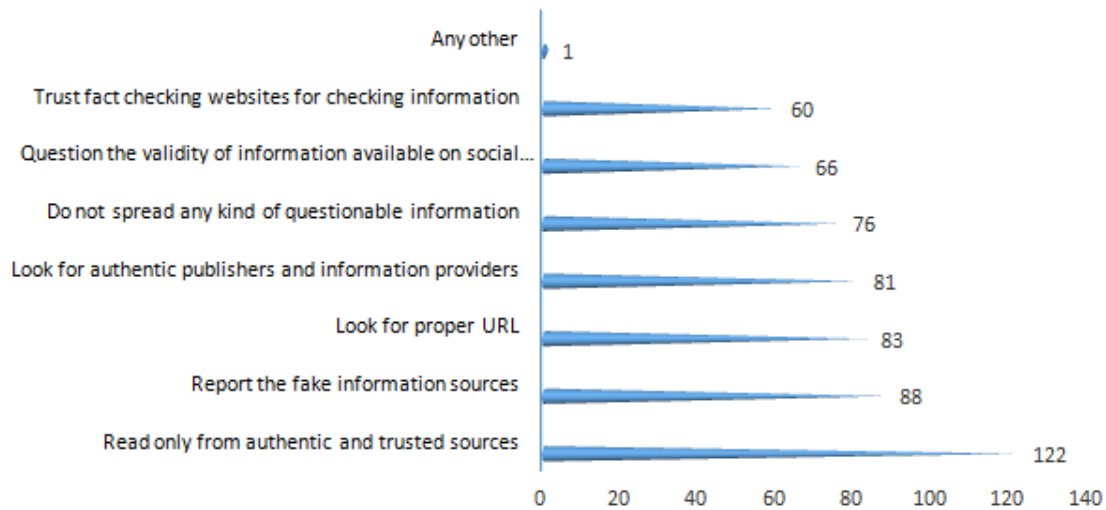


Fig. 3—Measures to avoid fake news/misinformation (n=133)

information sources. It is also seen that a fairly good proportion of students (66.2%) report fake information sources. About 45% of the students used fact-checking websites for checking information (Fig. 3).

### Conclusion

The survey reveals that LIS students come across fake news, misinformation and disinformation. Digital information literacy courses should be taught to the students. Similar studies on larger population among students in other disciplines and inclusion of interview method can give new or added insights.

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