

A Study of Views from Students about National Competitive Exam Paper Leaks in India

**Dr. Deepal Joshi¹, Nilesh Chauhan², Dhruv Gor³, Aryan Shahu⁴,
Bhavykumar Telariya⁵**

¹Director, Som-Lalit Institute of Business Administration, Gujarat University, Ahmedabad, India

^{2,3,4,5}BBA students, Som-Lalit Institute of Business Administration, Gujarat University, Ahmedabad, India

Abstract

One significant characteristic of Indian education system is various national level competitive exams for securing admission to specific higher education institutions or for recruitment to various government positions. A large number of students appearing for such exams in India. However, the integrity of these national competitive exams seems to be compromised with incidences of exam paper leaks. These paper leaks are a huge concern for all stakeholders in the national competitive exam system in India. This research attempts to study the awareness, perceptions, primary responsibilities, impact and prevention measures with regards to paper leaks at national competitive exams in India. It is based on primary data collection from students/candidates appearing for national competitive exams in Ahmedabad, Gujarat, India. Findings of the study are discussed and implications for future research and practice are analyzed. Measures to prevent exam paper leaks can safeguard the integrity of national competitive exams in India and can also help restore the confidence of students, parents and educators. An ethical and secure academic environment should be created for all the stakeholders – only that will uphold long-term benefits and uplift India's image on the map of global education system.

Keywords: Competitive Exams, Paper Leaks, Students, India

1. Introduction and Significance of the Study

Indian education system, one of the largest in the world, is perceived as an avenue for individual stability and prosperity as well as economic growth of the nation. One specific characteristic of the Indian education system is national level competitive exams. These exams are standardized tests meant for securing admission to specific higher education institutions or for recruitment to various government positions. These exams are meant to test a candidate's knowledge, skills and aptitude and the merit obtained in these exams is the criteria for admission or selection. These competitive exams mainly include exams for government recruitment, entrance exams for higher education in the fields of medicine, engineering, management, law, etc.

It is estimated that around 60 million students appear for various competitive exams every year in India and this number will keep on increasing. However, the integrity of these national competitive exams seems to be compromised with incidences of exam paper leaks. Paper leaks, meaning the release of papers before the exam schedule, are becoming a huge issue for the Indian higher education system. NEET

(National Eligibility cum Entrance Test) is one such major national competitive exam in India, largely meant for admission to medical and para-medical courses in India. NEET 2024 exam was plagued with controversies including instances of paper leak and wrongful provision of grace marks. Kamraju (2023) reports 32 instances of national or state level competitive exam paper leaks in India between 2011 to 2021. Paper leaks happen due to lack of appropriate security measures in the exam process, alleged corruption at any level by the exam conducting organizations, rampant use of technology and internet for widespread reach of leaked papers, etc. [5, 9]. Such incidences of paper leak disturb the exam system, cause considerable loss of money and efforts for the exam organizers, generate legal and ethical implications and negatively impact the academic and psychological well-being of candidates appearing for exams and their close families [3, 8]. These paper leaks are a huge concern for all stakeholders in the national competitive exam system in India.

Considering this backdrop, this research attempts to study the awareness, perceptions, primary responsibilities, impact and prevention measures with regards to paper leaks at national competitive exams in India. The further paper is planned as follows. The next section provides summary of existing literature on paper leaks in India – followed by objectives of existing research. The third section discusses the methodology of this paper, followed by findings of the study. The concluding part of the paper includes discussion and implications of this research. Findings of this study can safeguard the integrity of national competitive exams in India and can also help restore the confidence of students, parents and educators. An ethical and secure academic environment should be created for all the stakeholders – only that will uphold long-term benefits and uplift India's image on the map of global education system.

2. Literature Review and Objectives of the Study

Previous research has focused on causes of paper leaks in India, effects of paper leaks on students' academic performance and psychological health, the legal and ethical implications of paper leaks and how use of technology can help reduce the risks of paper leaks in competitive exams. Table 1 provides a summary of existing research in this area

Table 1 Summary of Existing Literature				
Sr. No.	Reference for Paper	Research Objectives	Methodology	Major Findings
	Gaikwad, et al. (2016)	The paper aims to propose and discuss a highly secured method for storing and distributing question papers	The Design and its implementation of ARM (Advanced Risk Machine) processor-based electronics protection for the exam paper leakage system were effectively carried out with the advantages of minimum peripheral interfaces, low power consumption, low cost, high portability	The compact and cost-effective solution for the examination paper leakage system was achieved with ARM processor controller. It can also be used in various other applications where protection of documents or any valuables is needed. The embedded system can be programmed to close the Electronic Control Box after the completion of the exam

	Alam, et al. (2017)	The study proposes a web-based secure model for examination management system that is robust to question paper leakage	Securing online examination using various technology-based security mechanisms is discussed from secondary data on the topic	The deployment of the digital examination system was the first of its kind in Bangladesh. Multi-factor authentication using digital certificates, cryptographic tokens, passwords, and OTPs can help to secure the online examination system
	Pandey (2018)	What is the available literature on prevalence, causes and impact of exam paper leaks in India?	Study of existing literature on exam paper leaks in India	Lack of adequate security, corruption and advanced technology are main causes of exam paper leaks in India. Studies on impact of these leaks need to be more detailed
	Sharma, et al. (2018)	What is the impact of exam paper leaks on students and education system in India?	Primary data collection through student surveys and study of secondary data	Exam paper leaks disrupt the system and cause considerable losses to academic and psychological well-being of students
	Singh, et al. (2019)	What is the impact of exam paper leaks on students and education system in India?	Study of literature on the topic	Despite many measures, paper leaks persist in India. This problem is increased by requirements of high grades at premier higher education institutions and more incentive for unethical practices such as paper leaks

	Kaur (2020)	What are the defects in prevailing examination system in India and what are some practical suggestions to improve the system?	Descriptive and analytical review, qualitative approach	Ratta system, cheating, subjectivity, theoretical nature, techniques of paper marking by examiners, exam paper leaks are some of the major defects. lack of comprehensive evaluation, insufficient practical insight, neglect of current privatization and technological changes, subjectivity in evaluation are other issues plaguing the examination systems of India
	Vedpathak, et al. (2020)	What is a safe electronic method to notice and avoid examination paper leaks?	Analysis of Secondary Data on the topic	The paper leakage can be prevented with the help of GSM (Global System for Mobile Communication) and RFID (Radio Frequency Identification)
	Chauhan (2023)	The paper seeks to highlight the profound consequences of paper leaks, both immediate and long-term, on various stakeholders. The study further explores the socio-economic and political implications of paper leaks	Secondary data from media reports of 2006 Himachal Pradesh combined pre-medical tests paper leaks	The paper emphasizes the need for a multi-faceted approach to combat paper leaks, including enhanced security protocols, ethical practices, technology leverage, and collaboration among stakeholders

	Kamraju (2023)	What are the causes and effects of paper leaks on students in India? What are the legal and ethical implications of paper leaks in the Indian education system? How do paper leaks impact students' academic performance and psychological well-being? What measures can be taken to prevent paper leaks in India?	Quantitative data through a Questionnaire to a sample of 200 students, Qualitative data through Group Discussion with 30 Students	The results indicate that paper leaks have a significant negative impact on student's academic performance, psychological well-being, and trust in the education system
	Kishan, et al. (2023)	The Paper discusses the ethics of competition in education and competitive exams, specifically examining the JEE (Joint Entrance Exam) in India and The EVAU (University Entrance Exam) in Spain, and whether the effects of this competition are ethical	Co-operation and Game Theory used for discussing the ethical angle of both the exams	Competitive exam raises concerns about socio-economic equality and mental health. Certain practices and environmental factors surrounding these exams can be considered unethical

	Naik (2024)	This paper aims to shed light on the systemic problems affecting the integrity and credibility of this crucial medical entrance exam	Based on secondary data from news reports	The NEET exam has been plagued by controversies, including paper leaks, mark scams, & corruption. The NTA (National Testing Agency) has been criticized for its handling of technical glitches, lack of transparency, and questionable decision making
	Rajurkar, et al. (2024)	What are the techniques that are pertinent to the elements of assessment process, answers submission, computerized grading and feedback after submission? How can these techniques reduce exam paper leaks?	Secondary Data Analysis of security systems working for preventing exam paper leaks	Creating a centralized research and development parliament system for fostering innovation is a commendable idea. below is a proposed framework for the centralized Research & Development parliament system

The above table suggests that literature on exam paper leaks in India consists of studies based on developing and using technology measures to prevent paper leaks [4, 6, 10, 12], studies on causes and impact of exam paper leaks in India [1, 3, 5, 8, 9]. There are studies focused on paper leaks during specific national competitive exams in India [2, 13]. Kaur (2020) is a general study focused on defects in prevailing exam system in India and suggestions to improve the same. There is a need for specific studies focused on awareness, perceptions, responsibilities, impact and preventive measures in the context of national competitive exam paper leaks in India. With this background, the current study pursues following objectives, from the student/exam candidate perspective:

1. Are students aware about paper leaks in national competitive exams in India?
2. What is the perception of students about the role of advanced technology, government and social media during national competitive exams in India?
3. According to students, who is primarily responsible for paper leaks during national competitive exams in India?
4. What is the impact of national competitive exam paper leaks on students in India?

5. According to students, how paper leaks can be prevented during national competitive exams in India? The methodology used for conducting research is discussed in the following section.

3. Research Methodology

This study focuses on the student/exam candidate perspective of national competitive exam paper leaks. Therefore, the sampling element is a student studying in class 11, class 12, graduation, post-graduation or diploma courses. These are the students/candidates who will be appearing for various national level competitive exams. The research instrument is a structured undisguised questionnaire framed using Sharma, et al., (2018) and Kamraju (2023).

Convenience sampling was used to collect 217 responses from above-mentioned type of students during November and December 2024 in Ahmedabad, Gujarat, India. The collected data was cleaned and analyzed. Major findings of the study are discussed in the next section.

4. Analysis of Data and Findings

A total of 217 responses were collected for the study. All the respondents were between 16 to 25 years of age – they were the candidates who had appeared or were planning to appear for various national level competitive exams. 62% respondents were male, and 38% respondents were female. Entrance exams after class 12 were applicable to 48% of respondents, entrance exams after graduation were applicable to 23% of respondents and recruitment exams were applicable to 29% of respondents Findings of this study are summarized in tables as per the objectives. Table 2 discusses the findings of the first objective.

Table 2 – Relates to Objective Number 1 – Awareness about Paper Leaks		
Criteria/Question	Category/Options	Percentage
Have you heard about paper leaks in India?	Yes	99%
	No	1%
Are you aware of any of these recent exam paper leaks? (The percentage mentioned for each category is out of total responses for that category)	NEET exam paper leak (2024)	84%
	UGC-NET (University Grants Commission – National Eligibility Test) exam paper leak (2024)	22%
	JUNIOR CLERK (Gujarat Government) paper leak (2023)	34%
	FOREST GUARD (Gujarat Government) paper leak (2022)	20%
	DGVCL (Dakshin Gujarat Vij Company Limited) Vidyut Sahayak paper leak (2021)	6.5%

The above table suggests that 99% of respondents are aware about exam paper leaks. The 2024 NEET exam paper leak is the most popularly known among the respondents. Further, table 3 summarizes the findings of the perception of students about the role of advanced technology, government and social media during national competitive exams in India.

Table 3 – Relates to Objective Number 2 – Perception of Role of Technology, Governments and Social Media during Paper Leaks

Criteria/Question	Category/Options	Percentage
Can national competitive exam paper leaks be prevented by using advanced technology?	Yes	72%
	No	8%
	Can't Say	20%
Do you think that governments are concerned about paper leaks in national competitive exams?	Yes	48%
	No	30%
	Can't Say	22%
How do social media and communication networks facilitate the spread of leaked papers?	They spread rumours and unnecessary information	12%
	They make leaks less common	41%
	They help in quick dissemination of useful information	8%
	They have no effect	39%

Table 3 suggests that advanced technology is being considered as a powerful tool for preventing exam paper leaks. Also, almost half of the respondents consider that governments are concerned about national competitive exam paper leaks. A significant proportion of respondents consider that social media and communication networks help in making paper leaks less common and other significant proportion consider that they have no effect on national competitive exam paper leaks. Table 4 discusses the respondents' opinion about who is primarily responsible for exam paper leaks in India.

Table 4 – Relates to Objective Number 3 – Primary Responsibility for Paper Leaks

Criteria/Question	Category/Options	Percentage
In your opinion, which stakeholder is primarily responsible for national exam paper leaks?	Institutions involved in exam planning and execution	45%
	Government Officials	24%
	Students	14%
	Sub-contracting agencies such as printing agency	17%
What is the primary factor contributing to paper leaks?	Insufficient security measures	35%
	Corruption	51%
	Lack of accountability	14%

As per table 4, the institutions involved in the exam process planning and execution are primarily responsible for national competitive exam paper leaks in India. Also, corruption is the single largest factor contributing to paper leaks. Table 5 discusses the responses about the impact of national competitive exam paper leaks on students in India.

Table 5 – Relates to Objective Number 4 – Impact of Paper Leaks on Students		
Criteria/Question	Category/Options	Percentage
Do you think that national competitive exam paper leaks are a significant issue in our education system?	Not significant at all	9%
	Not so significant	5%
	Neutral	17%
	Significant	19%
	Very Significant	50%
What is the primary consequence of a national competitive exam paper leak?	Delayed admissions	42%
	Mistrust in the system	40%
	Unfair advantages to some students	18%
Are you aware of any legal actions taken for paper leaks?	Yes	47%
	No	23%
	I have heard rumours	27%
	I don't follow legal issues	3%
What is the primary ethical issue arising from paper leaks?	Questionable assessment	12%
	Institutional accountability	6%
	Impact on students' future	36%
	All of the above	46%
What is the impact of exam paper leaks on students?	Loss of motivation	34%
	Unfair competition	29%
	Emotional distress	37%

Table 5 suggests that mistrust in the exam system and delayed admissions are primary consequences of paper leaks in national competitive exams. Half of the respondents are aware about legal actions taken in such situations and 27% consider news about these legal actions as rumours. Impact on students' future is the primary ethical issue arising from paper leaks. Loss of motivation, unfair competition and emotional distress are all impacts of national competitive exam paper leaks on students. Table 6 discusses the findings of questions related to the last objective of the study – how paper leaks can be prevented during national competitive exams in India?

Table 6 – Relates to Objective Number 5 – Measures to Mitigate Paper Leaks		
Criteria/Question	Category/Options	Percentage
What role should government play in preventing paper leaks?	Increase regulations	29%
	Educate the public	11%
	Implement strict punishment	60%
Should all national competitive exams be held online only?	Yes	52%
	No	35%
	Not sure	13%
'Secure online platforms can completely eliminate paper leaks'. What is your opinion for this statement?	Agree	39%
	Disagree	20%
	Not sure	41%
	Secure online storage	27%

What is the most effective solution for preventing paper leaks during national competitive exams in India?	Limited access to question papers	43%
	Background checks for exam staff	30%
‘Stricter punishment for those involved in exam paper leaks would deter future incidents.’ What is your opinion for this statement?	Yes, definitely	60%
	Yes, probably	29%
	Unlikely	5%
	Not at all	6%
How effective are the current measures to prevent exam paper leaks in India?	Very effective	32%
	Somewhat effective	32%
	Less effective	25%
	Not at all effective	11%
Which of the following is the most effective way to detect paper leaks?	Data analytics	62%
	Social media monitoring	26%
	Forensic analysis	9%
	Others	3%

Table 6 suggests that implementing strict punishment and regulation is the most important role of government for preventing paper leaks. More than half of the respondents suggest that all national competitive exams should be held in online mode only. 40% respondents feel that online exams can eliminate paper leak risks but similarly 41% of respondents are not sure about it. Limited access to question paper data is the most effective solution for preventing paper leaks. A whopping 89% of respondents agree that stricter punishments can deter exam paper leaks in India. The measures taken for prevention of paper leaks are considered effective by more than 60% of the respondents. Data analytics is the most effective way to detect paper leaks according to the respondents. The next part of this paper is a discussion of implications of this study.

5. Implications of the Study

99% of respondents are aware of national competitive paper leaks in India and 70% of respondents consider these paper leaks as a significant issue for India. This suggests that this study has immense implications for research and for practice.

This study has several implications for future research. First, the scope of this study is limited to Ahmedabad city in Gujarat state in India. Coverage of larger geographical area can provide more meaningful results from this study. Inter-city, inter-state and inter-country comparison can be conducted for this study using a wider geographical scope. Second, this study has discussed impact of paper leaks on students and national competitive exam candidates only. Future studies can focus studying the impact on other stakeholders such as parents, entrance exam training centers, higher education institutions, testing agencies, exam centers, etc. Third, longitudinal studies can be conducted to assess the long-term impact of paper leaks for students and other stakeholders. Fourth, future research can study the effectiveness of various measures for preventing and reducing paper leaks such as legal measures, technological measures, exam system measures, etc. (Sharma, et al., 2018; Singh, et al., 2019; Kamraju, 2023). Fifth, hypotheses framework can be developed, and more detailed statistical analysis of the topic can be undertaken.

On the practice front, there are implications mainly for government, exam conducting agencies and students. Government needs to implement stricter regulations and punishment for defaulters in case of

national competitive exam paper leaks in India. The Public Examinations (Prevention of Unfair Means) Act, 2024 should be enforced strictly with imprisonment and fines for those involved in national competitive exam paper leaks. Organized penalties for cheating, fines for testing agencies, increasing accountability of senior management are some of the government measures likely to reduce/prevent exam paper leaks. The burden of reconducting the exams along with the reduced morale of candidates appearing for the exam needs to be considered in enforcing these laws. The state agencies like the Bihar Public Service Commission and the Rajasthan Staff Selection Commission have been left out of the Public Examinations (Prevention of Unfair Means) Act 2024. Such agencies should also be included in the ambit of legal enforcement against paper leaks (Sushim, 2024).

In spite of the practical constraints, exams should be shifted from offline to online mode to reduce such paper leaks (Kamraju, 2023). NEET 2024 paper leak is a classic example of paper leak due to the offline exam. The agencies conducting such exams (e.g. NTA) should consider making all national competitive exams online. Using secure technology systems such as digital question paper delivery, encryption, real-time tracking and use of AI for generating questions can prevent question paper leaks. The agencies conducting exams need to involve randomization of questions and biometric verification for reducing malpractices and question paper leaks.

The study suggests that the students/candidates affected by the national competitive exam paper leaks suffer from demotivation and emotional distress. Hence, counselling and support system networks must be designed to guide and assist these students. Counselling and support activities for students should include awareness about suspicious activities on social media, measures to be taken in case of any suspected paper leak activity and strong motivation to work hard and succeed in competitive exams rather than relying on unfair means. Students and their parents spend resources such as time, money and efforts to prepare for entrance exams. Paper leaks should be prevented as far as possible, and in case of a paper leak situation, it should be handled properly so that these resources are not wasted.

6. Conclusion

National competitive exam paper leaks are a significant issue in India. There are widespread and long-lasting impacts of such paper leaks on all stakeholders including candidates appearing for exams, their parents and families, higher education institutions, exam conducting agencies, centers coaching for entrance exams and the government. This research attempts to study the awareness, perceptions, primary responsibilities, impact and prevention measures with regards to paper leaks at national competitive exams in India. It is based on primary data collection from students/candidates appearing for national competitive exams in Ahmedabad, Gujarat, India. Findings of the study are analyzed and implications for future research and practice are discussed. Measures to prevent exam paper leaks can safeguard the integrity of national competitive exams in India and can also help restore the confidence of students, parents and educators. An ethical and secure academic environment should be created for all the stakeholders – only that will uphold long-term benefits and uplift India's image on the map of global education system.

References

1. Aakarshan, C., "Himachal Pradesh Paper Leak Incidents: The Far-reaching Impact on Aspirations of the State", International Journal of Multidisciplinary Research, August 2023, 5(4), 1-8.
2. Eliza, K., Maria, A., Johnathan, A., "The Ethics of Competition in Education and Competitive Exams", Pittsburgh University Education Paper, 2023. <https://philsci-archive.pitt.edu/21785/1/Paper.pdf>

3. Kamraju, M. "A Study on The Impact of Paper Leaks on Students", Indonesian Journal of Teaching in Science, 2023, 3(1), 67-82.
4. Mohammad, S. A., Mohammad, I. A., Rubaiyat, H. M., "An Online Examination Management System for Geographically Dispersed Test Centres to Prevent Question Leakage: A Case Study of Bangladesh", Journal of Scientific Research and Reports, 2017, 16(5), 1-11.
5. Pandey, S. "Prevalence, causes and impact of examination paper leak: A review of literature", Journal of Education and Practice, 2018, 9(2), 1-5.
6. Ruchita, R., Shivani, G., Atharv, P., Shaily, W., Aarti, C., Anil, K., Mangesh, S., "A Review on AI Based Exam paper leakage Control System", International Journal of Scientific Research in Engineering and Management, 2024, 8(4), 1-3.
7. Sarabjit, K., "Examination System in India: Prevailing Defects and Suggestions for Improvement", Research Guru: Online Journal of Multidisciplinary Subjects, March 2020, 13(4), 190-192.
8. Sharma, A., Kaur, P. "Impact of exam paper leak on students and the education system in India", Journal of Education and Practice, 2018, 9(15), 66-72.
9. Singh, A., Agarwal, P. "A study on the impact of exam paper leaks on students and the education system in India", International Journal of Recent Technology and Engineering, 2019, 8(3), 2621-2626.
10. Smita, G., Namrata, K., Apurva, B., Bahubali, S., "Electronic Protection for Exam Paper Leakage", International Journal of Engineering Science, April 2016, 3699.
11. Sushim, M., "How India can dismantle the paper-leak industry", 2024. <https://www.indiatoday.in/india/story/how-india-can-dismantle-paper-leak-industry-anti-cheating-law-provisions-merits-experts-ugc-net-neet-nta-2556314-2024-06-22>
12. Yash, V., Samarth, P., Raj, S., Vaibhav, K., Mane, A., "Examination Question Paper Leakage Protection", International Journal of Innovations in Engineering Research and Technology, April 2020, 7(4), 40-43.
13. Yeshwant, N., "NEET Exam 2024: A Troubled History of Paper Leaks, Mark Scams, and Corruption in India", Idea Legal Research Paper Series, May 2024, 25.