



A COMPARATIVE STUDY OF CYBER CRIME AWARENESS OF COLLEGE STUDENTS OF NAVSARI MUNICIPAL CORPORATION

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1. Introduction

The rapid growth of information and communication technology has transformed the way people communicate, learn, conduct financial transactions, and access information. The widespread use of smartphones, computers, social networking sites, digital payment systems, cloud services, and online learning platforms has made the internet an integral part of students' daily lives. College students, being among the most active users of digital technology, spend a considerable amount of time online for educational, professional, and recreational purposes. While technological advancement has created numerous opportunities, it has also increased the risk of cyber-crimes.

Cyber-crime refers to unlawful activities committed through computers, digital devices, or the internet. These crimes include identity theft, phishing, hacking, online financial fraud, cyberbullying, ransomware attacks, social media scams, data breaches, malware distribution, and unauthorized access to personal information. Such cyber threats not only cause financial losses but also affect the psychological well-being, privacy, and academic life of students. Therefore, awareness of cyber-crime has become an essential component of digital literacy and responsible online behaviour.

Cyber-crime awareness refers to an individual's knowledge, understanding, and ability to identify, prevent, and respond to cyber threats. Students who possess adequate awareness are more likely to use strong passwords, recognize fraudulent emails and websites, safeguard personal information, verify online content, and adopt secure digital practices. In contrast, a lack of awareness increases vulnerability to online fraud and cyber-attacks.

Navsari Municipal Corporation has witnessed a rapid increase in internet connectivity, digital education, online banking, e-governance services, and social media usage among young people. College students residing in both urban and rural areas of the corporation frequently engage with digital platforms for academic activities, communication, and entertainment. However, their exposure to technology, access to cyber security education, and digital experiences may differ according to demographic factors such as gender and residential area. These differences may influence their level of cyber-crime awareness.

Gender-based differences in cyber-crime awareness have been discussed in several studies. Variations in technology usage patterns, confidence in digital environments, and exposure to cyber security education may contribute to differences between male and female students. Similarly, students from urban and rural areas often differ in terms of internet accessibility, technological infrastructure, digital resources, and opportunities for cyber safety training. Examining these variables provides valuable insights into the factors associated with cyber-crime awareness.

The present study, therefore, focuses on a comparative analysis of cyber-crime awareness among college students of Navsari Municipal Corporation with reference to gender (Male and Female) and residential area (Urban and Rural). The findings of the study are expected to assist educators, policymakers, college administrators, and cyber security agencies in designing effective awareness programmes, integrating cyber safety education into higher education, and promoting safe digital practices among college students. Ultimately, improving cyber-crime awareness will contribute to creating a more secure and responsible digital society.

2. College Students and Cyber Crime Awareness

College students are among the most active users of digital technologies and the internet. They rely extensively on smartphones, laptops, and online platforms for education, communication, entertainment, banking, shopping, and social



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networking. This increased dependence on digital services has made them more vulnerable to various forms of cyber-crime, including phishing, identity theft, hacking, online financial fraud, cyberbullying, malware attacks, and social media scams. As a result, cyber-crime awareness has become an essential life skill for college students.

Cyber-crime awareness refers to the knowledge and understanding of online threats, cyber laws, safe internet practices, and preventive measures that help individuals protect themselves in the digital environment. Students with adequate cyber-crime awareness are more likely to create strong passwords, identify suspicious links and fraudulent websites, secure their personal information, and report cyber incidents to the appropriate authorities. On the other hand, a lack of awareness increases the likelihood of becoming victims of cyber-attacks and online fraud.

Educational institutions play a significant role in enhancing cyber-crime awareness by organizing workshops, awareness campaigns, digital literacy programmes, and cyber security training. Developing cyber awareness among college students not only protects them from online threats but also promotes responsible digital citizenship, ethical internet use, and a secure digital society.

3. Recent Conceptualizations of Cyber Crime Awareness

In recent years, the concept of cyber-crime awareness has expanded beyond simply recognizing online threats. It is now viewed as a multidimensional construct that includes knowledge of cyber-crimes, understanding of cybersecurity practices, awareness of cyber laws, digital ethics, privacy protection, and the ability to respond effectively to cyber incidents. As digital technologies continue to evolve, cyber-crime awareness has become an essential component of digital literacy and cyber resilience.

Contemporary researchers emphasize that cyber-crime awareness involves cognitive, behavioural, and attitudinal dimensions. The cognitive dimension refers to knowledge about different forms of cyber-crimes such as phishing, identity theft, ransomware, hacking, cyberbullying, online financial fraud, and data breaches. The behavioural dimension focuses on adopting safe online practices, including creating strong passwords, enabling two-factor authentication, regularly updating software, recognizing suspicious links, and protecting personal information. The attitudinal dimension reflects an individual's willingness to follow cybersecurity guidelines, respect digital ethics, and report cyber incidents to the appropriate authorities.

Recent conceptualizations also highlight the importance of cyber resilience, which refers to an individual's ability to prevent, detect, respond to, and recover from cyber threats. In educational settings, cyber-crime awareness is increasingly linked with digital citizenship, responsible use of technology, critical evaluation of online information, and compliance with national cyber laws and institutional policies.

Researchers further recognize that cyber-crime awareness is influenced by demographic, educational, technological, and socio-economic factors such as gender, residential area, educational background, internet usage patterns, access to digital resources, and prior exposure to cybersecurity training. Consequently, higher educational institutions are encouraged to integrate cybersecurity education into their curricula through awareness programmes, workshops, practical training, and digital literacy initiatives. Such efforts not only reduce students' vulnerability to cyber-crimes but also foster a culture of safe, ethical, and responsible participation in the digital world.

4. The Study's Need and Significance

The increasing use of digital technologies, online learning platforms, social media, internet banking, and e-commerce has significantly exposed college students to various forms of cyber-crime. Despite being frequent internet users, many students lack adequate knowledge of cyber threats, safe online practices, and legal provisions related to cyber security. This situation highlights the need to assess the level of cyber-crime awareness among college students. Understanding differences in awareness based on gender and residential area can help identify vulnerable groups and the factors influencing cyber safety



knowledge. The findings of the present study will provide valuable information to educators, college administrators, policymakers, and cybersecurity professionals for designing effective awareness programmes, digital literacy initiatives, and preventive strategies. Furthermore, the study will contribute to the existing literature on cyber-crime awareness and support the integration of cyber safety education into higher education curricula. Ultimately, enhancing cyber-crime awareness among college students will promote responsible digital behaviour, reduce cyber risks, and contribute to a safer and more secure digital society.

5. Objective of the Study

The following objectives were framed in this study.

1. To study and compare the level of cyber-crime awareness among college students of Navsari Municipal Corporation based on gender (Male and Female).
2. To study and compare the level of cyber-crime awareness among college students of Navsari Municipal Corporation based on residential area (Urban and Rural).

6. Hypotheses of the Study

The following hypotheses were tested in this study.

1. There is no significant difference in the cyber-crime awareness of college students of Navsari Municipal Corporation based on gender (Male and Female).
2. There is no significant difference in the cyber-crime awareness of college students of Navsari Municipal Corporation based on residential area (Urban and Rural).

7. Methodology

7.1 Sample

The present study adopted the descriptive survey method. A total of 300 college students studying in colleges under the jurisdiction of Navsari Municipal Corporation constituted the sample. The sample included both male and female students as well as students from urban and rural residential areas. The respondents were selected using the stratified random sampling technique to ensure adequate representation of each subgroup.

7.2 Tool for Data Collection

Data were collected using the Cyber Crime Awareness Scale developed by Rajasekar. The scale is a standardized instrument designed to assess the level of awareness regarding various aspects of cyber-crime, including cyber threats, cyber laws, online safety practices, digital security, and preventive measures. The tool was selected because of its established reliability and validity for measuring cyber-crime awareness among students.

7.3 Method of Data Collection

The investigator personally visited the selected colleges after obtaining permission from the concerned authorities. The purpose of the study was explained to the participants, and informed consent was obtained before administering the Cyber Crime Awareness Scale. The respondents were assured that their responses would remain confidential and would be used solely for academic research. The completed questionnaires were collected, checked for completeness, and prepared for statistical analysis.

7.4 Statistical Techniques

The collected data were classified, coded, tabulated, and analyzed using appropriate statistical techniques. The following statistical measures were employed:

- Mean



- Standard Deviation (SD)
- Independent Samples *t*-Test

These statistical techniques were used to determine the level of cyber-crime awareness and to examine the significance of differences based on gender (Male/Female) and residential area (Urban/Rural).

8. Analysis and Interpretation of Data

HO-01: There is no significant difference in the cyber-crime awareness of college students of Navsari Municipal Corporation based on gender (Male and Female).

Table- 1

Significant difference in the cyber-crime awareness of college students of Navsari Municipal Corporation based on gender (Male and Female).

Variables	Group	N	Mean	SD	SED	t-Value	Significant Level
Gender	Boys	150	138.46	16.24	1.85	2.21	0.05*
	Girls	150	134.37	15.79			
0.05 = 1.96*, 0.01 = 2.58**							

The calculated t-value (2.21) is greater than the table value at the 0.05 level (1.96) but less than the 0.01 level (2.58). Hence, the difference in cyber-crime awareness between boys and girls is significant at the 0.05 level. Boys obtained a slightly higher mean score (138.46) than girls (134.37), indicating comparatively higher cyber-crime awareness among male college students. Therefore, the null hypothesis stating that there is no significant difference in cyber-crime awareness based on gender is rejected at the 0.05 level of significance.

HO-02: There is no significant difference in the cyber-crime awareness of college students of Navsari Municipal Corporation based on residential area (Urban and Rural).

Table- 2

Significant difference in the cyber-crime awareness of college students of Navsari Municipal Corporation based on residential area (Urban and Rural).

Variables	Group	N	Mean	SD	SED	t-Value	Significant Level
Residential Area	Urban	150	141.82	14.63	1.71	3.74	0.01*
	Rural	150	135.43	14.98			
0.05 = 1.96*, 0.01 = 2.58**							

The calculated t-value (3.74) is greater than the critical value at the 0.01 level (2.58). Therefore, a highly significant difference exists in the cyber-crime awareness of college students based on their residential area. The mean score of urban students (141.82) is higher than that of rural students (135.43), indicating that urban college students possess comparatively greater cyber-crime awareness. Hence, the null hypothesis stating that there is no significant difference in cyber-crime awareness based on residential area is rejected at the 0.01 level of significance.



9. Findings

The findings of the present study are reported below.

1. There was a significant difference in the cyber-crime awareness of college students based on gender. Male students demonstrated a higher level of cyber-crime awareness than female students.
2. There was a highly significant difference in the cyber-crime awareness of college students based on residential area. Urban students exhibited a higher level of cyber-crime awareness than rural students.

10. Recommendations

1. Conduct Regular Cyber Security Awareness Programmes: Colleges should organize workshops, seminars, and training programmes on cyber-crime prevention, cyber laws, online fraud, and safe internet practices to improve students' cyber-crime awareness.
2. Strengthen Digital Literacy in Rural Colleges: Special cyber awareness initiatives should be implemented for students from rural areas by providing practical training, digital literacy programmes, and access to cybersecurity resources.
3. Integrate Cyber Security Education into the Curriculum: Higher education institutions should incorporate cyber safety, digital ethics, privacy protection, and responsible online behaviour into the curriculum to develop informed and cyber-resilient students.

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