



A STUDY ON CYBER CRIME AWARENESS AMONG B.Ed., STUDENTS

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Abstract

The increasing integration of web technologies in everyday life, along with the popularity of social networks and the development of mobile technology, contribute to the creation of an optimal environment for various types of cybercrime and the dissemination of illegal Internet content.

The primary thing for such prevention is undoubtedly education aimed at establishing greater awareness and knowledge regarding illegal Internet content and cybercrime among children and teenagers, as well as parents and educators. As many children have Smartphone's, special attention should be paid to Smartphone's and other mobile devices. Awareness-raising can only be achieved with a combined effort of key stakeholders, which we attempt to achieve through interactive educational modules. The issue of strategic prevention, with emphasis on the fight against cybercrime related to children and teenagers by using education in order to establish greater awareness and increase the knowledge of children and teenagers, as well as parents and educators, regarding illegal Internet content and related activities. This paper is an attempt to provide awareness on cyber crime among B.Ed., students.

Keywords: Cyber crime, B.Ed., students.

Introduction

A **cybercrime** is a crime that involves a computer or a computer network. The computer may have been used in committing the crime, or it may be the target. Cybercrime may harm someone's security or finances. Computer crime mainly consists of unauthorized access to computer systems data alteration, data destruction, theft of intellectual property. Cyber crime in the context of national security may involve activism, traditional espionage, or information warfare and related activities. Most cybercrime is committed by cybercriminals or hackers who want to make money. However, occasionally cybercrime aims to damage computers or networks for reasons other than profit.

There are many privacy concerns surrounding cybercrime when confidential information is intercepted or disclosed, lawfully or otherwise. Internationally, both governmental and non-state actors engage in cybercrimes, including espionage, financial theft, and other cross-border crimes. Cybercrimes crossing international borders and involving the actions of at least one nation-state are sometimes referred to as cyber warfare. Warren Buffett describes cybercrime as the "number one problem with mankind" and said that cybercrime "poses real risks to humanity."

Review of related literature

Singh (2013) conducted a study on "To analyze cyber crime awareness of class XII students" of district Bathinda, Punjab. The main objective of the study was to compare the cyber crime awareness of XII class students in relation to their sex and stream. Descriptive and survey method would be used for measuring of

cyber awareness XII students. A sample of 60 students is selected randomly. Mean and Standard deviation is used for data analysis. The finding of the study shows that the gender of class XII students does not cause significant difference in respect of cyber crime awareness. The stream Arts as well as Science of class XII students does not play significant role in respect of cyber crime awareness

Goel (2014) conducted a study on awareness among 120 B.Ed students of Sonipat district based on gender difference, stream whether arts or science and area of living i.e., rural and urban areas. The results of this study concluded that cyber crime awareness is not affected by gender but is affected by streams and area.

Prabhu (2015) conducted a study to investigate the cyber crime awareness and concluded that there is no significant difference towards cyber-crime awareness among students on the basis of stream

Senthilkumar and Easwaramoorthy (2017) conducted a survey on "Cyber Security awareness among college students in Tamil Nadu". In this survey an online questionnaire is used as a tool for data collection. Overall cyber security awareness among the students is analyzed by considering different security issues such as email phishing, password strength, malicious codes and pop up windows. It was found that the cyber security awareness among college students in Tamil Nadu is measured as 69.45% comprising of 38.6% male and 30.85% female.

Definition

Cyber crime

Warren Buffett (2021) describes cybercrime as the "number one problem with mankind" and said that cybercrime "poses real risks to humanity."

Operational definition

Cyber crime

Cyber crime is criminal activity that either targets or uses a computer, a computer network or a networked device.

B.Ed., students

Students doing Bachelors in Education (I & II year) after finishing any degree in Arts or Science in any reputed colleges or Universities in a regular mode.

OBJECTIVES

- To find out the level of cyber crime awareness among B.Ed., students
- To find out whether there is any significant difference between male and female B.Ed., students in respect of cyber crime awareness
- To find out whether there is any significant difference among the sub-sample optional subject in respect of cyber crime awareness among B.Ed., students
- To find out the relationship if any among the sub-sample (optional subject) of B.Ed., students in respect of cyber crime awareness.

NULL HYPOTHESES

- The level of internet usage among B.Ed., students is low.
- There is no significant difference between male and female B.Ed., students in respect of cyber crime awareness.
- There is no significant difference among the sub-sample optional subject in respect of cyber crime awareness among B.Ed., students .
- There is no significant relationship among the sub-sample (optional subject) of B.Ed., students in respect of cyber crime awareness.

TOOL USED IN THE STUDY

- The cyber crime awareness scale constructed and validated by the investigator and his guide (2022)

Item Analysis

Cyber crime awareness scale

The investigator has constructed and standardized a test to measure the awareness in cyber crime among B.Ed., students. Awareness in cyber crime Scale is being measured by both experimental method and survey method. To develop the test in the beginning stage the investigator referred various books, journals and consulted various field experts like higher secondary and college computer science teachers.

A questionnaire for pilot study consisting of 92 statements was prepared. This was administered to a sample of 150 B.Ed., students. The respondents were requested to answer each item in terms of their agreement or disagreement by putting a tick mark in any one of the five columns, strongly agree, agree, undecided, disagree and strongly disagree. The answer sheets were then collected and scoring was done. For scoring the questionnaire, a score of 5, 4, 3, 2, and 1 was given to category SA, A U, D, and SD for a positive statement and a score of I, 2, 3, 4, and 5 was given to the category SA, A, U, D and SD for a negative statement.

The total score obtained for each respondent was calculated and the response sheets were arranged in the order of descending order of total scores. Then the highest 27 percent and the lowest 27 percent were taken out for analysis. For the final study, through item analysis 73 items were selected. In this, 21 items were negative and the remaining 52 items were positive.

Reliability

The reliability of the cyber crime awareness scale was established by the split-half method using Pearson's product moment correlation. This only gives the reliability of the half scale and hence the coefficient of the reliability of the full scale was determined by using the Spearman brown prophecy formula and was found to be 0.76 which is high and therefore the scale is reliable.

Validity

The Cyber crime awareness scale has construct validity as items were selected having the 't' values equal to or greater than 1.75 (Edwards, 1975). Its intrinsic validity was found to be 0.87 and hence the scale is valid.

METHOD

Simple random sampling techniques were used to collect data from various B.Ed., students of universities, aided colleges and affiliated colleges of Tamil Nadu Teacher Education University (TNTEU). The sample consists of 766 B.Ed., I & II year students.

Hypothesis : 1

The level of Cyber crime awareness among B.Ed., students is low.

Table : 1

MEAN AND STANDARD DEVIATION OF CYBER CRIME AWARENESS AMONG B.Ed., STUDENTS

Variable	N	Mean	S.D	M+1 σ	M-1 σ	Level
Cyber crime awareness among B.Ed., students	766	332.6	28.35	360.95	304.25	Average

It is clear from the table 1, that the Cyber crime awareness among B.Ed., students, mean and standard deviation scores are found to be 332.6 and 28.35 respectively. The mean value lies between 304 and 361. Hence it is concluded that the Cyber crime awareness among B.Ed., students is average.

Null Hypothesis : 2

There is no significant difference between male and female B.Ed., students in respect of Cyber crime awareness.

Table : 2
MEAN DIFFERENCE BETWEEN MALE AND FEMALE B.Ed., STUDENTS IN CYBER CRIME AWARENESS

Variable	Gender	N	Mean	Standard deviation	t- value	Significant at 0.05/0.01 level
Cyber crime awareness among B.Ed., students	Male	345	324.3	29.3	2.21	Significant
	Female	421	345.8	34.1		

In order to find out the significant difference between the mean scores of male and female B.Ed., students in respect of Cyber crime awareness; mean, standard deviation and 't' scores were computed.

The obtained value of mean and standard deviation of male B.Ed., students awareness in cyber crime are 324.3, 29.3 and female B.Ed., students awareness in cyber crime are 345.8 and 34.1. The obtained 't' value is 2.21 which is greater than 1.64. It is significant at both 0.05 and 0.01 level.

From the table 2, it can be concluded that there is significant difference in the mean scores of male and female B.Ed., students in respect of awareness in cyber crime. So, the null hypothesis No.2 is rejected.

Null Hypothesis : 3

There is no significant difference among the sub-sample optional subject in respect of Cyber crime awareness among B.Ed., students

Hypothesis : 3(a)

There is no significant difference between arts and science (optional subject) of B.Ed., students in respect of Cyber crime awareness

Table : 3

MEAN DIFFERENCE BETWEEN ARTS AND SCIENCE (OPTIONAL SUBJECT) IN CYBER CRIME AWARENESS AMONG B.Ed., STUDENTS

Variable	Optional subject	N	Mean	Standard deviation	t- value	Significant at 0.05/0.01 level
Cyber crime awareness among B.Ed., students	Arts	196	298.3	29.6	1.45	Not Significant
	Science	303	334.4	38.4		

The obtained value of mean and standard deviation of arts B.Ed., students awareness in cyber crime are 298.3, 29.6 and science B.Ed., students awareness in cyber crime are 334.4 and 38.4. The obtained 't' value is 1.45 which is less than 1.64. It is not significant at both 0.05 and 0.01 level.

From the table 3, it can be concluded that there is no significant difference in the mean scores of arts and science B.Ed., students in respect of awareness in cyber crime. So, the null hypothesis No.3(a) is retained.

Null Hypothesis :3(b)

There is no significant difference between science and language (Optional subject) of B.Ed., students in respect of Cyber crime awareness.

Table : 4

MEAN DIFFERENCE BETWEEN SCIENCE AND LANGUAGE (OPTIONAL SUBJECT) IN CYBER CRIME AWARENESS AMONG B.Ed., STUDENTS

Variable	Optional subject	N	Mean	Standard deviation	t-value	Significant at 0.05/0.01 level
Cyber crime awareness among B.Ed., students	Science	303	334.4	38.4	2.87	Significant
	Language	267	306.1	26.8		

The obtained value of mean and standard deviation of science B.Ed., students awareness in cyber crime are 334.4 , 38.4 and language B.Ed., students awareness in cyber crime are 306.1 and 26.8. The obtained 't' value is 2.87 which is greater than 1.64. It is significant at both 0.05 and 0.01 level.

From the table 4, it can be concluded that there is significant difference in the mean scores of science and language B.Ed., students in respect of awareness in cyber crime. So, the null hypothesis No.3(b) is rejected.

Null Hypothesis : 3(c)

There is no significant difference between arts and language (Optional subject) in respect of Cyber crime awareness among B.Ed., students

Table : 5

MEAN DIFFERENCE BETWEEN ARTS AND LANGUAGE (OPTIONAL SUBJECT) IN CYBER CRIME AWARENESS AMONG OF B.Ed., STUDENTS

Variable	Optional subject	N	Mean	Standard deviation	t-value	Significant at 0.05/0.01 level
Cyber crime awareness among B.Ed., students	Arts	196	298.3	29.6	1.56	Not Significant
	Language	267	306.1	26.8		

The obtained value of mean and standard deviation of arts B.Ed., students awareness in cyber crime are 298.3 , 29.6 and language B.Ed., students awareness in cyber crime are 306.1 and 26.8. The obtained 't' value is 1.56 which is less than 1.64. It is not significant at both 0.05 and 0.01 level.

From the table 5, it can be concluded that there is no significant difference in the mean scores of science and language B.Ed., students in respect of awareness in cyber crime. So, the null hypothesis No.3(c) is retained.

Null Hypothesis : 4

There is no significant relationship among the sub-sample (Optional subject) of B.Ed., students in respect of Cyber crime awareness

Table : 6

RELATIONSHIP AMONG THE SUB-SAMPLE (OPTIONAL SUBJECT) OF B.ED., STUDENTS IN RESPECT OF CYBER CRIME AWARENESS

Sub- sample		No. of students	r-value	Level of significance
OPTIONAL SUBJECT	Arts	196	0.87	S
	Science	303		
	Science	303	0.42	NS
	Language	267		
	Arts	196	0.81	S
	Language	267		

The Pearson's product –moment correlation was computed to find the relation in respect of the Cyber crime awareness among B.Ed., students. It is found that the obtained correlation values of the sub- sample (arts with science, and arts with language) have significant relation. Also it is found that the sub-sample (science with language) has no significant relation.

Results

- The Cyber crime awareness among B.Ed., students is average.
- There is significant difference between male and female B.Ed., students in respect of Cyber crime awareness.
- There is no significant difference between arts and science (optional subject) of B.Ed., students in respect of Cyber crime awareness.
- There is significant difference between science and language (Optional subject) of B.Ed., students in respect of Cyber crime awareness.
- There is no significant difference between arts and language (Optional subject) in respect of Cyber crime awareness among B.Ed., students.
- The obtained correlation values of the sub- sample (arts with science, and arts with language) have significant relation. Also it is found that the sub-sample (arts with language) has no significant relation.

Discussion

Prabhu (2015) conducted a study to investigate the cyber crime awareness and found that the awareness about cybercrime of female students was better than their male counterpart.

Kumaravelu (2018) conducted a study on 327 B.Ed., Teacher Trainees from two colleges of education in Puducherry. Cyber crime awareness scale by Rajasekar (2010) was used for data collection. Result of the study revealed that cyber crime awareness of male B.Ed. teacher trainees was significantly better as compared to female B.Ed. teacher trainees

This result is as same as the above findings.

Singh (2013) conducted a study on “To analyze cyber crime awareness of class XII students” of district Bathinda, Punjab. The main objective of the study was to compare the cyber crime awareness of XII class students in relation to their sex and stream. Descriptive and survey method would be used for measuring of cyber awareness XII students. A sample of 60 students is selected randomly. Mean and Standard deviation is used for data analysis. The finding of the study shows that the gender of class XII students does not cause significant difference in respect of cyber crime awareness. The stream Arts as well as Science of class XII students does not play significant role in respect of cyber crime awareness

CONCLUSION

Preliminary research displayed a need for additional education regarding the dangers of cybercrime and the importance of information safety for all target groups. In order to successfully address the issue of cybercrime, it is important to implement successful preventive techniques in all target groups. Therefore, we concluded that continuous education plays an important role in raising the awareness of all users and in encouraging them to implement preventive techniques in everyday life. As these B.Ed. student teachers prepare to join the teaching profession, creating cybercrime awareness among them would aid in the development of cybercrime awareness among students.

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