# A Study on Awareness of Cybercrime among Teacher Trainees in Addalaichenai Government Teachers' College

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## **Abstract**

Cybercrime is on the increase everywhere in the world. A large number of people have become victims of the cyber crimes. The awareness among teachers will be an effort to control the crimes and protect the student populace. The present study was conducted to investigate cyber crime awareness among teacher trainees studying at Government Teachers College, Addalaichenai. A normative survey method was adopted on a sample of 200 teacher trainees selected by stratified random sampling technique. The data were collected by using Cybercrime Awareness Scale and Personal Information Schedule. The major findings of the study have revealed that there exists significant differences in cyber crime awareness among teacher trainees with respect to gender, locality, knowledge of computer, and having own computer.

Keywords: Cybercrime; Awareness.

### Introduction

Cybercrime is one of the fastest growing areas of crime. Crimes are perpetrated not merely through the means of connectivity alone but also through other software programs and applications that are available for use in transaction and human interaction, such as electronic mail and instant messaging services, audio-visual conferencing programs and file transfer facilities (Rajeswari and Saravanakumar, 2013). More and more criminals are exploiting the speed, convenience and anonymity that modern technologies offer in order to commit a diverse range of criminal activities. These include attacks against computer data and systems, identity theft, the distribution of child pornography, terrorism and the internet auction fraud, the penetration of online financial services, as well as the deployment of viruses, and various email scams such as phishing, spoofing (Bala Josephine and Sudharson, 2017). The criminal activities committed through the use of electronic communications media include hacking, denial of

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service attacks, unauthorized use of services and cyber vandalism. One of the greatest concerns is with regard to cyber-fraud and identity theft through such methods as phishing, pharming, spoofing and through the abuse of online surveillance technology. There are also many other forms of criminal behavior perpetrated through the use of information technology such as harassment, defamation, pornography, cyber terrorism, industrial espionage and some regulatory offences (*Ibid*).

## The need of the Study

The cybercrime rate has increased in the world unprecedently. A large number of people have become victims. The main reason for falling victim is, among the other things, lack of awareness about cybercrime and cyber security.

Nowadays, teachers are mostly using technologies for the purpose of teaching learning process. They need to be contacted with the facilities of Information Communication Technology, particularly the use of the Internet. The teachers who interact through the Internet can be one the victims of the cybercrime due to lack of awareness.

A large number of student populations have contact with teachers. Most of these students are nowadays using the Internet for various purposes. The education about the crime in the Internet should be provided by the teachers. The awareness of cybercrime among

teachers might help the students know about the cybercrimes.

The teacher trainees who are studying at the college need to study a subject of ICT. However, the areas like cybercrime and cyber security are not generally taught. Assessing the awareness of teacher trainees will help the policy designer and curriculum designer for teacher education revise their syllabus on ICT and other subjects taking into account of the security in working in the Internet.

The review of related literature revealed there are no researches found to assess the awareness of teacher trainees studying at teachers colleges. Hence this study is planned to bridge this gap.

*Objectives of the Study* 

- 1. To find out the level of awareness of cybercrime among teacher trainees
- To find out whether there is any significant difference in cyber crime awareness of teacher trainees based on gender, locality, knowledge of computer, and having own computer.

## Methodology

In this study, a normative survey method was adopted.

Population of the Study

The population of the study constitutes all the teacher trainees studying at Government Teachers College, Addalaichenai.

*Sample of the Study* 

A sample of 200 teacher trainees following two years in-service teacher training at Government Teachers College, Addalaichenai was selected by using stratified random sampling technique. The strata for the selection were gender, locality, knowledge of computer and possession of computer

*Tools for the Study* 

The following tools were used for collecting the necessary data for the study

1. *Cybercrime Awareness Scale:* To measure cyber crime awareness of the sample, Cybercrime Awareness

Scale, the tool developed by Prof. Prema (2010) was used. This Scale consists of 15 items in a five point Likert Scale. Author of the Scale claimed that the instrument has good reliability and it was estimated and reported to be as  $\acute{a}=0.93$  and test retest reliability 0.84. The author also claimed the Scale has validity.

2. Personal Information Schedule: The demographic data such as sex, locality, knowledge of computer, and possession of computer of the participants were collected using Personal Information Schedule.

Procedure

The investigator requested their consent after explaining the objective, nature and method of study. After obtaining the participants informed consent, the research instruments were distributed among them. After completion, the instruments were collected back and checked for incomplete or omission. Then the instruments were scored as per the scoring scheme and entered in to a spread sheet for statistical analysis.

## **Results and Discussion**

The data collected by using the tools were calculated and tabulated in the following tables. Mean, Standard Deviation, and t value were calculated and the results are presented in Table 1.

From the Table 1, it can be seen that 60 per cent of teacher trainees have low level of awareness, 29 per cent of teacher trainees have average level of awareness and 11 per cent of teacher trainees have high level of awareness.

Differences in Awareness of Cybercrime Teacher among Trainees in terms of Gender

It is found from the Table 2 that the 't' value calculated for the sample with respect to their gender is 5.7. It is found to be more than the table value obtained. This shows there exists significant difference in respect to gender in awareness of cyber crime among teacher trainees. The mean score of male teacher trainees is higher than the female teacher trainees have more awareness about cyber crime than the female teacher trainees.

Table 1: Level of Awareness of Cybercrime among Teacher Trainees

Level of Awareness of Cyber Crime	Range of Scores	Number of Teacher Trainees	Percentage	
Low	8 -28	120	60	
Average	29 -49	58	29	
High	50 -69	22	11	

	N	Mean	SD	t-value	Level of Significance
Male Female	80 120	27.23 26.39	9.44 8.73	5.7	Significant at 0.01
Rural Urban	142 58	24.80 28.82	11.89 8.33	3.6	Significant at 0.01
Yes No	122 78	23.79 28.98	7.92 6.07	2.9	Significant at 0.01
Yes No	90 110	24.96 29.09	8.40 8.10	3.7	Significant at 0.01
	Female Rural Urban Yes No Yes	Male   80     Female   120     Rural   142     Urban   58     Yes   122     No   78     Yes   90	Male Female 80 27.23   Female 120 26.39   Rural 142 24.80   Urban 58 28.82   Yes 122 23.79   No 78 28.98   Yes 90 24.96	Male Female 80 27.23 9.44   Female 120 26.39 8.73   Rural 142 24.80 11.89   Urban 58 28.82 8.33   Yes 122 23.79 7.92   No 78 28.98 6.07   Yes 90 24.96 8.40	Male Female 80 27.23 9.44 5.7   Female 120 26.39 8.73   Rural 142 24.80 11.89 3.6 Urban 58 28.82 8.33 3.6 3.3   Yes 122 23.79 7.92 2.9 No 78 28.98 6.07 2.9 6.07   Yes 90 24.96 8.40 3.7

Table 2: Differences in Awareness of Cyber Crime Teacher among Trainees in terms of Gender, Locality, Knowledge of Computer, Possession of Own Computer

This result endorses the findings of previous similar studies done. Vipul (2009) investigated about cyber bullying. They found that the male students were the victims of cyber bullying at least once in their lifetime and more cyber bullying behavior than females.

Differences in Awareness of Cybercrime Teacher among Trainees in terms of Locality

It is also found from the table 2 that the 't' value calculated for the sample with respect to their locality is 3.6. This value is found to be more than the table value obtained. This shows there exists significant difference in respect to locality in awareness of cyber crime among teacher trainees. The mean score of urban teacher trainees is higher than the rural teacher trainees. Hence, it is inferred that urban teacher trainees have more awareness about cyber crime than the rural teacher trainees

From the table 2, the 't' value calculated for the sample with respect to their qualification is 0.6. This value is found to be less than the table value obtained. This shows there is no significant difference in respect to qualification in awareness of cyber crime among teacher trainees. But, the mean score of degree holding teacher trainees is slightly higher than that of the teacher trainees with GCE (A/L).

Differences in Awareness of Cybercrime Teacher among Trainees in terms of Their Knowledge of Computer

It is found from the table 2 that the 't' value calculated for the sample with respect to their computer knowledge is 2.9. This value is found to be more than the table value obtained. This shows there exists significant difference in respect to computer knowledge in awareness of cyber crime among teacher trainees. The mean score of teacher trainees with computer knowledge is higher than that of the teacher trainees without computer knowledge. Hence, it is inferred that the teacher trainees with computer

knowledge have more awareness about cybercrime than the teacher trainees without computer knowledge

Differences in Awareness of Cybercrime Teacher among Trainees in terms of Possession of Own Computer

It is found from the table 2 that the 't' value calculated for the sample with respect to their owing computer is 3.7. This value is found to be more than the table value obtained. This shows there exists significant difference in respect to owing computer in awareness of cyber crime among teacher trainees. The mean score of the teacher trainees who own computer is higher than the teacher trainees without their own computer. Hence, it is inferred that the teacher trainees having computer on their own have more awareness about cyber crime than the teacher trainees without owing computer.

## Discussion

The present study reveals that there exist gender differences regarding cybercrime awareness, among females found to be better than male students, exhibit that females may better in general information such as daily life forgery observations through newspapers, television news and other advanced technology concepts (Jazeel, 2017). Urban students were significantly higher in cybercrime awareness due to the fact that they might have got more opportunities in utilizing the advanced technology developments effectively, and would have educated on cyber crime through various sources which create awareness among them than rural students (Rajeswari, and Saravanakumar, 2013). Students' knowledge of computers and who acquired own computers found to be superior in cyber crime awareness, which advocated students to be cautious in computer crimes, hardware and software procedures knowledge.

Government aided and self-financing college students showed significantly higher performance in cybercrime awareness, it might be due to the fact that they would get chance to attend awareness programs and workshops on cyber crimes. These findings create awareness among teachers, teacher educators, college administrators, research workers, and curriculum developers to groom on awareness fairs, cyber crime awareness exhibitions, debates, workshops and use of different models in teaching to foster cyber crime awareness among students to maximize the individuals' potential in the advancement of computer science.

### Conclusion

It is concluded from the analysis of results that most of the teacher trainees have low level of awareness about cybercrime. This show there needs workshops incorporated in the curriculum for educating about cybercrime and cyber security. From the analyses, it was also concluded there are significant differences in the awareness of cybercrime in terms of gender, locality and possession their own computer. However, it was found that there is no difference in the awareness among the teacher trainees

in terms of their qualification. As in the case of teachers, the awareness about cybercrime is very important since they educate students in different aspect of life.

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