

# Cybercrime Awareness among B.Ed. Teacher Trainees

## Abstract

The present study was carried out with the objective to investigate the gender and locality differences among Teacher Trainees on cybercrime awareness. The study was carried out on 80 B.Ed. Teacher Trainees out of which 40 were from rural area and 40 from urban area. The sample consisted of Teacher Trainees from B.Ed. colleges in region Jammu (J&K). Cybercrime awareness scale constructed and validated by Rajasekar S. (2011) was administered to the selected sample. The obtained data were analyzed by using mean, S.D. and t-test. Analysis of the results revealed, insignificant role of gender and significant role of locality in Cybercrime awareness among B.Ed. Teacher Trainees.

**Keywords:** Cybercrime Awareness, Gender, Urban, Rural and B.Ed. Teacher Trainees.



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## Introduction

Crime is a social and economic phenomenon and is as old as the human society. It is the legal concept and has the sanction of law. In today's world cyber offence is emerging as a serious menace. The Encyclopedia Britannica defines "cyber crime" as any offence that is committed by agencies of particular cognition or expert usage of computing machine engineering. Dr. Debarati Halder and Dr. K. Jaishaker define cyber crimes as "Offences that are committed against individuals or groups of individuals with a criminal motive to intentionally harm the reputation of the victim or cause physical or mental harm or loss, to the victim directly or indirectly, using modern telecommunication networks such as internet (chat rooms, emails, notice boards and groups) and mobile phones (SMS/MMS)". From the above definitions, cyber offence can be generally defined as the unlawful acts wherein the computing machine is either a tool or mark or both. With 70 % of the world's total population projected to have access to the internet by 2017, compared to 33% in 2011, the human factor still remains the weakest link in Cyberspace (UNODC, 2013). With the increase in usage and access of internet to the people, the criminal activities on the internet are also on the rise. The cybercrime is the latest and one of the most complicated problems in the cyber world. Cyber crime victimizes both the person as well as the computer. Criminals are taking advantage of the fast speed and the convenience provided by the internet to perform large and different criminal activities. Cyber crime can be categorized as the crime against individual, property or the government, in the form of information theft, hacking, virus, Trojan attack, Defamation, Cyber Stalking, Spoofing, stealing money while transactions etc (Aggarwal, 2015). The impact of cybercrime, however, goes beyond financial detriment; researchers found that victims often experience symptoms similar to those of post-traumatic stress disorder (PTSD). Others have found a high risk of secondary victimization among people close to victims (Kirwan and Power, 2011).

## Review of Literature

Saroj Mehta and Vikram Singh (2013) concluded that the increased dependence of people and organizations on cyberspace has resulted in to a parallel boost in the cybercrimes. Over time studies have highlighted the fact that common man has inadequate understanding or knowledge about the crimes which take place in the cyber world (Brenner, 2010). Hence, Knowledge is imperative for one and all to prevent cybercrime (Wang et al., 2008). Asokhia (2010) found that the level of education contributes considerably in the differences in students' perceptions of cybercrime. Knowledge helps people to be more aware or conscious on cybercrime (Levin et al., 2008). Further studies have shown

that people are more likely to divulge their personal and confidential information in less formal settings, such as casual conversation or on social networks (John et al, 2011). E-frauds and identity thefts have caused financial loss all over the world and is a challenge for the country's infrastructure and security at large. (Heuven and Botterman, 2003), (Kraut et al., 1998). It has been found that sometimes even with understanding of security risks, individuals are still prone to take risks, they are unrealistically optimistic, to believe that negative events are less possible to occur to them (Campbell, 2007), they are unable to perceive any immediate negative consequences, or they make a convenience-security trade-off (Tam et al., 2010). Under the Lifestyle Theory, sex or gender is considered important demographic characteristic that is associated with distinction in lifestyle (Ngo and Paternoster, 2011). Research has shown that there are different perceptions and awareness between men and women (Li, 2006). Titi (2003) found women to be extra conscious of cyber regulations and to have better ethical values as compared to the men. He also found that women are less liable to become victims as compared to men. S. Rajasekar (2010) found gender, area and stream to be determinants of cyber awareness in the B.Ed. students. The B.Ed. students show high awareness on cyber crime and female students showed more awareness on cyber crime than male students. Also urban students show more awareness on cyber crime than the rural counterparts. The B.Ed. students belong to science subjects show high awareness of cyber crime than those belongs to arts subjects. Coupled with lack of proper training and education, the low level of awareness of the Indian society about the cybercrime has resulted into a spurt of cybercrimes. Singaravelu and Pillai (2014) found that the majority of B.Ed. students are in low level of awareness on cyber forums. Goel (2014) found area and stream to have positive significant affect on cyber awareness among B.Ed. students, and not of Gender. Malhotra and Malhotra (2017) conducted a study on 240 teacher trainees and found that most of the teacher trainees have comparatively moderate awareness level of cybercrime and there is significant effect of gender and locality on their level of cyber crime awareness.

Based on the review of above literatures it is anticipated that gender and locality too have significant influences on cybercrime.

### Operational Definition

Cybercrime: "Any criminal offence committed against or with the help of a computer network is identified as cybercrime" (Council of Europe Convention on Cybercrime 2001).

### Teacher Trainees

The term teacher trainees' in the present study refers to the pupil teachers of the B.Ed. Course.

### Objectives of the Study

1. To study the Cybercrime awareness among the boys and girls teacher trainees.
2. To study the Cybercrime awareness among the rural and urban teacher trainees.

### Hypotheses

1. There is positive significant difference towards Cybercrime Awareness among boys and girls Teacher Trainees.
2. There is positive significant difference towards Cybercrime Awareness among rural and urban Teacher Trainees.

### Methodology

#### Sample

A total no. 80 teacher trainee participated in the study, out of which 40 were from rural area (20 males & 20 females) and 40 were from urban area (20 males & 20 females). The participants were taken from two B.Ed. colleges in the Jammu region.

#### Tool

Cybercrime awareness scale constructed and validated by Rajasekar S (2011) has been used in the present study. This scale consists of 36 statements; some were positive and some otherwise. Each statement have five options, namely "Strongly Agree", "Agree", "Undecided", "Disagree", "Strongly Disagree". The responses of the subjects were scored by assigning numerical values or arbitrary weights to the two set of items as the statements showing positive and the statements showing negative. The positive statements having the scoring as 5,4,3,2 and 1 and for the responses from "strongly agree" to "strongly disagree" and it has been reversed for the negative statements i.e., 1,2,3,4 and 5 for the responses "strongly agree" to "strongly disagree". Also there are 21 positive statements and the statements are 1,2,4,6,7,9,11,12,14,17, 18,20,21,23, 24,26,27,29,30,34 and 36. Also there are 15 negative statements and the statements are 3,5, 8, 10,13,15,16,19,22,25,28,31,32,33 and 35. An individual score is the sum of all the scores of the 36 items. The score ranges from 36 to 180. The maximum score that one can get in this is 180. The person who scores above 36 up to 98 is said to have low level of cyber crime awareness, one who scores above 99 up to 107 is said to have below average level of cyber crime awareness, and one who scores above 108 up to 122 is said to have average level of cyber crime awareness, one who scores above 123 up to 132 is said to have above average level of cyber crime awareness, one who scores above 133 up to 142 is said to have high level of cyber crime awareness, one who scores above 143 up to 180 is said to have excellent level of cyber crime awareness.

### Procedure

After taking permission from head of the concerned colleges, the participants were approached. All participants completed the Cybercrime awareness scale. A letter describing the overall purpose of study, how data would be utilized and other test taker privileges and rights accompanied the scale. The letter provided participants the opportunity to request information pertaining to the results of the study. The data was collected using the purposive Sampling.

### Result and Discussion

The present study has been done to study the cyber awareness among male and female teacher

trainees and also rural and urban teacher trainees. Test of significance (t-test) was used to calculate the differences (if any) between two groups i.e., between teacher trainees belonging from rural and urban area and between male and female teacher trainees. All the calculations were done manually and were repeated 2 times to ensure the reliability of the results obtained.

Table - 1 shows that mean score of boys is 123.00 and of girls is 131.575 while SD is 9.153 and 9.491. The Results revealed that there is no significant difference between male and female in awareness about cybercrime. However the mean score of girls is more than boys.

**Table 1: t-ratio for the Significance of Difference in Boys and Girls, Teacher Trainees in Cybercrime Awareness**

Teacher Trainees	No. of Teacher Trainees	Mean	S.D.	t – Ratio	Significant/ Not Significant
Boys	40	123.00	9.153	-4.113	Not Significant
Girls	40	131.575	9.491		

Table - 2 shows that the mean score of rural teacher trainees is 113.150 and of urban teacher trainees is 136.975, with S.D. of 15.755 and 9.4121. The results revealed that there is significant difference

between the rural and urban teacher trainees in the awareness regarding cybercrime (S. Rajasekar, 2010).

**Table 2: t-ratio for The Significance of Difference in Rural and Urban Teacher Trainees in Cybercrime Awareness**

Teacher Trainees	No. of Teacher Trainees	Mean	S.D.	t – Ratio	Significant/ Not Significant
Rural	40	113.150	15.755	7.866	Significant
Urban	40	136.975	9.4121		

It is to be noted that boys as well as girls on average fell under the above average awareness regarding cybercrime. On the other hand, rural teacher trainees fell under average awareness while urban teacher trainees were found to have high cybercrime awareness. The group of boys and girls show difference in the means, but it's not significant enough. It is the need of today's world to have awareness about the crimes that are linked with the internet (Wang et al., 2008). It is the duty of one and all to be aware of the basic internet security like changing the passwords regularly, keeping long passwords, avoids disclosing personal information to strangers on the internet or entering credit card details on unsecured websites to avoid any fraud etc. It has been rightly said that "Prevention is better than cure" so it is always better to take certain precautions while operating the internet. Certain steps should be taken to raise public awareness of cyber security risks, to adjust people's perception and subsequently their behavior towards privacy.

**Conclusion**

The hypothesis, positive significant difference towards Cybercrime among boys and girls teacher trainees, is rejected and, positive significant difference between rural and urban teacher trainees is accepted as the study showed difference in the cybercrime awareness in these two groups. Hence locality was found to be determinant in level of cybercrime awareness in B.Ed. teacher trainees and gender did not.

**Further Suggestions**

1. This study can be applied on a large sample of young adults or teacher trainees or teachers of government and private schools.
2. The study can be applied on a large sample of teacher trainees of rural and urban localities.

3. The study can be done on the teacher trainees of different educational streams.

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