Awareness among B.Ed teacher training towards Cyber-crime-A Study

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Abstract

The present study aims to find out the Cyber Crime Awareness among B.Ed. Teacher Trainees. For this purpose a sample of 120 B.Ed students was selected from Sonipat district. The data was collected by Cyber Crime Awareness Scale (CCAS-RS) developed by Dr. S. Rajasekar. The study reveals that there is no significant difference towards cyber-crime awareness among boys and girls. There is no significant difference towards cyber-crime awareness among rural boys and girls. There is significant difference towards cyber-crime awareness among urban boys and girls, science and art boys and science and art girls. The result shows that awareness towards cyber-crime is not significantly affected by Gender, whether it is male or female but it is significantly affected by area, whether it is rural or urban and stream, whether it is science or art.

Keywords: Cyber crime, teachers awareness

Introduction

Internet, though offers great benefit to society, also present opportunities for crime using new and highly sophisticated technology tools. Today e-mail and websites have become the preferred means of communication. Organizations provide Internet access to their staff. By their very nature, they facilitate almost instant exchange and dissemination of data, images and variety of material. This includes not only educational and informative material but also information that might be undesirable or anti-social. Regular stories featured in the media on computer crime include topics covering hacking to viruses, sometimes accurately portraying events, sometimes misconceiving the role of technology in such activities. Increase in cyber crime rate has been documented in the news media. Both the increase in the incidence of criminal activity and the possible emergence of new varieties of criminal activity pose challenges for legal systems, as well as for law enforcement.
Cyber space is a collective noun for the diverse range of environments that have arisen using the Internet and the various services. The expression crime is defined as an act, which subjects the doer to legal punishment or any offence against morality, social order or any unjust or shameful act. The “offence” is defined in the Code of Criminal Procedure to mean as an act or omission made punishable by any law for the time being in force.

Cybercrime also called computer crime, the use of a computer as an instrument to further illegal ends, such as committing fraud, trafficking in child pornography and intellectual property, stealing identities, or violating privacy. Cybercrime, especially through the internet, has grown in importance as the computer has become central to commerce, entertainment, and government. By the 21st century, though, hardly a hamlet remained anywhere in the world that had not been touched by cybercrime of one sort or another.

Cyber crime is a term used to broadly describe criminal activity in which computers or computer networks are a tool, a target, or a place of criminal activity and include everything from electronic cracking to denial of service attacks. It is also used to include traditional crimes in which computers or networks are used to enable the illicit activity.

Cyber crime mainly consists of unauthorized access to computer systems data alteration, data destruction, theft of intellectual properly. Cyber crime in the context of national security may involve hacktivism, traditional espionage, or information warfare and related activities.

“Cybercrime” has been used to describe a wide range of offences, including offences against computer data and systems (such as “hacking”), computer-related forgery and fraud (such as “phishing”), content offences (such as disseminating child pornography), and copyright offences (such as the dissemination of pirated content).

Most cybercrime is an attack on information about individuals, corporations, or governments. Although the attacks do not take place on a physical body, they do take place on the personal or corporate virtual body, which is the set of informational attributes that define people and institutions on the internet.

Cybercrime ranges across a spectrum of activities. At one end are crimes that involve fundamental breaches of personal or corporate privacy, such as assaults on the integrity of information held in digital depositories and the use of illegally obtained digital information to blackmail a firm or individual. Also at this end of the spectrum is the growing crime of identity theft. S. Rajasekar (2010) found that the B.Ed. students show high awareness on cyber crime and especially female students show 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. Saroj Mehta and Vikram Singh (2013) concluded that the increased reliance of individuals/organizations on cyberspace has resulted in to a corresponding increase in the cybercrimes. 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. At times, even the law enforcement officers do not have proper training and other requisite expertise for tackling cybercrime.
Need and Significance of Study

Internet, though offers great benefit to society, also present opportunities for crime using new and highly sophisticated technology tools. Today e-mail and websites have become the preferred means of communication. Organizations provide Internet access to their staff. By their very nature, they facilitate almost instant exchange and dissemination of data, images and variety of material. This includes not only educational and informative material but also information that might be undesirable or anti-social.

Cyber crime is a term used to broadly describe criminal activity in which computers or computer networks are a tool, a target, or a place of criminal activity. It is also used to include traditional crimes in which computers or networks are used to enable the illicit activity.

In teaching-learning process, the use of internet is inevitable. The importance of e-learning is increasing day by day. This is all because of distance learning and searching and sharing of study materials on internet. Besides it, internet provides many search engines that helps a student as well as a teacher to find out the solutions of their problems. It also helps a teacher and student to update their knowledge by getting the new information about new researches, new techniques etc. A teacher and a student can also get connected outside the class-room through the internet. And when they get the benefits of internet then of course they should face the risk factors also attached to it.

Hence, the awareness on cyber crime is very much needed for the learners and also for teachers, so that they can prevent to face the unexpected problems or cyber crimes such as hacking, phishing, spam, computer viruses, sabotage, wire fraud, ATM fraud, internet fraud, identity theft etc. and they can take the appropriate measures to sort out these problems. Awareness about cyber crimes will also help in decreasing the involvement of the students or our coming generations in cyber crimes. This study will help to find out the awareness level among B.Ed. teacher trainees (the perspective teachers) of Sonipat district. And after knowing their awareness level, they can take further steps to increase their level of cyber crime awareness. It will be beneficial for themselves and their teaching career and also they can aware their students about cyber crimes.

Operational Definitions of terms

Cyber Crime: Cyber crime is a term used to broadly describe criminal activity in which computers or computer networks are a tool, a target, or a place of criminal activity and include everything from electronic cracking to denial of service attacks.

Cybercrime has been used to describe a wide range of offences, including offences against computer data and systems (such as “hacking”), computer-related forgery and fraud (such as “phishing”), content offences (such as disseminating child pornography), and copyright offences (such as the dissemination of pirated content).

Teacher Trainees: Teacher trainees are the students who are studying in the teacher training courses i.e. J.B.T., B.Ed., and M.Ed. In the present study the term teacher trainees’ stands for the pupil teachers of the B.Ed. Course.
Objectives of Study

In present study the objectives are as follow:-

To study cyber-crime awareness among boys and girls teacher trainees.

- To study cyber crime awareness among rural boys and girls B.Ed. Teacher Trainees.
- To study cyber crime awareness among urban boys and girls B.Ed. Teacher Trainees.
- To study cyber crime awareness among science and art boys B.Ed. Teacher Trainees.
- To study cyber crime awareness among science and art girls B.Ed. Teacher Trainees.

Hypotheses

- There is no significant difference towards Cyber Crime Awareness among boys and girls Teacher Trainees.
- There is no significant difference towards Cyber Crime Awareness among rural boys and girls Teacher Trainees.
- There is no significant difference towards Cyber Crime Awareness among urban boys and girls Teacher Trainees.
- There is no significant difference towards Cyber Crime Awareness among science and art boys B.Ed. Teacher Trainees.
- There is no significant difference towards Cyber Crime Awareness among science and art girls B.Ed. Teacher Trainees.

Design of Study

(a) **Methodology:** Descriptive survey method is used for the study of the Cyber Crime Awareness among B.Ed. Teacher Trainees.

(b) **Population:** The population for the study includes the all B.Ed. Teacher Trainees of Sonipat district.

(c) **Sample:** Multi-stage sampling technique and simple random sampling technique is used for the selection of sample. A sample of 120 students is taken for the study.

(d) **Tool:** Cyber Crime Awareness among B.Ed. Teacher Trainees is measured by Cyber Crime Awareness Scale (CCAS-RS) developed by Dr. S. Rajasekar.

(e) **Statistical Technique:** Mean, Standard Deviation and T-test is employed to measure Cyber Crime Awareness among students.
(f) Analysis and Interpretation of Data:

### Table 1. Cyber Crime Awareness among Boys and Girls Teacher Trainees

<table>
<thead>
<tr>
<th>Teacher Trainees</th>
<th>No. of Teacher Trainees</th>
<th>Mean</th>
<th>S.D.</th>
<th>t- Ratio</th>
<th>Significant/ not significant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boys</td>
<td>60</td>
<td>132.13</td>
<td>21.09</td>
<td>1.75</td>
<td>Not significant</td>
</tr>
<tr>
<td>Girls</td>
<td>60</td>
<td>126.13</td>
<td>16.13</td>
<td></td>
<td>*not significant at 0.05 level and 0.01 level</td>
</tr>
</tbody>
</table>

*not significant at 0.05 level and 0.01 level

**Fig. 1. Mean Score of Boys and Girls Teacher Trainees**

**Interpretation**

The Table 1 reveals that ‘t’ value is 1.75 which is not significant at 0.01 and 0.05 level of significance. Hence, the null hypothesis “There is no significant difference towards Cyber Crime Awareness among boys and girls teacher trainees” is accepted. The obtained difference is not real difference. It is due to chance or sampling fluctuations. The mean of boys teacher trainees is 132.13 which is higher than the girls teacher trainees 126.13. It can be interpreted that boys teacher trainees has more awareness towards cyber crime than girls teacher trainees.
Table 2: Cyber Crime Awareness among Rural Boys and Girls Teacher Trainees

<table>
<thead>
<tr>
<th>Teacher Trainees</th>
<th>No. of Teacher Trainees</th>
<th>Mean</th>
<th>S.D.</th>
<th>t- Ratio</th>
<th>Significant/ not significant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural Boys</td>
<td>30</td>
<td>117.93</td>
<td>11.21</td>
<td>0.049</td>
<td>Not significant</td>
</tr>
<tr>
<td>Rural Girls</td>
<td>30</td>
<td>117.76</td>
<td>16.13</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Not significant at 0.05 level and 0.01 level

Interpretation

The Table 2 reveals that ‘t’ value is 0.049 which is not significant at 0.01 and 0.05 level of significance. Hence, the null hypothesis “There is no significant difference towards Cyber Crime Awareness among rural boys and girls teacher trainees” is accepted. The obtained difference is not real difference rather it is due to chance or sampling fluctuations. The mean of rural boys teacher trainees is 117.93 which is higher than the rural girls teacher trainees 117.76. It can be interpreted that rural boys and girls teacher trainees have almost equal awareness towards cyber crime.
Table 3. Cyber Crime Awareness among Urban Boys and Girls Teacher Trainees

<table>
<thead>
<tr>
<th>Teacher Trainees</th>
<th>No. of Teacher Trainees</th>
<th>Mean</th>
<th>S.D.</th>
<th>t- Ratio</th>
<th>Significant/not significant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban Boys</td>
<td>30</td>
<td>146.33</td>
<td>15.86</td>
<td>2.88</td>
<td>Significant</td>
</tr>
<tr>
<td>Urban Girls</td>
<td>30</td>
<td>134.5</td>
<td>15.95</td>
<td></td>
<td>Significant at 0.05 level and 0.01 level</td>
</tr>
</tbody>
</table>

* Significant at 0.05 level and 0.01 level

Interpretation

The Table 3 reveals that ‘t’ value is 2.88 which is significant at 0.01 and 0.05 level of significance. Hence, the null hypothesis “There is no significant difference towards Cyber Crime Awareness among urban boys and girls teacher trainees” is rejected. The obtained difference is real difference which is not by chance. The mean of urban boys teacher trainees is 146.33 which is higher than the girls teacher trainees 134.5. It can be interpreted that urban boys teacher trainees has more awareness towards cyber crime than urban girls teacher trainees.
Table 4. Cyber Crime Awareness among Science and Art Boys Teacher Trainees

<table>
<thead>
<tr>
<th>Teacher Trainees</th>
<th>No. of Teacher Trainees</th>
<th>Mean</th>
<th>S.D.</th>
<th>t- Ratio</th>
<th>Significant/not significant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Science Boys</td>
<td>30</td>
<td>145.26</td>
<td>17.36</td>
<td>6.16</td>
<td>Significant</td>
</tr>
<tr>
<td>Art Boys</td>
<td>30</td>
<td>119</td>
<td>15.64</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Significant at 0.05 level and 0.01 level

Interpretation

The Table 4 reveals that ‘t’ value is 6.16 which is significant at 0.01 and 0.05 level of significance. Hence, the null hypothesis “There is no significant difference towards Cyber Crime Awareness among science and art boys teacher trainees” is rejected. The obtained difference is real difference which is not by chance. The mean of science boys teacher trainees is 145.26 which is higher than the art boys teacher trainees 119. It can be interpreted that science boys teacher trainees has more awareness towards cyber crime than art boys teacher trainees.
Table 5: Cyber Crime Awareness among Science and Art Girls Teacher Trainees

<table>
<thead>
<tr>
<th>Teacher Trainees</th>
<th>No. of Teacher Trainees</th>
<th>Mean</th>
<th>S.D.</th>
<th>t- Ratio</th>
<th>Significant/not significant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Science Girls</td>
<td>30</td>
<td>132.27</td>
<td>11.54</td>
<td>2.865</td>
<td>Significant</td>
</tr>
<tr>
<td>Art Girls</td>
<td>30</td>
<td>120.9</td>
<td>18.44</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Significant at 0.05 level and 0.01 level

**Interpretation**

The Table 5 reveals that ‘t’ value is 2.865 which is significant at 0.01 and 0.05 level of significance. Hence, the null hypothesis “There is no significant difference towards Cyber Crime Awareness among science and art girls teacher trainees” is rejected. The obtained difference is real difference which is not by chance. The mean of science girls teacher trainees is 132.27 which is higher than the art girls teacher trainees 120.9. It can be interpreted that science girls teacher trainees has more awareness towards cyber crime than art girls teacher trainees.

**Findings**

The main findings of the study are:

- There is no significant difference towards cyber crime awareness among boys and girls.
There is no significant difference towards cyber crime awareness among rural boys and girls.

There is significant difference towards cyber crime awareness among urban boys and girls.

There is significant difference towards cyber crime awareness among science and art boys.

There is significant difference towards cyber crime awareness among science and art girls.

Conclusion

Awareness towards cyber crime is not significantly affected by Gender, whether it is male or female.

Awareness towards cyber crime is significantly affected by

- (a) Area, whether it is rural or urban.
- (b) Stream, whether it is science or art.

Educational Implication

The result of the study can be usefully employed in school practice. The present study has the following educational implications for the school teachers, and students:

- It can help the teacher to know about the level of awareness towards cyber crime in students.
- The teacher can tell the students about the harmful effects of using internet without sufficient preventing measures.
- The teacher can tell the students about safe internet browsing and protect themselves of being victims.
- It can help in decreasing the involvement of students in cyber crimes who do mistakes due to the lack of awareness towards cyber crime.
- The students can protect themselves from hacking, phishing, spam, identity theft etc.

References

B. Muthukumaran, criminal investigation department review- january2008 “Cyber Crime Scenario In India” From


