

## **A STUDY OF AWARENESS ABOUT CYBERLAWS IN THE INDIAN SOCIETY**

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**ABSTRACT:** 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. India may succeed in combating the problem of cybercrimes by adopting a synergetic approach wherein technological measures and proper legislative framework with a properly trained human resource in a tech-savvy society.

### **I. INTRODUCTION**

Although, there exist firewalls, antivirus software, and other technological solutions for safeguarding the data and computer networks, but in India much needs to be done towards effective use of these technologies for safeguarding the precious data and in combating cybercrime. Even most of the seasoned users of IT tools may not be aware of cyber victimization. Along with the advancements in technology it is equally important to be aware of cybercrime and related issues thereof. The cybersafety depends on the knowledge of the technology and the care taken while using internet and that of the preventive measures adopted by user and servers systems. It is well said that the problems created cannot be solved with the same level of awareness that created them. Hence there is need to enhance awareness about the cybercrime. The growing danger by cybercrime in India needs technological, behavioural and legal awareness; and proper education and training. The study being reported herein examines the awareness of netizens about cyberlaws and role of police.

**KEYWORDS:** cyberlaws, cybercrimes, netizens, ccybervictimization.

## II. REVIEW OF LITERATURE

This section reports a brief review of research literature wherein the researchers have dealt with the related topics of cybersecurity, cybervictimisation etc. Bhushan (2012) has revealed that awareness of cybernetics in India is abysmally low and thus has gained a reputation as a country where foreign investors can do business in cybersecurity and have been investing heavily in cybersecurity.

Pandey (2012) concluded that lack of awareness about internet and low level of internet security is fast making Indore<sup>1</sup> a heaven for cybercriminals. There has been a steady increase in the number of cybercrimes as people are not aware about the rapid developments in the cyberworld. Increasing dependence of common citizens on cybernetics without proper security has made the job easy for cybercriminals. In the absence of experts and cybersleuths, Indore has become more vulnerable to cybercriminals, the researcher concluded.

According to Dalal (2010) one area that requires special attention is the cyberlaw awareness in India. Very few users, practitioners and organizations are aware about disputes arising out of IT Act, 2000 and its various amendments. Nappinai (2010) found that cybercrime prosecution is not resorted in many instances due to lack of awareness amongst both the victims and the enforcement authorities about the applicability of general laws to cybercrimes. Saxena et al. (2012) have concluded that proactive actions on the part of Government and enhanced participation of education system in the cybersecurity awareness approach may lead to a strongly secured nation.

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<sup>1</sup> Indore is an important city in the Indian state of Madhya Pradesh.

Jamil and Khan (2011) while comparing the data protection act in India with that of European countries have concluded that the Indian cyberlaws are very poor and it is very necessary to actually bring in the appropriate cyberlaw and awareness about them. There is not much of awareness regarding protecting the data. There is a continuous rise in cybercrime as there is huge population but lesser resources to manage the population and the cybercrimes that take place.

Seth (2007) has noticed that with increasing awareness and provision of training on the subject of cybercrime, enhanced technological and legislative steps being taken to further strengthen the IT laws and enforcement framework, India will effectively succeed in combating the problem of cybercrimes.

### III. RESEARCH DESIGN

The study aimed to collect responses with regards to the knowledge and awareness of respondents towards cyberlaws in India. A three point structured questionnaire was designed to find the results. Such data were collected from the students/teachers and employee .An individual participant constituted the sampling unit whereas probability sampling (random sampling) techniques were used to select the sample Table 1 shows the break-up of the sample:

Table 1 Break-up of sample

| <b>Gender<br/>Category</b> | <b>Male</b> | <b>Female</b> | <b>Total</b> |
|----------------------------|-------------|---------------|--------------|
| <b>Unemployed</b>          | 150         | 100           | 250          |
| <b>Employed</b>            | 80          | 70            | 150          |
| <b>Total</b>               | 230         | 170           | 400          |

Test items were written to cover the entire content. The test so prepared was given to the students/teachers and employees and arranged in descending order subjected to Kelley's items analysis techniques as per their achievement scores. Upper 27% which formed the upper group and the lower 27% that formed the lower group were taken up for computing the internal consistency discrimination index and the difficulty value of the test. For this, the number of correct responses to an item in each of the two groups was identified and tabulated. For the selection of items the criteria recommended by Ebel (1979) were given due consideration. Table 2 shows the criteria for selecting items on the basis of discriminating power (DP).

Table 2: Selection criteria of items

| Sr. No | Discriminating Power | Item Evaluation                               |
|--------|----------------------|---|
| 1      | 0.40 and above       | Very Good                                     |
| 2      | 0.20 to 0.39         | Marginal items usually subject to improvement |
| 3      | Below 0.19           | Poor items                                    |

After calculating the discriminating power of the items, criteria given in table 2 was applied to select the items for the final test items. The variables were categorized as independent and dependent variable. The dependent variables for the present study were some of the general questions to be answered by which the awareness to combat cybercrime could be measured. Independent variables for the present study were employees and students/teachers.

The main objective of the present work consisted of assessment of awareness of respondents by means of studying the difference in awareness on the basis of gender and occupation. Accordingly, following hypotheses were formulated: **H1**: There is no significant

difference in the awareness for Indian cyberlaw on the basis of gender. **H2:** There is no significant difference in the awareness for Indian cyberlaw on the basis of occupation.

Self tested questionnaire has contained some of the questions which has been answered in the form of don't know, yes, no. It has been designed with the objective to assess the awareness for Indian cyberlaw for cybercrime of the respondents. It was having maximum score of 69 and minimum score of 23.

Table 3 Mean, SD and CR ratio (male vs. female)

| Variables | N   | Means | SD   | DF  | CR    | Level of Significance                            |
|-----------|-----|-------|------|-----|-------|--|
| Male      | 230 | 49.32 | 9.14 | 398 | 12.44 | Significant at .05 and .01 level of significance |
| Female    | 170 | 36.50 | 2.42 |     |       |  |

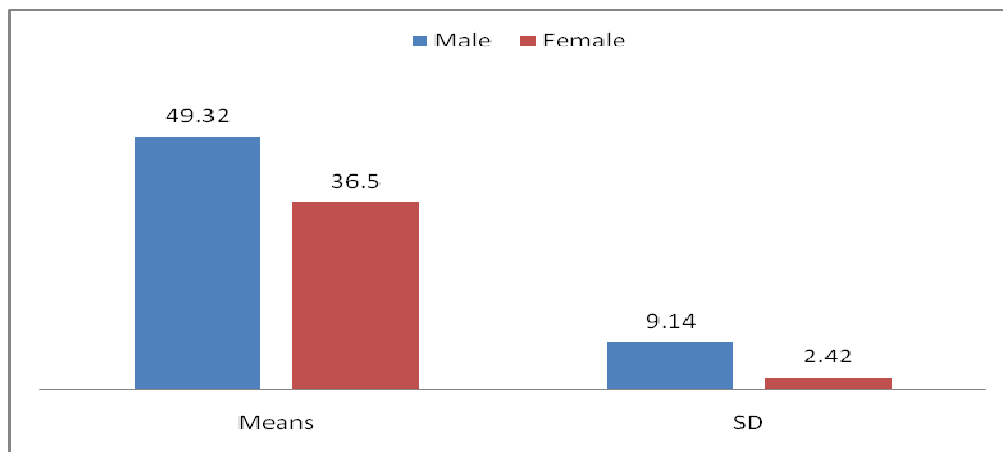


Figure 1 Awareness about Indian Cyberlaws (male vs. female)

Table 3 indicates that the mean scores of male for the awareness for Indian cyber law and role of the police for cybercrime and related legal provision is 49.32 and the mean score of female for the awareness for Indian cyberlaw is 36.50 and their SD values are 9.14 and 2.42 respectively.

The CR value comes out to be 12.44 which is significant at .05 and .01 level of significance at DF value = 398. This further reveals that the two groups differ significantly because the table value at DF =398 are 1.97 at .05 level of significance and 2.60 at 0.01 level of significance are lower than the calculated value (figure 1). It is concluded that male and female differ significantly and the mean value of male is greater than female. Therefore it is analyzed that the male has more awareness for Indian cyberlaw than female. The corresponding hypothesis (H1) has been rejected.

Table 4 Mean, SD and CR Ratio (student vs. employee)

| Variables | N   | Means | SD   | DF  | CR    | Level of Significance                            |
|-----------|-----|-------|------|-----|-------|--|
| Students  | 250 | 40.87 | 6.31 | 398 | 13.75 | Significant at .05 and .01 level of significance |
| Employees | 150 | 52.12 | 8.76 |     |       |  |

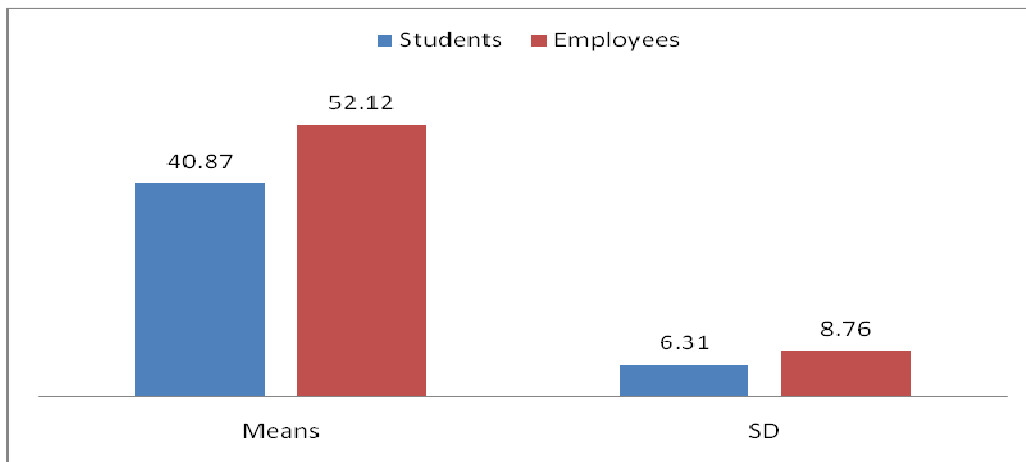


Figure 2 Awareness for Indian cyberlaw (student vs. employee)

Table 4 indicates that the mean scores of the students for the awareness for Indian cyber law is 40.87 and the mean score of employees in the awareness for Indian cyberlaw is 52.12 and their SD values are 6.31 and 8.76 respectively. The CR value comes out to be 13.75 which is

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significant at .05 and .01 level of significance at DF value = 398. This further reveals that the two groups differ significantly because the table value at DF =398 are 1.97 at .05 level of significant and 2.63 at 0.01 level of significance are lower than the calculated value (figure 2). It is concluded that students and employees differ significantly and the mean value of employees are greater than students therefore it is analyzed that the employees has more awareness for Indian cyberlaw than the students. Accordingly, the corresponding hypothesis (H2) has been rejected.

## IV. CONCLUSION

On the bases of findings of present work it could be concluded that there is a significant difference between the awareness level of male and female users of internet services and it was established that the male netizens are more aware for Indian cyberlaws in comparison to their female counterparts. On the similar lines there exists a significant difference between the awareness level of employee-users and non-employee-users of internet services and it was found that the employed users are more aware for Indian cyberlaws in comparison to non-employees.

## REFERENCES

- Bhushan K. (2012), India ranks fifth among cybercrime affected country, retrieved from [http://www.thinkdigit.com/Internet/India-ranks-fifth-among-cyber-crime-affected\\_9476.html](http://www.thinkdigit.com/Internet/India-ranks-fifth-among-cyber-crime-affected_9476.html) on September 5, 2012.
- Dalal P. (2010), Awareness of Cyber Law in India, retrieved from <http://cyberlawsinindia.blogspot.in/2010/05/awareness-of-cyber-law-in-india.html> on September 03, 2012.
- Ebel R.L. (1979), Educational tests and measurements; Examinations; Evaluations; Design and Construction; Interpretation (3e), Prentice Hall, Englewood Cliffs, New Jersey.

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Jamil D. and Khan M.N.A. (2011), Data Protection Act in India with Compared To the European Union Countries, International Journal of Electrical & Computer Sciences, Vol: 11 No: 06.

Nappinai N.S. (2010), Cyber Crime Law in India: Has Law Kept Pace with Emerging Trends? An Empirical Study, N. S. Journal of International Commercial Law and Technology Volume. 5, Issue 1.

Pandey K. (2012), Low security makes netizens vulnerable to cyber crimes, retrieved from [http://articles.timesofindia.indiatimes.com/indore/31863717\\_1\\_cyber-crimes-cyber-cell-cyber-criminals](http://articles.timesofindia.indiatimes.com/indore/31863717_1_cyber-crimes-cyber-cell-cyber-criminals) on May 26, 2012.

Saxena P. et al. (2012), A Cyber Era Approach for Building Awareness in Cyber Security for Educational System in India, IACSIT International Journal of Information and Education Technology, Vol. 2, No. 2.

Seth K. (2007), India – Cyber crimes and the arm of Law – An Indian Perspective, retrieved from <http://www.sethassociates.com/%E2%80%9Ccyber-crimes-and-the-arm-of-law-an-indian-perspective.html> on August 22, 2012.