

A Study on Cyber Crime Awareness among B.Ed Teacher Trainees

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ABSTRACT

The present study entitled “A Study on Cyber Crime Awareness among B.Ed Teacher Trainees” was conducted to examine the level of cyber crime awareness among B.Ed teacher trainees. The study focused on rural and urban male and female B.Ed teacher trainees. The main objective of the study was to compare the level of cyber crime awareness among different groups of trainees. The data were collected by using Cyber Crime Awareness Scale (CCAS)Rs developed by Dr. S. Rajashekhar. A sample of 96 B.Ed teacher trainees was selected from B.Ed college of the Bhilai- Durgcity region. The collected data were analyzed by using Mean, Standard Deviation, and t-test statistical techniques. The findings of the study revealed that no significant difference was found among urban & rural area male & female B.Ed teacher trainees in cyber crime awareness among the comparative groups at the 0.05 level of significance.

Keywords: B.Ed Trainee Teachers, Cyber Crime Awareness, Cyber safety, Digital awareness.

INTRODUCTION

In today's digital age, cybercrime has emerged as a pressing global concern, impacting individuals, organizations, and educational institutions alike. As future educators, B.Ed teacher trainees play a crucial role in shaping the minds of young learners, making it essential for them to be aware of cyber threats, online safety, and responsible digital practices. With the increasing reliance on technology in teaching and learning, educators must possess adequate knowledge of cybercrime to protect themselves and their students from online risks.

This dissertation aims to explore the level of cybercrime awareness among B.Ed teacher trainees, examining their understanding of cyber threats such as phishing, hacking, identity theft, cyberbullying and others. Additionally, it seeks to analyse the effectiveness of existing cybersecurity education in teacher training programs and propose strategies to enhance awareness and preparedness.

By investigating the awareness levels, this study contributes to ensuring a safer digital environment in the educational sector. The findings of this research can assist policymakers and educators in developing comprehensive cybersecurity training modules tailored for future teachers, empowering them with the knowledge and skills necessary to foster a secure learning space for students.

REVIEW LITERATURE

Yashaswini, K & Sharath Kumar, C.R and (2023) studied cyber crime awareness among B.Ed teacher trainees and found no significant difference based on gender, locality, or stream. **P. Velumurugan & Dr. R. Ramachandran and (2022)** studied cyber crime awareness among B.Ed students in Tamil Nadu and found a moderate level of awareness among teacher trainees. **Goel, U.(2014)** conducted a study on cyber crime awareness among B.Ed teacher trainees. The study found no significant difference in cyber crime awareness among boys and girls, while differences were observed based on area and stream. **Choudhary(2020)** conducted a study on Cyber Crime Awareness among Higher Education Students from Haryana with respect to various demographical variables. The study showed that professional students having more awareness towards cybercrime as compare to traditional students but no difference on the basis of gender. **Singh, A. & Chandvir (2022)** The study also showed Average Cyber Crime Awareness among the college

students. Awareness between cyber Crime is not significantly affected by area whether it is urban or rural. Because the findings show the total result output where we come to know about the Cyber Crime awareness where 10% excellent awareness, 24% High awareness, 24% Above average awareness, 36% Moderate/average awareness, 6% Below average awareness, 0% Low awareness and no significance difference between Cyber Crime Awareness of attended computer classes, unattended computer classes, have own computer and have no computer of rural and urban areas B.Ed. Pupil Teachers is accepted. **Mandal, U. (2024)** studied cyber crime awareness among B.Ed. student teachers and emphasized the importance of cyber safety awareness in the educational field.

Operational Definition of terms

Cyber crime awareness: It refers to the awareness, knowledge, and understanding of cyber crimes such as hacking, phishing, online fraud, cyberbullying, identity theft, misuse of personal information and preventive measures related to the use of internet and digital technology.

B.Ed Teacher Trainees: In the present study, B.Ed teacher trainees refers to those who are studying in the 4th semester of the Bachelor of Education (B.Ed).

Objectives of the study

- To assess the level of awareness about cybercrime among Urban & Rural B.Ed teacher trainees.
- To compare cybercrime awareness between Urban Female & Urban Male B.Ed teacher trainees.
- To compare cybercrime awareness between Rural Female & Rural Male B.Ed teacher trainees.
- To compare cybercrime awareness between Rural Male & Urban Male B.Ed teacher trainees.
- To compare cybercrime awareness between Rural Female & Urban Female B.Ed teacher trainees.
- To compare cybercrime awareness between Rural Female & Urban Male B.Ed teacher trainees.
- To compare cybercrime awareness between Urban Female & Rural Male B.Ed teacher trainees.

Null hypothesis

- $H_{0.1.0}$ there is no significant difference in cybercrime awareness between Urban & Rural B.Ed teachers trainee.
- $H_{0.1.1}$ there is no significant difference in cybercrime awareness between Urban Male and Urban Female B.Ed teacher trainee's.
- $H_{0.1.2}$ there is no significant difference in cybercrime awareness between Rural Male and Rural Female B.Ed teacher trainee's.
- $H_{0.1.3}$ there is no significant difference in cybercrime awareness between Rural Male & Urban Male B.Ed teacher trainee's.
- $H_{0.1.4}$ there is no significant difference in cybercrime awareness between Rural Female and Urban Female B.Ed teacher trainee's.
- $H_{0.1.5}$ there is no significant difference in cybercrime awareness between Rural Female & Urban Male B.Ed teacher trainee's.
- $H_{0.1.6}$ there is no significant difference in cybercrime awareness between Urban female & Rural Male B.Ed teacher trainee's.

Design of study

- (a) **Methodology:** descriptive survey method is used for the study of the cyber crime awareness among B.Ed Teacher Trainee's
- (b) **Population:** All B.Ed teacher trainee's of teacher education college of Bhilai & Durg city will be the population of this proposed study.
- (c) **Sample:** A total of 98 B.Ed will be selected for the study trainee's. This study adopted a random sampling method.
- (d) **Tools :** This study of Cyber Crime Awareness on B.Ed teacher trainee's is measured by cyber crime awareness scale (CCAS) prepared by Dr. S. Rajasekar.
- (e) **Statistical technique:** mean, standard deviation, standard error and t-test is used to measure cyber crime awareness among students.
- (f) **Analysis and interpretation of data :**

Hypothesis :

- $H_{0.1.0}$ there is no significant difference in Cyber Crime Awareness between Urban & Rural B.Ed teachers trainee.

Table 1.0 Cyber Crime Awareness between Urban & Rural B.Ed teachers trainee.

Comparative Group	Number of Trainees (N)	Mean (M)	Standard Deviation (SD)	Standard Error	t-value
Urban B.Ed Teacher	48	142.87	20.47		

Trainee's				1.34	0.053
Rural B.Ed Teacher Trainee's	48	137.56	21.66		

$$df = (N_1 + N_2) - 2 = df = (48 + 48) - 2 = 94$$

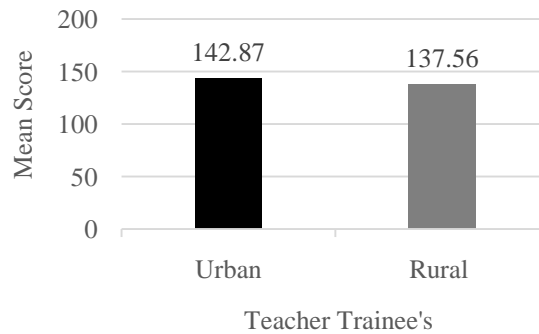


Fig . 1.0 Mean Score Of Urban & Rural B.Ed Teacher Trainee's

Interpretation

Table 1.0 shows that the mean scores of Urban and Rural B.Ed teacher trainees are 142.87 and 137.56 respectively. The obtained t-value (0.053) is not significant at the 0.05 level for $df = 94$. Hence, no significant difference was found in cyber crime awareness between Urban and Rural B.Ed teacher trainees, and the null hypothesis was accepted.

Hypothesis $H_{0.1.1}$ there is no significant difference in cybercrime awareness between Urban female and Urban male B.Ed teacher trainee's.

Table 1.1 cybercrime awareness between Urban female and Urban male B.Ed teacher trainee's.

Comparative Group	Number of Trainees (N)	Mean (M)	Standard Deviation (SD)	Standard Error	t-value
Urban Female B.Ed Teacher Trainee's	24	145.75	18.88	1.73	0.29
Urban Male B.Ed Teacher Trainee's	24	140.00	21.86		

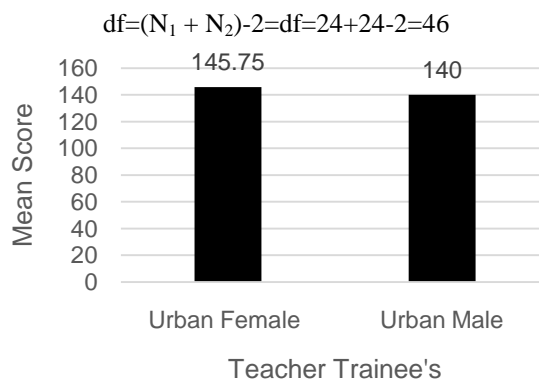


Fig . 1.1 Mean Score Of Urban Female & Urban Male B.Ed Teacher Trainee's

Interpretation

Table 1.1 reveals that the mean scores of Urban Female and Urban Male B.Ed teacher trainees are 145.75 and 140 respectively. The obtained t-value (0.29) is not significant at the 0.05 level for $df = 46$. Hence, no significant difference was found in cyber crime awareness between Urban Female and Urban Male B.Ed teacher trainees, and the null hypothesis was accepted

- **Hypothesis $H_{0.1.2}$** there is no significant difference in cybercrime awareness between Rural Female and Rural Male B.Ed teacher trainee's.

Table 1.2 cybercrime awareness between Rural Female and Rural Male B.Ed teacher trainee’s.

Comparative Group	Number of Trainees (N)	Mean (M)	Standard Deviation (SD)	Standard Error	t-value
Rural Female B.Ed Teacher Trainees	24	140.29	17.59	6.36	0.86
Rural Male B.Ed Teacher Trainees	24	134.83	25.04		

$$df=(N_1 + N_2)-2=df=24+24-2=46$$



Fig . 1.2 Mean Score of Rural Female and Rural Male B.Ed Teacher Trainee

Interpretation:

Table 1.2 reveals that the mean scores of Rural Female and Rural Male B.Ed teacher trainees are 140.29 and 134.83 respectively. The obtained t-value (0.86) is not significant at the 0.05 level for df = 46. Hence, no significant difference was found in cyber crime awareness between Rural Female and Rural Male B.Ed teacher trainees, and the null hypothesis was accepted.

- **Hypothesis H_{0_1,3}** there is no significant difference in cybercrime awareness between Rural Male & Urban Male B.Ed teacher trainee.

Table 1.3 cybercrime awareness between Rural Male & Urban Male B.Ed teacher trainee.

Comparative Group	Number of Trainees (N)	Mean (M)	Standard Deviation (SD)	Standard Error	t-value
Rural Male B.Ed Teacher Trainees	24	134.83	25.04	6.91	0.75
Urban Male B.Ed Teacher Trainees	24	140.00	21.86		

$$df=(N_1+N_2)-2=df=24+24-2=46$$

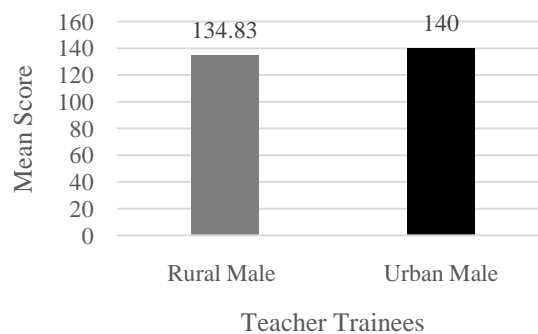


Fig1.3. Mean Score of Rural Male &Urban Male B.Ed Teacher Trainee

Interpretation:

Table 1.3 reveals that the mean scores of Rural Male and Urban Male B.Ed teacher trainees are 134.83 and 140 respectively. The obtained t-value (0.75) is not significant at the 0.05 level for df = 46. Hence, no significant difference

was found in cyber crime awareness between Rural Male and Urban Male B.Ed teacher trainees, and the null hypothesis was accepted.

- **Hypothesis H_{0-1,4}** there is no significant difference in cybercrime awareness between rural female & urban female B.Ed teacher trainee's.

Table 1.4 cybercrime awareness between rural female & urban female B.Ed teacher trainee's.

Comparative Group	Number of Trainees (N)	Mean (M)	Standard Deviation (SD)	Standard Error	t-value
Rural female B.Ed Teacher Trainees	24	140.29	17.59	5.36	0.01
Urban female B.Ed Teacher Trainees	24	145.75	18.88		

$$df = (N_1 + N_2) - 2 = df = (24 + 24) - 2 = 46$$

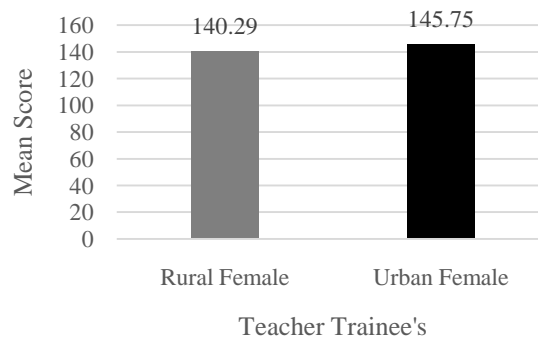


Fig 1.4 Mean Score of Rural Female & Urban Female B.Ed Teacher Trainee

Interpretation:

Table 1.4 reveals that the mean scores of Rural Female and Urban Female B.Ed teacher trainees are 140.29 and 145.75 respectively. The obtained t-value (0.01) is not significant at the 0.05 level for $df = 46$. Hence, no significant difference was found in cyber crime awareness between Rural Female and Urban Female B.Ed teacher trainees, and the null hypothesis was accepted.

- **Hypothesis H_{0-1,5}** there is no significant difference of Cyber Crime Awareness between Rural Female and Urban Male B.Ed Teacher Trainees

Table 1.5 Cyber Crime Awareness between Rural Female and Urban Male B.Ed Teacher Trainee's

Comparative Group	Number of Trainees (N)	Mean (M)	Standard Deviation (SD)	Standard Error	t-value
Rural female B.Ed Teacher Trainees	24	140.29	17.59	6.01	0.04
Urban male B.Ed Teacher Trainees	24	140	21.86		

$$df = (N_1 + N_2) - 2 = df = (24 + 24) - 2 = 46$$

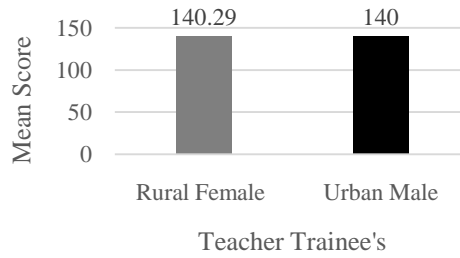


Fig 1.5. Mean Score of Rural Female & Urban Male B.Ed Teacher Trainee

Interpretation:

Table 1.5 reveals that the mean scores of Rural Female and Urban Male B.Ed teacher trainees are 140.29 and 140 respectively. The obtained t-value (0.04) is not significant at the 0.05 level for $df = 46$. Hence, no significant difference was found in cyber crime awareness between Rural Female and Urban Male B.Ed teacher trainees, and the null hypothesis was accepted.

- **Hypothesis $H_{0-1.6}$** there is no significant difference of cybercrime awareness between Urban female and Rural male B.Ed teacher trainees

Table 1.6 cybercrime awareness between Urban female and Rural male B.Ed teacher trainee

Comparative Group	Number of Trainees (N)	Mean (M)	Standard Deviation (SD)	Standard Error	t-value
Urban female B.Ed Teacher Trainees	24	145.75	18.88	6.52	1.67
Rural Male B.Ed Teacher Trainees	24	134.83	25.04		

$$df = (N_1 + N_2) - 2 = df = (24 + 24) - 2 = 46$$

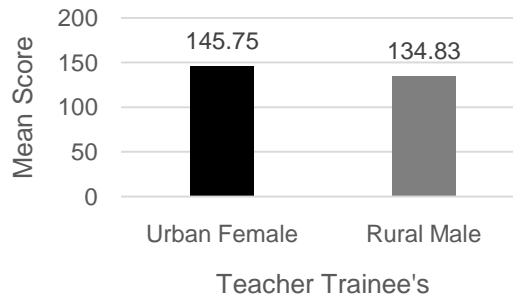


Fig1.6 Mean Score of Urban Female & Rural Male B.Ed Teacher Trainee

Interpretation:

Table 1.6 reveals that the mean scores of Urban Female and Rural Male B.Ed teacher trainees are 145.75 and 134.83 respectively. The obtained t-value (1.67) is not significant at the 0.05 level for $df = 46$. Hence, no significant difference was found in cyber crime awareness between Urban Female and Rural Male B.Ed teacher trainees, and the null hypothesis was accepted.

Findings:

The main findings of the study are :

- No significant difference was found in cybercrime awareness among Urban & Rural B.Ed teacher trainees.
- No significant difference was found in cybercrime awareness among Urban Female & Urban Male B.Ed teacher trainees.
- No significant difference was found in cybercrime awareness among Rural Female & Rural Male B.Ed teacher trainees.
- No significant difference was found in cybercrime awareness among Rural Male & Urban Male B.Ed teacher trainees.
- No significant difference was found in cybercrime awareness among Rural Female & Urban Female B.Ed teacher trainees.
- No significant difference was found in cybercrime awareness among Rural Female & Urban Male B.Ed teacher trainees.

- No significant difference was found in cybercrime awareness among Urban Female & Rural Male B.Ed teacher trainees.

CONCLUSION

The study concluded that B.Ed. teacher trainees possess awareness regarding cybercrime. The study concluded that B.Ed. teacher trainees possess awareness regarding cybercrime. No significant difference was found among the comparative groups of B.Ed teacher trainees from urban & rural areas.

Educational Implications

1. The study helps teacher educators understand the level of cyber crime awareness among B.Ed trainees.
2. It highlights the need to include cyber safety and digital awareness topics in the teacher education curriculum.
3. Training programmes, workshops, and seminars should be organized to improve awareness about cyber crimes and preventive measures.
4. B.Ed trainees can use this knowledge to guide students about safe and responsible use of the internet.
5. It helps in creating awareness among school students regarding the risks of cyber crimes and ways to stay safe online.
6. The study emphasizes the importance of continuous efforts to strengthen cyber awareness in the education system.

REFERENCES

- [1]. Mandal, U. (2024). Cyber crime awareness: A study (with special reference to B.Ed. student teachers). *International Education and Scientific Research Journal (IESRJ)*, 10(2).
- [2]. Yashaswini, K., & Kumar, S. C. R. (2023). A study on cyber crime awareness among B.Ed teacher trainees. *International Journal of Research in Applied Science & Engineering Technology*, 11(4), 112-119. <https://www.ijraset.com/research-paper/cyber-crime-awareness-among-b-ed-teacher-trainees>
- [3]. Velmurugan, P., & Ramachandran, S. (2022). A study on cybercrime awareness among B.Ed students in Tamil Nadu. *Journal of Emerging Technologies and Innovative Research (JETIR)*, 9(11), f993-f999.
- [4]. Choudhary, M. (2020). Cyber crime awareness among higher education students from Haryana with respect to various demographical variables. *Palarch's Journal of Archaeology of Egypt/Egyptology* 17(7), ISSN 1567-214X
- [5]. Kumar, R. (2020). A study of cyber crime awareness among B. Ed. and M. Ed. students of Sirsa District. *International Economic Society*, 11 (3), 74-86.
- [6]. Kumaravelu (2018). Awareness of cybercrime among B. Ed. teacher trainees in Puducherry region. *Research reflection on education*, 17 (3).
- [7]. Singh, B. (2015). A study of cyber crime awareness and attitude towards internet of college students of Haryana state (Ph.D. thesis)
- [8]. Singh, Dr & Chandvir, Dr. (2022). Cyber Crime Awareness among Pupil Teachers: Urban-Rural Perspective. *Innovative Research Thoughts*. 8. 422-435. 10.36676/irt.v8.i4.1615.