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Effectiveness of Structured Teaching on Cyberbullying Awareness Among Junior College Students in India: A Quantitative Study

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Abstract:

Cyberbullying has emerged as a pervasive issue globally, with an estimated 20 to 40% of youngsters experiencing it at some stage of their lives. With the rapid proliferation of internet usage in India, addressing cyberbullying has become increasingly imperative. This study aimed to assess the effectiveness of structured teaching interventions on enhancing awareness of cyberbullying among junior college students in India.

A pre-experimental one-group pre-test-post-test design was employed, and data were collected from 180 participants (60 from Arts, 60 from Commerce, and 60 from science streams) in selected schools. The structured teaching intervention was delivered, focusing on enhancing participants' knowledge regarding cyberbullying.

Results indicated a significant increase in post-test knowledge scores (mean = 15.21 ± 6.12 , range: 11-16) compared to pre-test scores (mean = 9.92 ± 10.62 , range: 0-10). Statistical analysis revealed a highly significant difference ($p < .00001$), supporting the effectiveness of the structured teaching intervention. Thus, the hypothesis that structured teaching would enhance knowledge of cyberbullying among junior college students was accepted.

This study underscores the importance of implementing educational interventions to combat cyberbullying and highlights the role of educational institutions in promoting cyberbullying awareness among students. Future research could explore long-term effects and potential interventions to address cyberbullying comprehensively.

Key Terms- *Impact, Structured Teaching, Cyberbullying, Knowledge, Students.*

INTRODUCTION-

Cyberbullying presents distinct challenges due of its potential impact. Due to the constant and immediate nature of digital devices, children who experience cyberbullying may have difficulties in seeking assistance. The majority of electronically transmitted information is enduring and accessible to the general public unless it is reported and then erased. An unfavourable internet reputation, especially for individuals who engage in bullying behavior, can have a detrimental impact on employment prospects, college admissions, and several other elements of one's life. Cyberbullying may be inconspicuous as instructors and parents may not be aware of its occurrence.¹

Every state has legislation mandating that schools address incidents of bullying. With the rise in technology, the occurrence of cyberbullying has become more widespread. As a result, some states have now included cyberbullying in their legal statutes or explicitly included offenses related to cyberbullying.² Schools have the option to either follow the law or follow local or institutional regulations that allow them to enforce disciplinary actions or implement additional measures. Certain states have legislation that specifically deals with bullying in cases when it hampers pupils' academic progress. One may acquire further information on the laws and regulations of each state, including whether or not they specifically deal with the issue of cyberbullying.³

Based on the 2019 School Crime Supplement to the National Crime Victimization Survey conducted by the National Center for Education Statistics and the Bureau of Justice, about 16 percent of high school students in the United States have been victims of cyberbullying. Based on the 2019 Youth Risk Behavior Surveillance System conducted by the Centers for Disease Control and Prevention, 15.7% of high school students reported being victims of cyberbullying in the year preceding the survey.⁴

Cyberbullying is a relatively new notion and the study into it is still in its early stages. study on cyberbullying is very fresh in contrast to the extensive four decades of study on face-to-face bullying. Technological advancements have altered interpersonal dynamics and provide young individuals extended periods of unsupervised connection, hence increasing the potential for bullying through novel communication channels.⁵

The investigator conducted the current investigation to address the research gap caused by a scarcity of nursing research literature on organized training programs for enhancing knowledge in the prevention of cyberbullying.⁶ The study endeavour focused on providing organized training about cyberbullying to junior pupils in order to enhance their understanding.

Research Questions

1. Whether the junior college students have some knowledge regarding cyberbullying?
2. Whether the awareness program will be significant in enhancing the student's knowledge and become aware about the practices regarding cyberbullying?
3. Are there any association between existing knowledge scores and demographic characteristics of participants?

Research Objectives-

1. To assess the pre-test knowledge scores
2. To assess the post-test knowledge scores

3. To compare the pre-test knowledge scores with the post-test knowledge score regarding cyberbullying among students.
4. To find out the association of Pre-test knowledge scores with demographic variables.

Hypothesis-

H0-There is no significant difference between pretest and post-test knowledge scores regarding cyberbullying among the students at the level of $p < 0.05$ level of significance

H1- There is a significant difference between pretest and post-test knowledge scores regarding cyberbullying among the students at the level of $p < 0.05$ level of significance.

Methods-

The researcher used a quantitative research strategy using a pre-experimental, pre-test, and post-test design. The researcher investigated knowledge about cyberbullying through structured education in selected junior colleges. 180 samples were selected using a simple random procedure from the streams of Arts (60), Commerce (60), and Science (60) who were in 11th and 12th grade and spoke Marathi and English. The study's goal was explained to the school authorities and participants in order for them to provide consent.

DATA COLLECTION TOOL:

Section- A -Description of proforma for personal variables:

This section included basic information about the age, gender, residential area, average usage of cell phones and computers per day, social media platforms used, and access to any information related to cyberbullying

Section B: Description of Structured Knowledge Questionnaire -The investigator designed a structured knowledge questionnaire with the goal. The 19 specialists were chosen from different fields based on the topic. Three people from the hospital's psychiatry department, eight from nursing college mental health nursing departments, two from pediatric nursing departments, one educational psychologist, four clinical psychologists, and one statistician worked together to create the final product. The tool's dependability was evaluated using the split-half approach, and the result was $r = 0.824632$, which is greater than 0.70. The pilot study assisted the researcher in determining whether this method could be replicated for a wider population. No corrections were made after the pilot study.

Section-wise Distribution of Analysis of Data-

Analysis and discussion of study results were organized under the following headings:

Section I: Frequency and percentage distribution of characteristics of junior students based on demographic information.

Section II analyses the pre-test and post-test knowledge scores of junior students on cyberbullying.

Section III: Compare the pre-test and post-test scores of junior students on cyberbullying.

Section IV: Relationship between pre-test knowledge scores and demographic characteristics.

Findings and Discussions-

The demographic variables of the participants were analysed and the findings were presented as follows-

TABLE NO.1 Frequency and percentage distribution of demographic variables of Junior students

(n=180)			
SN	Characteristics	Freq (f)	Per. (%)
1	Age in years-		
1.1	17	98	54.44
1.2	18	82	45.56
2	Gender-		
2.1	Male	90	50
2.2	Female	90	50
3	Residential area		
3.1	Urban	103	57.22
3.2	Rural	77	42.78
4	Educational Qualification-		
4.1	Arts	60	33.33
4.2	Commerce	60	33.33
3.3	Science	60	33.34
5	The average usage of cell phones per day		
5.1	Less than 5 hours	113	62.78
5.2	6 hours and above	67	32.22
6	The average usage of computers per day		
6.1	Less than 5 hours	127	70.56
6.2	6 hours and above	53	29.44
7	Social media Platforms used		
7.1	What's App	59	32.78
7.2	Instagram	60	33.33
7.3	Twitter	51	28.34
7.4	Mail	10	5.55
8	Have you accessed any information related to cyberbullying-		
8.1	Yes	31	17.22
8.2	No	149	82.78
	If yes, Source of Information		
	Internet	31	17.22

The demographic data of the study samples were analysed to get insight into the general characteristics of students at chosen junior colleges of the corporate areas. The following are the primary findings of the study.

- **Table no.1** shows that the majority of the participants 98(54.44%) were aged 17 years, and the remaining 82(45.565) of the participants were comprised from age of 18 years.
- Considering the gender the researcher selected the 90 males (50%) and 90(50%) females respectively to maintain the homogeneity for association.
- According to the residential area of the participants the majority 103(57.22%) of the participants were from the urban area of Sangli- Miraj and Kupwad corporation area which was confirmed with their college ID address and only 77(42.78%) of the participants were from the rural area.
- Researcher selected an equal number of participants 60(33.33%) from each stream that is arts, commerce, and science respectively.
- The average use of cell phones per day was the majority of the participants 11(61.11%) were using less than 5 hours and only 7(38.89%) are using 6 hours and above.
- The average use of computers per day was the majority of the participants 113(62.78%) using less than 5 hours and only 67(32.22%) using 6 hours and above.
- In social media platform majority of the participants 168(93.33%) using Instagram, 149(32.78%) using WhatsApp, and 81(45%) using twitter and only 56(31.11%) only using mail Id.
- The majority of the participants 149(82.78%) doesn't have access of information regarding cyberbullying and only 31(17.22%) had access of knowledge through internet resources.

The researcher chosen these demographic variables because various study supports with the same findings for the defined characteristics

Table 2. Analysis of the level of knowledge before and after the administration of structured teaching among college students-

(n-180)

Level of knowledge score	Pre-test Knowledge score		Post-test K. score	
	Freq	%	Freq	%
Poor (0-10) - 50%	129	71.67	14	7.78
Average (11-16) - 50-75%	31	17.22	153	85
Good (17-22) - 76-100%	20	11.11	13	7.22

According to the findings in **Table 2.** in the pre-test the majority of junior college students 129(71.67%) had low knowledge (Score 0-10), 31(17.22%) had average knowledge (Score 11-16), and 20(11.11%) had strong knowledge (Score 17-20) regarding cyberbullying; whereas after the administration of structured teaching in the post-test the majority of college students

153(85%) had average knowledge (Score 11-16), 14(7.78%) had low knowledge (Score 0-10), and 13(7.22%) had strong knowledge (Score 17-22) regarding cyberbullying. Hence, it shows that the administration of structured teaching leads to an increase in the knowledge scores in the post-test than in the pre-test knowledge score.

Table No.3 Analysis of Comparisons of Mean, SD, and df. of the PRETEST and POSTTEST knowledge scores of college students regarding Cyberbullying (n-180)

Knowledge	Mean	SD	df	Calculated t- value	p -Value
Pre-test	9.92	10.62	179	17.34171	< .00001
Post-test	15.21	6.12	179		

The maximum score in the structured knowledge-based questionnaire was 22 on cyberbullying. The data represented in **Table no.3** depicts the mean scores of post-test knowledge of the participants was (15.21± 6.12(SD)) with a range of (11-16) than the mean of pre-test knowledge scores (9.92± 10.62) with a range of (0-10). The calculated paired t -t-value is 17.34171, and the p-value is <.00001. The result is highly significant at <0.05. Hence hypothesis H₁ is accepted and H₀ is rejected. This suggests that there is a statistically significant increase in post-test knowledge scores so, structured teaching on cyberbullying among junior college students was proved to be effective.

Table No. 4 The association of the findings with demographic variables was assessed using Chi-square(χ^2). The summary of Chi-Square results is tabulated below- (n=180)

Demographic variables	Chi-square	Calculated values	Significance at (p<0.05)
Age in years	1.171	0.704	Not significant
Gender	0.0451	5.765	Significant
Residential area	1.118	0.566	Not Significant
Educational Qualification-	0.0432	2.139	Significant
The average usage of cell phones per day	.000722	8.453	Significant
The average usage of computers per day	2.4567	1.4930	Not significant
Social media Platforms used	1.08931	0.67448	Not significant

The findings in **Table no. 4** show that there is a significant association between gender, educational qualification, and the average usage of cell phones per day with the demographic

variables but there was no significant association between the age in years, residential area, average use of computers per day and social media platform with pre-test knowledge score.

SUPPORTIVE STUDIES:

Similar study findings concluded by the **Christine D. MacDonald and Bridget Roberts-Pittmana (2021)**⁷ that the findings of the study include, the analysis and interpretation of data collected from the adolescents in selected colleges. In this study, out of 100 subjects, most of the subjects 46(46%) belonged to 17 years age group, the 79 (79%) subjects were males, residential area of most of the subjects 66 (66%) belongs to urban area, majority of the subjects 46 (46%) were belong to nuclear family, 57 (57%) subjects had one number of sibling and most of the subjects 68 (68%) belonged to 4-5 hours average usages of cell phones and computer per day. when the prevalence rates for males and females were compared, they were comparable. Of the male students, 37.4% knew someone who had been cyberbullied, 21.9% had been cyberbullied, and 11.4% had been cyberbullied themselves. Of the female students, 38.5% knew someone who had been cyberbullied, 22% had been cyberbullied, and 7.6% had been cyberbullied themselves. There did not appear to be any differences in rates between white US citizens and nonwhite or foreign national students. 39.2% of white students who were US citizens knew someone who had been cyberbullied, 21.5% had been cyberbullied, and 8.4% had been cyberbullied themselves. Following that, the specific media platforms via which college students had been cyberbullied were investigated. In this sample, 25% of college students reported being harassed or threatened via a social networking site; 21.2% reported receiving harassing or threatening text messages; 16.1% reported receiving harassing or threatening email messages; 13.2% reported receiving harassing or threatening Instant Messages (IMs); 9.9% reported having someone write negative or embarrassing things about them in a chat room; and 6.8% reported having someone post negative information about them. Based on these findings, it is clear that certain types of electronic media are more regularly used to cyberbully others, with social networking and text messaging being the most popular, and chat rooms and other websites (forums) being the least prevalent.

However, **Slonje and Smith**⁸ found that 50% of targets did not tell anyone, 35.7% told a friend, 8.9% told a parent or guardian, and 5.4% told someone else. Notably, the majority of targets do not tell adults, 10,88–91 with one study reporting up to 90% of adolescents not telling an adult about their experiences related to cyberbullying.

Wright, M. F., Kamble, S. V., & Soudi, S. P. (2015).⁹ supported the study with the jotted statement that bullying is predominantly considered as a serious issue in Western countries In India, bullying is part of certain cultures. Even though school bullying or college bullying is prevalent in the name of ragging (Ragging is strongly condoned now after the Raghavan committee gained popularity), we do not give the connotation of bullying in the Indian context (Jaishankar & Shariff, 2018). However, there are new laws regarding ragging in schools and colleges, and bullying per se has not been condoned. The use of modern technologies such as the internet and mobile phones has increased the prevalence of bullying by school and college students. Today, the internet and mobile phones have become a part of everybody's lives, including students. The misuse and abuse of technology such as the internet and mobile phones have surfaced and various cases of cyberbullying have emerged in India. In this present research work, an attempt is made to analyse the situation of bullying using the internet and mobile phones among college students in selected Indian cosmopolitan cities.

Similar study findings supported by **Mayuri B. Zod and Sonali Mene (2022)**¹⁰ that in pre-test, 18% subjects had poor knowledge, majority of the subjects i.e.70% had satisfactory

knowledge, minority of the subjects 12% had good knowledge and nobody was in excellent group regarding Cyberbullying and it's prevention. While in post-test, out of 100 subjects 6% had satisfactory knowledge, 57% of the subjects had good knowledge and 37% had excellent knowledge about Cyberbullying and it's prevention. The comparison between the mean of pre-test and post-test for knowledge showed that the mean of differences was 10.28, the calculated 't' value was 19.98. It showed that there was a significant improvement in the knowledge of adolescence regarding Cyberbullying and it's prevention. It shows that there was a significant improvement in the knowledge of adolescents regarding Cyberbullying and its prevention, the null hypothesis H is rejected, and the research 0 hypothesis H is accepted.

CONCLUSION:

The current findings of the study, are on the impact of structured teaching on knowledge regarding cyberbullying among students of selected colleges. The results revealed and concluded that structured teaching is very effective in enhancing the level of knowledge scores at $p < 0.05$ level of significance.

IMPLICATIONS:

Nursing practice: Nurses in their educative role must conduct educational programs in psychiatric clinics for the students to improve their knowledge of cyberbullying.

Nursing Education: Nurse Administrators need to plan and organize health education programs regarding cyberbullying for the nursing personnel and motivate them to conduct the same. They should plan for manpower, money, material, methods, and time to conduct successful educational programs. In-service education programs should be organized for the nurses who are working in psychiatric wards and community areas.

Nursing Administration: The nurse in charge of the psychiatric unit can motivate the staff nurses to use structured teaching on cyberbullying to educate hospitalized students and their parents. The nursing superintendent can use this content of the cyberbullying to prepare the information booklet and keep it in the OPD for further reference.

Nursing Research:

Nursing practices need to be based on scientific knowledge. Very few studies have been conducted regarding cyberbullying in India. More innovative teaching methods like audio-visual package can be incorporated and effectiveness can be evaluated.

LIMITATIONS:

- The study was limited to one group pre-test and post-test design.

RECOMMENDATIONS:

Based on the findings of the study the investigator wants to recommend further studies can be conducted -

1. A similar study can be conducted using larger samples.
2. A comparative study can be done among adolescents
3. A comparative study can be conducted to assess the knowledge and attitude among college students residing in urban and rural areas of the Sangli district.

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