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**Original Research Article**

# Effectiveness Of Computer Assisted Assertiveness Training On The Level Of Knowledge Regarding Assertiveness Behavior Towards The Prevention Of Abuse In Adolescent Girls Among Students At Selected Schools In Vadodara, Gujarat.

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## ABSTRACT

### Background of the study:

In India, adolescents account for more than one-fifth of the population. Many of them drop out of school, marry young, work in dangerous jobs, are sexually active, and are subjected to peer pressure. These variables have significant economic and public health ramifications. More over half of the adolescent girls were between the ages of 15 and 16. The majority of them (50.82%) were from the lower socioeconomic level, 78% were Hindus, 5.31% were married, and 17.55% of their moms were illiterate. Around 9.6% of adolescent girls had dropped out, with the primary reasons being marriage (38%) and not being interested (25%). Adolescent girls were married at a rate of about 5.31%. The average age of menarche, marriage and pregnancy was 13.54+ years, 17.5 1.29 years and 18.23 + 0.9 years, respectively. Majority of adolescent girls (53.06%) were underweight followed by normal (45.51 %), overweight (1.02 %) and obese (0.41%). About 95.31% of adolescent xii girls were anaemic. Around 69.59% of adolescent girls had mild anaemia and only 1.84% were severely anaemic.

### Objectives of the Study

 To assess the level of knowledge among adolescent girls towards the abuse.

 To evaluate the effectiveness of computer assisted teaching assertiveness behaviour towards the prevention of abuse among adolescent girls.

 To associate the level of knowledge score adolescent girls with their selected demographic variables.

**Method:** This was experimental study with the total 40 subjects were selected through non probability convenient sampling technique. Exploratory design was used. Data was collected by

using structured interview schedule. The tool consists of two sections i.e. socio-demographic data and knowledge questionnaire. The reliability of the tool was established by split half method formula. The calculated r=0.904 hence it shows that the tool is reliable to assess the assertiveness behaviour towards the prevention of abuse among adolescent girls.

**Result:** In pre test 16 (40%) of the adolescent girls had average knowledge only and remaining 24(60%) had low knowledge. Post test scores compared to pre test scores showed an observable increase in the knowledge of adolescents as 12 (30%) of them had high knowledge and remaining 28(70%) had average knowledge. The mean of knowledge score in pre test was increased from 16.2 $\pm$ 2.85 to 22.45 $\pm$ 2.13 in post test.

**Conclusion:** The study proved that the computer assisted assertiveness training helps the adolescent girls for the prevention of abuse.

**Keywords:** Effectiveness, computer assisted assertiveness, training, Knowledge, Assertiveness behaviour, Abuse

## INTRODUCTION:

Currently, one in every five people on the planet is an adolescent, with developing countries accounting for 85% of these adolescents. Adolescents (10-19 years) account for 20.07% of the overall population in India, or more than 200 million people.[1]

In India, adolescents account for more than one-fifth of the population. Many of them have dropped out of school. They marry young, work in dangerous jobs, are sexually active and are subjected to peer pressure. These variables have significant economic and public health ramifications. Adolescents are not a uniform group. Their circumstance differs depending on their age, gender, marital status, locality, and cultural background. It is critical to influence adolescents' health-seeking behaviour because their situation will be critical in deciding the nation's health mortality and morbidity, as well as the population growth scenario.[2]

Women have acted as looking glasses for millennia, capable of reflecting the figure of man at double its natural size. However, violence against women continues to be a major issue. [3]

Violence against girls is a symptom of historically uneven power relations between men and women," and "violence against women is one of the critical societal mechanisms by which women are driven into a subordinate position in comparison to males."[4]

Physical and mental aggression, emotional and psychological abuse, rape and sexual abuse, incest, rape between spouses, regular or occasional partners and cohabitants, crimes committed in the name of honour, female genital and sexual mutilation, and other traditional practises harmful to women, such as forced marriages, all occur in the family or domestic unit.[5] Violations of women's human rights in times of armed conflict perpetrated or supported by the state or its officials, include the kidnapping of hostages, forced displacement, systematic rape, sexual slavery, forced pregnancy, and trafficking for sexual exploitation and economic exploitation.[6]

Violence against women is so ingrained in culture that many of those who are victims believe they are to blame. Many perpetrators of violence believe they are justified by strong cultural messages that rape, battering, sexual harassment, child abuse, and other forms of violence are acceptable. We encounter images of male aggression against women in the news, on TV shows, in movies, in advertisements, and in our own homes and workplaces every day. It is a reality for women of all ages, colours, and social classes.[7]

Violence against women is defined broadly as any violation of a woman's personhood, mental or physical integrity, or freedom of movement through individual acts or societal oppression. It encompasses all of the ways in which our society objectifies and oppresses women. Sterilization abuse, prescription medication misuse, pornography, stalking, assault, and rape are all forms of

violence against women. It involves sexual and physical abuse of young girls as well as elder abuse.[8]

In its research on this, the World Health Organization classified it as occurring at five stages of the life cycle: pre-birth, infancy, girlhood, adolescence and adulthood, and elderly. Adolescents face challenges such as psychological abuse, abuse of women with impairments, and forced childbearing throughout their lives. Economically enforced sex (e.g., school girls having sex with "sugar daddies" in exchange for school tuition), incest, sexual abuse in the workplace, rape, sexual harassment, forced prostitution and pornography, trafficking in women, relationship violence, marital rape, dowry abuse, and murders.[9]

## METHODS

### Study area and period

### Study design

An Institutional based cross-sectional study design was conducted among adolescent girls.

### Inclusion criteria and Exclusion criteria:

### Inclusion criteria

All sampled adolescent girls those who studying and who live in selected high school, in the study period.

### Exclusion criteria

Adolescent girls those who are severely ill during data collection period and unable to communicate was excluded from our study

### Sample size determination

The sample size in this cross-sectional survey was determined by using a single proportion formula i.e. sample size was 40.

### Operational definition

- **Assess:** It refers to the process of investigating pre and post knowledge level from adolescent girls towards the prevention of abuse
- **Effectiveness:** It refers to the extent to which the computer assisted teaching programme has achieved the desired outcome as expected by gain in knowledge
- **Assertiveness behaviour:** It refers to behaviour that makes the adolescent girls to standing up for their personal rights in appropriate ways, towards the prevention of abuse
- **Prevention of Abuse:** It refers to the process that attempts to prevent the onset of adolescent girl abuse
- **Adolescent Girls:** It refers to the age of girl from 10 to 19 years and it is a stage of physical and psychological human development that generally occurs during the period from puberty to legal adulthood.

### Selected Variables

Variable is an attribute of a person or object that varies and that which taken on different values.[(21)]

### Dependent variable

The outcome of interest. The variable that is hypothesized to depend on or caused by another variable.[(21)]

In this study the Knowledge on assertiveness behaviour to prevent abuse was considered as dependent variable.

**Independent Variable**
The variable that is believed to cause or influence the dependent variable.[21]

In this study the Computer assisted teaching on assertiveness behaviour considered as independent variable.

**Extraneous Variables**
These are the variables other than independent variables, which can influence the dependent variable.

**Assumptions**
The present study was assumed that:
It refers to the beliefs that are held to be true, but have not necessary to be proven
1. The adolescent girls may not have adequate knowledge towards abuse
2. Assertiveness training programme towards the prevention of abuse will enhance the knowledge and skills among adolescent girls

**Hypotheses**
**H1-**There will be significant difference in before and after teaching programme towards the prevention of abuse among adolescent girls.
**$H_2$-** There will be a significant association between the levels of knowledge regarding the prevention of abuse among adolescent girls with selected demographic variables.

**Variables:**
Independent Variable: Computer assisted teaching on assertiveness behaviour.
Dependent Variable: Knowledge on assertiveness behaviour to prevent abuse.

**Population**
Population is a complete set of persons or objects that possess a common characteristic that is of interest to the researcher.
The target population of the present study was refers to the adolescent girls in the age group from 10 to 19 years.

**Sample**
Sample is a subset of population, selected to represent the population.
In present study the sample consist of adolescent girls those who fulfilled the inclusion and exclusion criteria.

**Sampling Technique**
Sampling is a process of selecting the portion of the population to represent the entire population.
Convenient Sampling Technique was used to select the sample for the present study.

**Setting of the Study**
Research setting refers to the physical location and condition in which the data collection for study takes place. [(29)]
The study will be conducted in selected Schools at Bangalore.

**Criteria for Sample Selection**
The following criteria were set by the researcher for the selection of sample.

**Inclusion Criteria:** The study includes the Adolescent girls who are:

- In age group from 10 to 19 years
- who are available at the time of data collection
- who knows English.

**Exclusion Criteria:** The study excludes the Adolescent girls who**:**

- Cannot understand and read/write English.
- Are suffering from chronic diseases.
- Are not willing to participate in the study

**Data collection instrument and procedure**

Structured and semi-structured English version questionnaire was prepared from the literature review by principal -investigators. It includes about adolescent girls socio-demographic factors, Assertiveness training programme towards the prevention of abuse.

**Data collection instrument and methods:-**The data collector was the group members. Face to face interview held privately after verbal consent is obtained from each participant. The data was collected until the required sample size achieved.

**RESULT:**

**Table 1:** Frequency distribution of Adolescent school girls according to their socio demographic characteristics.

| Socio-Demographic variables | No of respondents(f) | Percentage |
|---|---|---|
| **Age (in years)** | | |
| 10-12 | 22 | 55.00 |
| 12-14 | 14 | 35.00 |
| 15 &above | 4 | 10.00 |
| **Educational status** | | |
| No formal education | 2 | 5.00 |
| Primary | 12 | 30.00 |
| Secondary | 6 | 15.00 |
| Higher secondary | 10 | 25.00 |
| **Occupation** | | |
| House wife | 10 | 25.00 |
| Coolie | 16 | 40.00 |
| Government employee | 6 | 15.00 |
| Private employee | 8 | 20.00 |
| **Family Income(monthly)** | | |
| Rs. 1000/--Rs.2000/- | 2 | 5.00 |
| Rs.2001/--Rs.4000/-. | 24 | 60.00 |
| Rs.4001/--Rs.6000/-. | 6 | 15.00 |
| Rs.6001/--and above | 8 | 20.00 |
| **Place of Residence** | | |
| Urban | 18 | 45.00 |
| Rural | 22 | 55.00 |
| **Source of Information** | | |
| News paper | 4 | 10.00 |
| Mass media | 10 | 25.00 |
| Magazine | 6 | 15.00 |
| Others | 20 | 50.00 |

Table.1 represents the percentage distribution of study subjects. As per age out of 60 subjects, 22(55%) of the subjects belong to 10-12 years, followed by 14(35 %) in the age group of 12-15 years and 4(10%) were 19 and above years of age. Out of 60 subjects, 2(5%) of the subjects had no formal education, 12(30%) up to primary education, 6(15%) had secondary education, 10(25%) had High school, 2(5%) had 2(5%) of the subjects had post graduation, 6(15%) were government employee, and remaining 8(20%) of the subjects were private employee. 2(5%) subjects had an

income of Rs.1000/- Rs. 2000/-, followed by 24( 60%) subjects with income between Rs. 2001/-4000/-,6(15%) had about Rs 4001/- 6000 and 8(20%) had about Rs.6001/-and above.
Majority 22 (55%) of subjects were staying in rural area and remaining 18(45%) were in urban area. The following diagram represents the percentage distribution of study sample by source of information regarding health. Around 4(10%) subjects were getting information from news paper, followed by 10(25%) subjects were getting from mass media, 6(15%) were getting from magazine and 20(50%) were getting from others like friends, neighbors, relatives etc.

**TABLE 2:** Percentage distribution of knowledge levels of prevention of abuse among adolescent girls in pre test and post test

| Levels of knowledge | Pre test | | Post test | |
|---|---|---|---|---|
| | Frequency | Percentage | Frequency | Percentage |
| High knowledge | 00 | 00 | 12 | 30 |
| Average knowledge | 16 | 40 | 28 | 70 |
| Low knowledge | 24 | 60 | __ | __ |

Table 2 presents the overall knowledge levels of prevention of abuse among adolescent girls. In pre test, 16 (40%) of the adolescent girls had average knowledge only and remaining 24(60%) had low knowledge.

Post test scores compared to pre test scores showed an observable increase in the knowledge of adolescent girls as 12 (30%) of them had high knowledge and remaining 28(70%) had average knowledge.

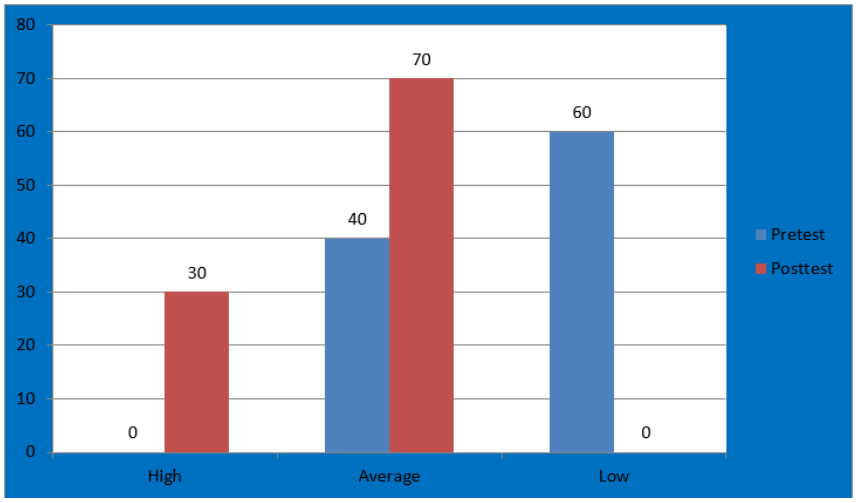


**Fig no. 1** Percentage distribution of adolescent girls by their knowledge on prevention of abuse in pre test and post test.

**TABLE 3:** Mean and standard deviation of pre test and post test knowledge scores of assertiveness behaviour towards the prevention of abuse among adolescent girls

**n = 60**

| | Pre test | | Post test | |
|---|---|---|---|---|
| | Mean | Standard deviation | Mean | Standard deviation |
| Knowledge regarding prevention of abuse among adolescent girls | 16.2 | 2.85 | 22.45 | 2.13 |

Table 3 represents the mean and standard deviation of pre test and post test knowledge scores of prevention of abuse among adolescent girls**.** It clearly demonstrates that the mean of knowledge score in pre test was increased from 16.2 $\pm$ 2.85 to 22.45 $\pm$ 2.13 in post test.


**Fig.2:** Mean and standard deviation of pre test and post test knowledge scores of prevention of abuse among adolescent girls

**SECTION –IV: Testing hypothesis for evaluating effectiveness of instructional module**

**TABLE 3:** Comparison of knowledge scores of adolescent girl regarding prevention of prevention of abuse among adolescent girls

| Mean Difference | Standard error of difference | Paired 't' test value | |
|---|---|---|---|
| | | Calculated value | Table Value |
| 07.3 | 2.23 | 19.07 | 2.26 |

(Table value of 't' for 39 df at 0.05 level of significance is 2.26)

Table 3 reveals that the overall mean difference was 7.3 with paired 't' value 19.07. Thus it was revealed that the post test mean score was significantly higher than the pre test mean score. The table value of paired 't' test at 39 degree of freedom and at 0.05 level of significance is 2.26. Since the calculated value was higher than the table value, the research hypothesis $H_2$ was accepted. Hence there was a significant difference between the pre test and post test scores on prevention of abuse among adolescent girls.

**TABLE 4:** Comparison of knowledge scores of adolescent girls before and after intervention of instruction module on prevention of abuse among adolescent girls.

| Mean Difference | Standard error of difference | Paired 't' test value | |
|---|---|---|---|
| | | Calculated value | Table value |
| **08.66** | **2.4** | **17.49** | **1.96** |

(Table value of 't' for 39 df at 0.05 level of significance is 2.26)

Table 4 reveals that the overall mean difference was 08.66 with paired 't' value 17.49. Thus it was revealed that the post test mean score was significantly higher than the pre test mean score. The table value of paired 't' test at 39 degree of freedom and at 0.05 level of significance is 2.26. Since the calculated value was higher than the table value, the research hypothesis $H_3$ was accepted. Hence there was a significant difference between the pre test and post test practice scores on prevention of abuse among adolescent girls.

**SECTION – V: Analysis and interpretation of data to find out correlation between knowledge scores.**

Karl Pearson's coefficient correlation was used to compute the correlation between knowledge of adolescent girls regarding assertiveness behaviour towards the prevention of abuse among adolescent girls. The 'r' was found to be 0.052, hence a positive correlation was found between

knowledge assertiveness behaviour towards the prevention of abuse among adolescent girls. Hence the research hypothesis $H_1$ is accepted.

**Section V: Association between pretest knowledge scores and selected socio demographic variables**.

**Table 5:** Association between knowledge scores and selected socio demographic variables

| Sl. No. | Socio demographic variables | df | Chi-square value | Table value | Level of significance |
|---|---|---|---|---|---|
| 1. | Age | 1 | 3.523 | 3.84 | 0.05 |
| 2. | Educational status | 1 | 12.2 | 3.84 | 0.05 |
| 3. | Occupation | 1 | 7.29 | 3.84 | 0.05 |
| 4. | Place of residence | 1 | 6.532 | 3.84 | 0.05 |
| 5. | Source of information regarding abuse | 1 | 2.434 | 3.84 | 0.05 |

Table no. 5 depicts the association between socio demographic variables of sample and their knowledge scores. For age the calculated $\chi^2$ value was 3.523 and table value of $\chi^2$ at 5% level of significance with degree of freedom 1 is 3.84. As the calculated value was less than the table value the research hypothesis related to Age of the sample and pre test knowledge score was accepted. Hence no significant relationship was observed between the Age of the adolescent girls regarding prevention of abuse.

The calculated $\chi^2$ value was 12.2 and table value of $\chi^2$ at 5% level of significance with degree of freedom 1 is 3.84. As the calculated value was more than the table value the research hypothesis related to Educational status of the sample and pre test knowledge score was rejected. Hence significant association was observed between the Educational status of the adolescent girls and their pre test knowledge score on selected assertive behaviour and their prevention.

For education the calculated $\chi^2$ value was 7.29 and table value of $\chi^2$ at 5% level of significance with degree of freedom 1 is 3.84. As the calculated value was more than the table value the research hypothesis related to occupation of the sample and pre test knowledge score was rejected. Hence significant association was observed between the occupation of the adolescent girls and their knowledge score on prevention of abuse.

For family monthly the calculated $\chi^2$ value was 6.532 and table value of $\chi^2$ at 5% level of significance with degree of freedom 1 is 3.84. As the calculated value was more than the table value the research hypothesis related to family income of the sample and pre test knowledge score was rejected. Hence significant association was observed between the family income of the adolescent girls and their pre knowledge score on selected prevention of abuse and their prevention.

The calculated $\chi^2$ value was 2.434 and table value of $\chi^2$ at 5% level of significance with degree of freedom 1 is 3.84. As the calculated value was less than the table value the research hypothesis related to source of information of the sample and pre test knowledge score was accepted. Hence no significant relationship was observed between the source of information of the adolescent girls and their pre test knowledge score on selected abuse and their prevention.

For educational status of sample the calculated $\chi^2$ value was 4.905 and table value of $\chi^2$ at 5% level of significance with degree of freedom 1 is 3.84. As the calculated value was more than the table value the hypothesis related to educational status of the sample and practice score was accepted. Hence a significant relationship was observed between the educational status of the adolescent girls and their prevention of assertiveness behaviour.

For place of residence the calculated $\chi^2$ value was 5.633 and table value of $\chi^2$ at 5% level of significance with degree of freedom 1 is 3.84. As the calculated value was less than the table value the research hypothesis related to place of residence of the sample and practice score was accepted. Hence a significant relationship was observed between the place of residence of adolescent girls and their prevention of assertiveness behaviour.

For occupation status of sample the calculated $\chi^2$ value was 3.346 and table value of $\chi^2$ at 5% level of significance with degree of freedom 1 is 3.84. As the calculated value was less than the table

value the research hypothesis related to occupation of the sample and practice score was rejected. Hence no significant relationship was observed between the occupation of the adolescent girls and their prevention of assertiveness behaviour.

For source of information of sample the calculated $\chi^2$ value was 1.346 and table value of $\chi^2$ at 5% level of significance with degree of freedom 1 is 3.84. As the calculated value was less than the table value the research hypothesis related to source of information of the sample and practice score was rejected. Hence no significant relationship was observed between the source of information of the adolescent girls and their prevention of assertiveness behaviour.

## DISCUSSION:

The purpose of this study was to assess knowledge towards prevention of abuse and associated factors among adolescent girls studying selected high school at vadodara.

Similar study explored adolescents' attitudes toward, and responses to, warning signs of emotional abuse. Males and females aged 16 to 19 years ($N$ = 171) from two high schools and one University completed a purpose-designed questionnaire containing 20 statements of warning sign behaviors. They then answered questions measuring perceived acceptability of these behaviors and proposed responses to them. Warning signs were separated into four domains: denigration, personal degradation, public degradation, and verbal aggression. As expected participants on average proposed passive or vague responses to warning signs in all four domains. Warning sign behaviors that involved personal degradation were perceived to be the least acceptable of all behaviors, but even "risk-aware" individuals still lacked knowledge of effective responses to warning signs. Females perceived warning sign behaviors to be the least acceptable and proposed the most assertive responses. However, the response protectiveness effect was reversed in those aged 19 years, with females proposing the least assertive responses. Although adolescents are aware of what constitutes unacceptable relationship behaviors, they still lack knowledge of the appropriate ways to respond to warning signs to discourage future abusive relationship behaviors. The implications of these findings for interventions and practical training for adolescents to prevent abuse are discussed.[13]

We describe adolescent girls' perceptions of sexual assertiveness and examine the relationship of these perceptions with developmental and interpersonal variables. Participants were recruited from a school-based health clinic and local colleges, and through snowballing to participate in a 6-month study examining microbicide acceptability. Result showed that Girls perceived themselves as asserting themselves between 50% and 75% of the time with their current or most recent partner. The Initiation subscale was not related to the other two subscales. In final models, girls with a prior pregnancy perceived themselves as initiating sex more than girls without a prior pregnancy. Having a greater number of lifetime partners was related to perceptions of less refusal, whereas greater number of partners, being sexually experienced longer, and engaging in more unprotected sex were related to perceptions of less implementation of preventive methods. None of the relationship variables were related to scores on any subscale. Study concluded that Most of these girls perceived themselves as sexually assertive. Given that sexual experience, not relationship factors, were related to perceptions of sexual assertiveness, the design of counselling messages should incorporate sexual experience. These messages should find effective ways to help girls both to communicate their sexual desires and to enhance their ability to protect themselves.[14]

**CONCLUSION:** After providing computer assisted assertiveness training helps to adolescent girls regarding prevention of abuse**.**

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