



## A Study To Evaluate The Effectiveness Of Video-Assisted Games & Mock Drills On Knowledge & Practice On Road Safety Measures Among Middle School Students In Selected Schools In Jabalpur.

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**ABSTRACT** : Road traffic accidents are one of the main causes of death and injury/disability to children of school age from age group 6 to 12 years. Accident tragically are often due to ignorance, carelessness, thoughtlessness and overconfidence. The consequences of accidents affect seriously children's health and growth, and interfere in their studies and future. The methodology adopted for assessing the knowledge of school-going children regarding the prevention of road accident. Assessing the knowledge of school – going students regarding the prevention of road accidents. the research approach for this study is quantitative and pre experimental one group pretest posttest design . The sample size 60 was selected by purposive sampling The accessible population was ( 6th , 7th , 8th , ) at green valley public school students Jabalpur . Analysis revealed that there was marked Pre – test knowledge score of the students in pre test poor 3 [ 5 % ] , average score is 28 [ 48 . 6 % ] and good score is 29 [ 48.3 % ] . Post test knowledge score of students , poor score is 0 [ 0% ] , average score is 7 [ 11.6% ] and good score is 53 [ 88.3 % ] , the pre test mean is 19.80 and in post test mean score is 6.16 and standard deviation of pre test is 5.99 and standard deviation of post test is 3.23 and calculated t – value is 17.57 . On the pre – test knowledge, it was found that age [ chi square 0.99 ] so the association of each variable with level of pretest knowledge score is significant .

**Keywords:-** Video Assisted games, Mock drill, Standard road Safety Measures

### INTRODUCTION

**Road traffic accidents (RTA)** are defined as "any occurrence that arises on a way or road open to public Road traffic accidents are one of the main causes of death and injury/disability to students of school age from age group 6 to 12 years. Accident statically are often due to ignorance, carelessness, thoughtlessness and overconfidence. The consequences of accidents affect seriously children's health and growth, and interfere in their studies and future. Factors related to humans, vehicles and the environment are considered to play an important role before, during, and after the occurrence of any traumatic episode related to road accidents. As youngsters are more susceptible, due to their emotional and biological makeup, it is important to generate attentiveness and increase their knowledge related to traffic rules. Education regarding road safety rules aims to enlighten the knowledge and understanding of traffic rules.

### OBJECTIVE

1. Assess the pre-test knowledge score regarding road safety measures among middle school



children in selected area of Jabalpur.

2. Assess the effectiveness of video assistant games among middle school children in selected area of Jabalpur.
3. Assess post-test knowledge score regarding road safety measures among middle school children in selected area of Jabalpur.
4. Assess the association between pre-test knowledge score with there selected demographic variables.

### HYPOTHESIS

H1 ; There will be significant differences in the level of knowledge among school- going students regarding prevention of road accidents before and after video-assisted game and mock drill knowledge and practice.

H2: There will be a significant association between socio-demographic variables and

The level of knowledge regarding the prevention of road accidents among school-going students

### METHODOLOGY

Assessing the knowledge of school – going students regarding the prevention of road safety accidents . the research approach for this study is quantitative and research design is experimental . sample size 60 . the accessible population (6<sup>th</sup> , 7<sup>th</sup> , 8<sup>th</sup> , ) at green valley public school students .

#### INCLUSION CRITERIA

- A) Students 6th, 7th and 8th standard only
- B) Students who present during data collection

#### EXCLUSION CRITERIA

- A) Students 6th, 7th, and 8th standard do not accept these.
- B) Students who are not present during data collection.

#### TOOL DESCRIPTION :

**SECTION A** – Deals with demographic data such as age, class, area of living, type of family, family income, mode of transport, and minimum age to get license knowledge about road accidents.

**SECTION B** - Deals with an assessment of knowledge regarding road safety measures. A score of 1 was assigned for the correct answer & 0 was assigned for the wrong answer the range of total scores was 0-30. The score ranges from a minimum of zero to a maximum of 30.

The level of knowledge has been classified as knowledge score & distribution is assigned are **scoring**

Distribution of knowledge score –

Level of Knowledge	Score
Good	0-10
Average	11-20
Poor	21-30

### MAJOR FINDING OF THE STUDY

Demographic distribution - majority of 60 samples .

- Distribution of students [age in year], the majority 16 ( 27 % ) of students were in the age group of 10 -12 years, and 44 ( 73% ) were in the age group of 13-14 years.
- Distribution of student [ education in a year], the majority 20 ( 34%) of students were in the education of 6th class, followed by 20 ( 33%) in the education of 7<sup>th</sup> class , followed by 20 ( 34%) in the education of 8th class .
- Distribution of students [ area of living ]: The majority, 24 (40% ), were rural, followed by 36 ( 60%) urban.



- Distribution of students [ type of family]: The majority, 34 (56.6% ), were in a nuclear family, followed by 24 ( 40%) in a joint family and 2 ( 3.3%) in an extended family.
- Distribution of students [family income], the majority of income 5(8.3%) of the respondents have below 10 thousand, 16 (26.6%) have 11-20 thousand, 7(11.7%) have 21-30 thousand and 32 (53.2 %) have above 30 thousand.
- Distribution of students [ mode of transport ] used 21 (35%) were cars, 12 (20%) were walking, 21 (35%) were motorcycles and 6 (10%) were bicycles.
- Distribution of students [ age to get driving license ]: The majority, 2 ( 3.3%), are 15 years old, 1 ( 1.6 %) are 16 years old, 0 (0% ) are 17 years old, and 57 (95.5 % ) are 18 years old.
- Distribution of students [ source of information ]: The majority of sources of information were 35 (58.4% ) newspapers, 2 (3.4 % ) radio, 10 ( 16.6 % ) television, and 13 (21.6% ) parents.

## SECTION-B TABLE

### ASSESSMENT OF SCORE FOR PRE-TEST KNOWLEDGE STUDENTS REGARDING ROAD SAFETY MEASURES

N=60

S.NO.	CATEGORY	FREQUENCY	PERCENTAGE	MEAN	SD
1	POOR	3	5%		
2	AVERAGE	28	46.6%	19.80	5.99
3	GOOD	29	48.3%		

**Table-fig.** Pre-test knowledge score of the students in pre test poor 3 [5%], average score is 28 [ 48.6 % ] and good score is 29 [ 48.3 % ]

The data present in the table fully fill the objectives of pre-test clearly indicate that 60 students have average & good knowledge among road safety measures . The mean & SD also justify the knowledge of students

pretest poor 3 [5%] ,average score is 28 [ 48.6 %] and good scores 29 [ 48.3 %] Post test knowledge score of students ,poor score is 0 [0%] , average score is 7 [ 11.6% ] and good score is 53 [ 88.3 % ],the pre test mean is 19.80 and in post test mean score is 6.16 and standard deviation of pretest is 5.99 and standard deviation of post test is 3.23 and calculated t – values

17.57 . On the pre- test knowledge, it was found that age [ chi square 0.99] , class [ 1] , area [ 0] , type of family [ 0] , family income [0.99] , mode of transports [1] , age to driving license [ 0] and source of information [0.97],so the association of each variable with level of pretest knowledge score is significant .

### ASSESSMENT OF SCORE FOR POST-TEST KNOWLEDGE STUDENTS REGARDING ROAD SAFETY MEASURES

N=60

S.NO.	CATEGORY	FREQUENCY	PERCENTAGE	MEAN	SD
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1	POOR	0	0%	24.5	3.0
2	AVERAGE	7	11.6%		
3	GOOD	53	88.3%		

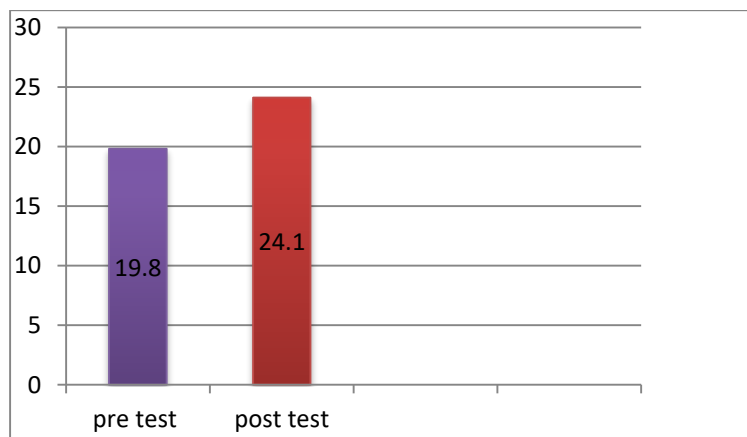
The data presented in the table fully fill the objectives clearly indicates that 60 students have good knowledge among road safety measures. The mean & SD also justify the knowledge of students.

### COMPARISON OF PRE AND POST KNOWLEDGE OF STUDENTS REGARDING ROAD SAFETY MEASURES

N=60

SL NO.	DESCRIPTION	MEAN	SD	t-TEST (0.05)
1	PRETEST KNOWLEDGE	19.80	5.99	4.00
2	POST-TEST KNOWLEDGE	24.5	3.01	

Table fulfill the objective. It compares pre-and post-test knowledge, which was statically tested by applying a t-test.



### ASSOCIATION :-

Association of each variables with level of pre test knowledge score – on the pre – test knowledge, it was found that age [ chi square 0.99 ], class [ 1 ], area [ 0 ], type of family [ 0 ], family income [ 0.99 ], mode of transport [ 1 ], age to Age driving license [ 0 ] and source of information [ 0.97 ], so the association of each variable with level of pretest knowledge score is significant.

### LIMITATION

1. Small sample size (60 students) limits generalizability.
2. Study focused only on middle school students, which may not represent other age groups.
3. Limited geographic scope (Jabalpur) reduces applicability to other regions.



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4. Short-term evaluation may not reflect long-term knowledge retention and behavior change.
5. Possible bias in self-reported practices and knowledge .

## CONCLUSION

In this present study to evaluate the effectiveness of video assisted game The findings indicate significant improvement on both knowledge and practical application of road safety rules following the intervention. Before the intervention, many students demonstrate limited awareness and incorrect practices regarding essential road safety measures. However, post-intervention assessments revealed a notable increase in knowledge and improved adherence to safe road behaviors, suggesting that interactive and engaging educational tools like video games and mock drills are effective in instilling road safety awareness among young learners.

The results emphasize the importance of interactive learning approaches in school- based road safety programs. Incorporating digital learning tools alongside practical demonstrations can be a valuable strategy to enhance children's understanding and encourage safer road behaviors. Based on these findings, it is recommended that schools integrate such innovative educational strategies into the irregular curriculum to ensure long-term behavioral change and improved road safety compliance among students.

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