A VIDEO-BASED EDUCATIONAL PROGRAM IN ENHANCING AWARENESS ABOUT ROAD SAFETY MEASURES AMONG SCHOOL-GOING CHILDREN IN THE OLAPALAYAM AREA AT NAMAKKAL DISTRICT

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ABSTRACT

Road safety measures are an essential aspect of our daily lives, and it is crucial to educate school-going children about the importance of safe road behavior. With the rising number of road accidents involving children, there is a need to explore effective methods of educating children about road safety measures. This study aims to assess the effectiveness of a video teaching programme on road safety measures among school-going children.

Objectives: To evaluate the impact of video-based teaching program on the understanding of road safety measures among school-going children in the Olappalayam area at Namakkal District. Design: A pre-experimental research design, specifically utilizing a one-group pre-test and post-test design. **Setting**: In this present study was conducted in Olappalayam rural area at Namakkal district. Inclusive criteria School going children who are residing in Olappalayam area at the time of study, Those who are willing to participate in this study, Those who are present at the time of data collection period**,** Participants who can understand language Tamil and English. **Results:** In pre test, 22 (44%) inadequate knowledge, 26 (52%) moderately adequate and 2 (4%) adequate knowledge. In post test, 28 (56%) adequate knowledge, 22 (44%) moderately adequate knowledge and none of them had inadequate knowledge, The paired "t" value for knowledge score was 12.73, it is high when compared with table value 2.021 at 49 degree of freedom, The pre test knowledge score of mean was 11.7, standard deviation was 4.9, mean percentage was 39% Where as the post test knowledge score of mean was 20.3, standard deviation was 3.9, mean percentage 67.7% and the difference in mean percentage was 28.7% . The results revealed a significant positive impact of the video teaching program on road safety measures among school-going children, leading to a noticeable increase in their knowledge levels.

INTRODUCTION

Road accidents are a serious problem globally, and school-going children are at particular risk due to their limited experience and understanding of traffic rules and safety measures. to provide children with education regarding road safety measures to mitigate the potential risks of accidents.

The Video teaching programs have been developed as an innovative and effective approach to teach road safety measures among school going children. These programs can be accessed at any time, and the material can be repeated as often as necessary until children fully understand the concepts. This study aims to assess the effectiveness of video teaching programs in improving road safety knowledge among school-going children.

Road safety is a crucial topic that concerns everyone, especially school-going children who are vulnerable to accidents and injuries on the road. In recent years, there has been an increase in the occurrence of road accidents involving children, underscoring the importance of imparting road safety education to them. One effective way to educate children about road safety is through video teaching programmes. This study aims to assess the effectiveness of a video teaching programme on road safety measures among school-going children.

Road safety measures is an essential aspect of our daily lives, and it is crucial to educate school-going children about the importance of safe road behavior. With the rising number of road accidents involving children, there is a need to explore effective methods of educating children about road safety measures. This method for gaining popularity in recent times is the utilization of video teaching programs. This study aims to assess the effectiveness of a video teaching programme on road safety measures among school-going children.

Statement of the problem: **A Video-Based Educational Program in Enhancing Awareness about Road Safety Measures among School-Going Children in Olappalayam Area at Namakkal District.**

Objectives:

1. To evaluate the knowledge levels pertaining to road safety measures among school-going children both before and after the implementation of the video teaching program.

2. To assess the effectiveness of the video teaching program in enhancing awareness about road safety measures among school-going children.

3. To explore the relationship between the post-test knowledge scores concerning road safety measures among school-going children and specific demographic variables.

HYPOTHESIS

H_1 : There was a significant association between the levels of knowledge regarding road safety measures among school-going children before and after the pre-test and post-test assessments.

H_2 : A significant correlation was observed between the post-test knowledge level and the chosen demographic variables among school-going children.

Ethical Considerations:

The research proposal received approval from the institutional dissertation committee before conducting the pilot study. Permission was obtained from the head of the institutional authorities, and

informed consent was duly acquired from the participating school-going children. Furthermore, ethical clearance certificates were procured from the relevant institutional ethical committees.

Methods and Materials of the study:

This study a pre-experimental research design, specifically utilizing a one-group pre-test and post-test design. The study was conducted among 50 school going children are residing in Olappalayam area at Namakkal District. The Data was collected before and after administering the video teaching programme on road safety measures among school going children. A structured interview questionnaire was employed to evaluate the extent of knowledge concerning road safety measures.

DEVELOPMENT OF THE TOOL

The researcher was prepared and developed a close ended multiple choice questionnaire for road safety measures. In this study after exploring all sources of information like internet sources, library searching, searching journals and consultation with experts.

Data Collection Tools and Technique

Section I:

Demographic data - school going children like Age, Gender , Educational status , occupation of the family , Family income , type of family , religion ,sources of information on road safety measures .

Section II:

A structured questionnaire was utilized to evaluate the knowledge pertaining to road safety measures among school-going children.

Section III:

Video assisted teaching programme – A video assisted teaching programme which may last for 30 minutes. Duration involving lecture cum discussion of road safety measures by using video clippings, which were prepared ahead by the investigator and validated by the experts.

SCORING PROCEDURE

Multiple choice questions were used, correct answers score is (1) and wrong answers score (0).

SCORING INTERPRETATIONS

Knowledge		Range
Adequate knowledge	:	Above 70%
Moderate knowledge	:	51 – 70%
Inadequate knowledge	:	Below 50%

VALIDITY

The content validity of the tool was established by submitting the study, along with the blueprint, to experts for their opinions and suggestions on the content. The researcher was asked to give their opinion about the relevance of the items should be clarity, appropriateness and validity of the content areas.

Most of the experts accepted on all the items of the knowledge questionnaire statements except some opinion and suggestions for modifications. The main study was conducted data collection method and plan for statistical analysis.

PROCEDURE FOR DATA COLLECTION

Level 1: Pre test will be conducted from the school going children in Olappalayam area at Namakkal district.

Level 2: Educating the school going children on road safety measures.

Level 3 Following one week of the educational program, a post-test will be conducted to evaluate the extent of knowledge concerning road safety measures among school-going children.

RESULTS AND DISCUSSION

Frequency and percentage distribution of demographic variables of school going children (n=50)

S. No	Demographic variables	School going children	
		Frequency (F)	Percentage (%)
1.	**Age in years**		
	a. 6- 10 years	22	44%
	b. 10- 15 years	18	36%
	c. 16-18 years	10	20%
2.	**Gender**		
	a. Male	26	52%
	b. Female	24	48%
3.	**Educational status**		
	a. 6th- 8th std	29	58%
	b. 9th std	6	12%
	c. 10th std	6	12%
	d. Intermediate (+1& +2)	9	18%
4.	**Religion**		
	a. Hindu	35	70%

	b. Christian	9	18%
	c. Muslim	6	12%
	d. Others	-	-
5.	**Family income per month**		
	a. Rs. 5000 - Rs. 10000	23	46%
	b. Rs. 10000 - Rs. 20000	14	28%
	c. Rs. 21000 - Rs. 40000	8	16%
	d. Rs. > 40000	5	10%
6.	**Occupation of the family members**		
	a. Business	11	22%
	b. Government worker	8	16%
	c. Private worker	14	28%
	d. Coolie	17	34%
7.	**Which type of vehicle can you use?**		
	a. Bus	16	32%
	b. cycle	11	22%
	c. walking	19	38%
	d. motor cycle	4	8%
8.	**Sources of information**		
	a. mass media	7	14%
	b. health workers	10	20%
	c. schools	19	38%
	d. internet	14	28%

Table 1 : reveals that the demographic variables of school going children such as age , gender , educational status , religion , family income , occupation , which type of vehicle can you use, sources of information to the school going children.

➢ Distribution of samples according to their **age group** shows that 44% of school going children were in the age group of 6- 10 years and 36% were in the age group of 10 – 15 years and 20% were in the age group of 16 – 18 years.

➢ The distribution of samples based on gender indicates that 52% are male and 48% are female.

➢ Distribution of samples according to their **Educational status** shows that 58% of 6 th – 8th std, 12% of 9th std , 12% of 10th std , 18% of intermediate (+1 & + 2).

- ➢ The distribution of samples based on religion reveals that 70% are Hindu, 18% are Christian, and 12% are Muslims.
- ➢ The distribution of samples based on their family income indicates that 46% fall under the category of below Rs.5,000 – 10,000, 28% of them Rs.10,000 – Rs.20,000 and 16% of them Rs.20,000 – Rs.40,000, and 10% of them above Rs.40,000.
- ➢ Distribution of samples according to their **occupation** shows that 22% of them were Business, 16% of them were government worker, 28% of them were private worker, 34% of them were coolie.
- ➢ Distribution of samples according to **which type of vehicle can you use** shows that 32% of them were bus, 22% of them cycle, 38% of them walking, 8% of them were motor cycle.
- ➢ Distribution of samples according to their **sources of information** shows that school going children 14% of them were mass media, 20% of them were health worker, 38% of them were schools, 28% of them were internet.

Frequency and percentage distribution of pre and post test knowledge score for road safety measures among school going children   (N= 50)

S.NO	Level of knowledge	Range of marks	Pre – Test		Post -Test	
			F	%	F	%
1.	Inadequate	0-10	22	44	0	0
2.	Moderately adequate	11-20	26	52	22	44
3.	Adequate	21-30	2	4	28	56
Total			**50**	**100**	**50**	**100**

Table 2: frequency and percentage distribution of pre test knowledge score regarding road safety measures, 44 % of them had inadequate knowledge, 52% of them had moderately adequate level of knowledge and 4% of them have got adequate level of knowledge, post test knowledge score 0% of inadequate level, 44% of moderately adequate, 56% of adequate knowledge level. The video teaching program proved to be more effective for school-going children.

Paired "t" test of pre test and post test level of knowledge for school going children.

Level	"t" value	df	Table value	"p" value	Inference
Knowledge	12.73	49	2.021	P < 0.05	Significant

Table 3 : The paired "t" value for knowledge was 12.73, which is high when compared with table value 2.021 at 49 of degree of freedom. road safety measures related video teaching programme was more effective.

Mean, Standard Deviation, Mean Percentage and Difference in Mean Percentage of Pre and Post Test level of Knowledge for School Going Children.

Level	Maximum Scores	Level of knowledge			
		Mean	SD	Mean (%)	Difference in mean (%)
Knowledge	30				28.7%
Pre test		11.7	4.9	39%	
Post test		20.3	3.9	67.7%	

Table 4: Pre test level of knowledge mean value 11.7, standard deviation value 4.9, mean percentage value 39% .were as post test knowledge score of mean value 20.3, standard deviation 3.9, mean percentage 67.7% and the difference in mean percentage was 28.7%. In that video teaching programme on road safety measures had significant effect in increased the knowledge level of school going children.

Chi square value of association between post test level of knowledge for school children with their demographic variables

S. No	Demographic Variables	Level of knowledge			Df	Chi square value	Table value	P value
		Inadequate	Moderate	Adequate				
1.	Age in years 6- 10 years 10 – 15 years 16 – 18 years	0 0 0	9 6 7	13 12 3	4	0.11	9.49	P> 0.05
2.	Gender Male Female	0 0	12 10	14 14	2	3.61	5.99	P> 0.05
3.	Educational status 6th – 8th std 9th std 10th std Intermediate(+1,+2)	0 0 0 0	12 3 3 4	17 3 3 5	6	5.094	12.59	P> 0.05
4.	Religion Hindu Christian Muslim Others	0 0 0 0	14 4 4 0	21 5 2 0	6	1.61	12.59	P> 0.05
5.	Family income per month 5,000- 10,000 10,000 – 20,000 20,000 – 40,000	0 0 0	13 4 4	10 10 4	6	3.01	12.59	P> 0.05

	> 40,000	0	1	4				
6.	Occupation							
	Business	0	3	8				
	Government worker	0	5	3	6	2.412	12.59	P> 0.05
	Private worker	0	6	8				
	Coolie	0	8	9				
7.	Which type of vehicle can you use?							
	Bus	0	7	9				
	Cycle	0	6	5	6	0.86	12.59	P> 0.05
	Walking	0	8	11				
	Motor cycle	0	2	2				
8.	Sources of information							
	Mass media	0	4	3				
	Health worker	0	4	6	6	1.15	12.59	P> 0.05
	Schools	0	9	10				
	Internet	0	5	9				

P = 0.05   S = Significant   NS = Non significant

Table 5: It is revealed that there was significant association (P> 0.05) found between post test knowledge scores of school going children and their health status. There was no significant association between post test knowledge scores and other demographic variables like age, gender, educational status, religion, family income, occupation, how will you go to school, sources of information of the school going children.

CONCLUSION

From this findings of the study it can be concluded that,

More school going children had inadequate knowledge in pre test but more school going children had adequate knowledge in post test regarding road safety measures.

The mean post-test knowledge scores were found to be higher than the mean pre-test knowledge scores, indicating that the video teaching program was more effective.

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