Study to Assess the Effectiveness of Planned Teaching Programme Regarding Knowledge of Traffic Rules among Higher Secondary Students (15-18 Years) in Selected Schools of Dehradun

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ABSTRACT

Young people in the productive age group lose their lives in road accidents every year. Premature deaths of such young people cause substantial loss of productivity to the nation. The detailed age profile of road accidents victims for the calendar year 2015 reveals that the most productive age group of 15-34 years accounted for the largest share of 54.1% (79076 persons) in total road accident fatalities

A Experimental research study was conducted to assess the knowledge regarding traffic rules among higher secondary students of government schools of Dehradun. A total of 70 students were selected through convenient non -probability sampling technique. A self- structure questionnaire is used to obtain information from higher secondary students.

Result revealed that the total of 70 sample, 1.43% sample has inadequate knowledge, 28% sample has moderate knowledge and 58.57% sample has adequate knowledge regarding traffic rules. The mean score of knowledge regarding traffic rules is 9.88 with SD 1.38. 35.71% sample were in the age group of 15-16 years and 64.29% were in the age group of 17-18years. In this study 55.71% sample were male and 44.29% were female. There is no association found with knowledge score, else no demographic variable shows any significant association with their knowledge regarding traffic rules.

The study conclude that Majority of the students has adequate knowledge regarding traffic rules and no association with the knowledge regarding traffic rules. The study suggests that there is no need to replicate the study with experimental research design on large number of sample.

KEYWORDS: Knowledge, traffic, higher secondary students, adolescence

INTRODUCTION

Economic well-being, technological advancement and need to commute have resulted in increased traffic on roads. Casualties and losses have increased to very large extent. The increased traffic on roads has challenged the safety of an individual on road. A number of factors have been identified for such losses on road like inappropriate and excess speed, non-use of seat belts and child restraints, drinking and driving, non-use of helmets by riders of motorized two-wheelers, poorly designed or insufficiently maintained road infrastructure and vehicles that are old, not well maintained or that lack safety features. Global status report on road safety 2015 reflecting information from 180 countries indicates that worldwide the total number of road traffic deaths has plateau at 1.25 million per year, with the highest road traffic fatality rates in low-income countries. Urgent action is needed to achieve the ambitious target for road safety reflected in the newly adopted 2030 agenda for sustainable development: halving the global number of deaths and injuries from road traffic crashes by 2020. [1]

As per 'World Road Statistics 2015' released by International Road Federation, Geneva, India recorded the second highest number of road accident fatalities per 100,000 populations, which was at 11. Russian Federation topped the list at 19 per 100,000. India is signatory to the 'Brasilia Declaration' and has committed to reduce road accidents by 50% by 2020 – just four years from now. 1,374 road accidents take place every day resulting in 400 deaths. This number translates to 57 accidents every average hour and resulting in the deaths of 17. That's a high number by any standard and should be a major cause for worry for all stakeholders that use and manage roads and highways in the country. The total number of road accidents in 2015 was 5,01,423 as against 4,89,400 in 2014, representing an increase of 2.5%. The resulting number of deaths in 2015 was 1, 46,133, as against 1, 39,671, marking an increase of 4.6%.[2]

In addition, WHO collaborates with partners to provide technical support to countries? For example, WHO is

currently collaborating with the Bloomberg Initiative for Global Road Safety (BIGRS) 2015-2019 to reduce fatalities and injuries from road traffic crashes in targeted low- and middle-income countries and cities. In 2017, WHO released Save LIVES a road safety technical package which synthesizes evidence-based measures that can significantly reduce road traffic fatalities and injuries. It focuses on Speed management, Leadership, Infrastructure design and improvement, Vehicle safety standards, Enforcement of traffic laws and post-crash survival. The package prioritizes 6 strategies and 22 interventions addressing the risk factors highlighted above, and provides guidance to Member States on their implementation to save lives and meet the road safety target of halving the global number of deaths and injuries from road traffic crashes by 2020. Young people in the productive age group lose their lives in road accidents every year. Premature deaths of such young people cause substantial loss of productivity to the nation. The detailed age profile of road accidents victims for the calendar year 2015 reveals that the most productive age group of 15-34 years accounted for the largest share of 54.1% (79076 persons) in total road accident fatalities. In New Delhi – road accidents are the leading cause of deaths among youth between 15 and 29 years, the latest global report on road safety says. This group constitutes over one fourth of the total number of persons killed in fatal road crashes across the world. The road deaths rate for one lakh people is 24.1 and 18.5 in low and middle-income countries respectively, whereas in high income countries its only 9.3 persons per lakh population. [1, 3]

Road injuries are the biggest killer of teenagers globally; according to a latest WHO report which found that over 3000 adolescents die every day, totaling 1.2 million deaths a year, from largely preventable causes. In 2015, more than two thirds of these deaths occurred in low and middle-income countries in Africa and south-East Asia. Older adolescent boys aged 15–19 years experienced the greatest burden. Most young people killed in road crashes are vulnerable road users such as pedestrians, cyclists and motorcyclists. The top five causes of death for all adolescents aged 10–19 years in 2015 were: Road traffic injury with 115,302 deaths, lower respiratory infections (72,655 deaths), self- harm (67,149), diarrheal diseases (63,575) and drowning (57, 125). "Relatively small investments focused on adolescents now will not only result in healthy and empowered adults who thrive and contribute positively to their communities, but it will also result in healthier future generations, yielding enormous returns,[4]

Traffic laws are the laws which govern traffic and regulate vehicles, while rules of the road are both the laws and the informal rules that may have developed over time to facilitate the orderly and timely flow of traffic. The basic traffic rules are defined by an international treaty under the authority of the United Nations, the 1968 Vienna Convention on Road Traffic. The national upper speed limit is 140 kilometers per hour (87 mph) for cars, 80 kilometers per hour (50 mph) for motorcycles, and varies for other categories of vehicle. Until 2014, there was no national upper speed limit for cars in India, as local police set the limits in their own areas. Local governments are still encouraged to set specific limits within their own jurisdiction. Traffic violations occur when drivers violate laws that regulate vehicle operation on streets and highways. More than 90% of Americans over age 16 are licensed to drive, often with more than one vehicle registered per name.[5]

Traffic signs are the silent speakers on the road. Be it the person behind the wheel or a pedestrian, having a sound knowledge about road safety is absolutely necessary for all before hitting the roads. Traffic signs give information about the road conditions ahead, provide instructions to be followed at the major crossroads or junctions, warn or guide drivers, and ensure proper functioning of road traffic. Being unaware of road signs can lead to loss of life and property. A person is supposed to be familiar (get through a written or oral test) with the traffic signs and symbols before acquiring a driving license in India. Education about road safety is often provided in schools, colleges, workplaces, clubs and public places. However, there could be other ways to create mass awareness. Every year, prominent metro cities of India celebrate the road safety week to promote road safety measures. During the entire week, the transport departments of various states create awareness through community building process in school, colleges, offices and on roads. Road safety week 2015 was celebrated in India from 11-17 January.[6]

According to recent traffic safety reports, the incidence of accidents among new drivers is highest at age 16. Teenagers represent almost 20 percent of all driving fatalities even though they make up only four percent of all drivers. Sixty-six percent of all fatal accidents that teens are in are deemed the teenage driver's fault. The death risk for a teenage driver is three times as high as it is for older drivers. Teenage drivers face a higher likelihood of traffic accidents than other age group because of the common factors like seatbelts, distraction, excitement, alcohol, impatience, speeding.[7]

NEED AND JUSTIFICATION
Every year the lives of more than 1.25 million people are cut short as a result of a road traffic crash. Between 20 and 50 million more people suffer non-fatal injuries, with many incurring a disability as a result of their injury. People aged between 15 and 44 years account for 48% of global road traffic deaths. From a young age, males are more likely to be involved in road traffic crashes than females. About three quarters (73%) of all road traffic deaths occur among young males under the age of 25 years who are almost 3 times as likely to be killed in a road traffic crash as young females.[8]

Material and methods
Design
A pre-experimental one group pre test post test design was selected to assess the effectiveness of structured teaching programme on knowledge regarding traffic rules among higher secondary students.

Sample-
A total of 70 students of higher secondary students selected through Non-probability convenient sampling technique who met inclusion criteria. Subject who were not willing to participate in study or with any known psychiatric illness were excluded from the study.

Tools
Various tools used to collect the data were:

Self- structured questionnaire
Total number of questions were 40

Data collection schedule and procedure
Ethical permission
Permission to conduct the study was taken from the Principal of Gandhi Inter college, SanatanDharm (Bannu) Inter college and CNI girls Inter college Dehradun.

Procedure of data collection
A separate class room was allotted to the researcher for making the atmosphere conducive for interviewing the participants. Participants were fulfilling the inclusion criteria were enrolled in the study. Participants were informed about the purpose of the study, possible risks, benefits and confidentiality of their information before conducting interview. Written informed consent was obtained from the study participants. After making participants comfortable, they were interviewed by using various tools i.e. socio-demographic profile, and Self- Structured Questionnaire.

Data analysis
Analysis of data was done in accordance with the objectives laid down for the study using descriptive and inferential statistics in SPSS software version 20.0, Mann-Whitney for two groups and Kruskal-Wallis for more than two groups and spearman's correlation were used to analyze the data.

Result
Finding of the study revealed that-

➢ The study shows that 25 (35.71%) of the students belong to the age group of 15-16 years, 45 (64.29%) of the students belongs to the age group of 17-18 years.

➢ In relation to the gender of the student's majority of the students are male, i.e., 39 (55.71%) and rest of the students are female, i.e., 31 (44.29%).

➢ In accordance to the parents education 12 (17.14%) of Illiterate, 16(22.86%) having primary education, 22(31.43%) are matrix, 14(20.00%) are intermediate and 06(8.57%) are graduate. It shows that majority of the parents had 10th pass.

➢ According to the father occupation 34 (48.57%) are labor/farmer, 21(30%) have private job, 06 (8.57) having government job and 09(12.86) had others. It shows that majority of the Father are labor/farmer.

➢ According to the family income the table reveals that 30 (42.86%) have less then 5000rs, 35(50%) are having 5001- 15000rs, and 5(7.14%) having the family income 15001-25000rs. It shows that majority of the family having 5001-15000rs income.

➢ According to the Residence the table depicts that20 (28.57%) are belong to rural area, 48(68.57) are belong to urban area and 02(2.86) are belong to urban slum. It shows majority of students were belong to urban area.

➢ According to the Vehicle used that 23 (32.86%) are using bicycle, 21(30%) have two wheeler, 02 (2.86) are used four wheeler, 24(34.28) don't have any vehicle. It shows that majority of student have don't have any type of vehicle.

➢ 54 (77.14%) students having previous knowledge and 16 (22.86%) are don't previous knowledge. Majority of the students have the previous knowledge.

➢ Knowledge by Books 21 (38.89%), 17(31.48%) students have knowledge from the mass media, 14(25.93%) students have knowledge from friends and 02(3.70%) students have knowledge from health personnel. It shows that majority of the students have knowledge from books and journals.

➢ The findings in relation to aspect wise distribution of scores during the pre test and post test shows that in pre test, the highest 61.58 mean percentage knowledge score was obtained in general questions on traffic rules, 53.38 mean percentage knowledge score on questionnaire on road safety, followed by 47.53 mean percentage knowledge score on questionnaire on traffic sign. However, the overall pre test mean was found to be 21.44 and standard deviation as 4.99 among the students.

➢ In post test, the highest 82.33 mean percentage knowledge score was obtained in general question on traffic rules, 75.61 mean percentage knowledge score on questionnaire on road safety, followed by 72.73 mean percentage knowledge score on questionnaire on traffic sign. However, the overall post test mean was found to be 30.62 and standard deviation as 3.98 among the students.

➢ The findings in relation to aspect wise comparison between pre test and post test knowledge score shows that the highest enhancement of knowledge 25.2 percent was seen in the questionnaire on traffic sign with pre test and post test mean of 7.13 and 10.91. In aspect of questionnaire on road safety 22.23 percentage of enhancement was seen with 6.94 pre test mean and 9.83 as post test mean. In aspect general questions on traffic rules 20.75 percentage of enhancement was seen with 7.39 as pre test mean and 9.88 as post test mean.

➢ The finding in relation to pretest mean was 21.44 with 4.99 SD and the post test mean was 30.62 with 3.98 SD. The paired "t" test was used to find out the comparison between total pre test score and post test score, the value was found to be 15.89 at 0.05 significance level. As the calculated value is greater than the tabulated value with 69 degree of freedom, so it shows that there was statistically significant difference between the pretest and post test knowledge score. The research finding showed that the planned teaching programme was highly effective in improving knowledge of higher secondary students.

➢ To determine the association between the pretest knowledge score and demographic variables "Chi-square" test was used. The result findings exhibited that no significant association at 0.05 level of significance with the pre test knowledge score and demographic variables.

Discussion
In respect to age, 25 (35.71%) of the students belong to the age group of 15-16 years, 45 (64.29%) of the students belongs to the age group of 17-18 years.

In relation to the gender of the student's majority of the students are male, i.e., 39 (55.71%) and rest of the students are female, i.e., 31 (44.29%).

In accordance to the parents education 12 (17.14%) of Illiterate, 16(22.86%) having primary education, 22(31.43%) are matrix, 14(20.00%) are intermediate and 06(8.57%) are graduate. It shows that majority of the parents had 10th pass.

According to the father occupation 34 (48.57%) are labor/farmer, 21(30%) have private job, 06 (8.57) having government job and 09(12.86) had others. It shows that majority of the Father are labor/farmer.

According to the family income the table reveals that 30 (42.86%) have less then 5000rs, 35(50%) are having 5001-15000rs, and 5(7.14%) having the family income 15001-25000rs. It shows that majority of the family having 5001-15000rs income.

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Section II - Finding related to knowledge of higher secondary students regarding traffic rules.

Assessment of the knowledge regarding traffic rules among higher secondary students reveals that in pre test majority of the students 48 (68.57%) had inadequate knowledge and 20 (28.57%) had moderate knowledge and 02(2.86%) had adequate knowledge. Majority of the students had inadequate knowledge.

In post test one (1.43%) of the student had inadequate knowledge, 28 (40%) students had moderate knowledge and majority of the students i.e. 41 (58.57%) possess adequate knowledge regarding traffic rules.

Similar findings have been reported in study done by Mrs. Dilshad Rashid and Mrs. Aisha Akhtar at SKIMS Srinagar, Kashmir (2017) Out of 62 study subjects, in pre-test 31 (50%) of the subjects had inadequate knowledge, 30 (48.39%) had the moderately adequate knowledge, and only 1 (1.61%) had an adequate level of knowledge regarding prevention of RTAs. In post-test, the majority of the subjects 61 (98.38%) had adequate knowledge, only 1(1.61%) subject had a moderately adequate level of knowledge, and none had an inadequate level of knowledge regarding prevention of RTAs

Section III - Aspect wise comparison between pre-test and post-test knowledge scores

In aspect wise comparison between pre test and post test knowledge score of among higher secondary students regarding traffic rules reveals that in questionnaire regarding general questions on traffic rules the mean score is 7.39 with 5.18 SD in pre test and mean score is 9.88 with 1.38 SD in post test, questions related on traffic sign the mean score is 7.13 with 6.51 SD in pre test and mean score is 10.91 with 5.45 SD in post test, questions related to road safety the mean score is 6.94 with 5.69 SD in pre test and mean score is 9.83 with 4.87 SD in post test.

Similar findings have been reported in study done by Mrs. Dilshad Rashid and Mrs. Aisha Akhtar at SKIMS Srinagar, Kashmir (2017). The mean pre-test knowledge score was (19.40) which improved to (35.25) in post-test.[15]

Section IV – This section deals with the effectiveness of the planned teaching programme.

Effectiveness of planned teachingprogramme by comparing the pre test and post test knowledge scores of the students. There was a difference between the pre test and post test mean score. The pre test mean was 21.44 with 4.98 SD and the post test mean was 30.62 with 3.98 SD. The paired' test was used to find out the comparison between pre test and post test knowledge score. The mean difference was 9.18 The't' value was 15.89 at df 69.

so it shows that there was significant difference between the pretest and post test knowledge score. Hence the planned teaching programme was effective in increasing the knowledge of students regarding traffic rules.

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Section V- This section deals with the association of pre-test knowledge score with socio demographic variables.

The chi-square was used to find out the association between the pre-test level of knowledge and demographic variable. The result findings exhibited that There was no significant association of pre test knowledge score with their socio demographic variables.

Similar findings have been reported in study done by Mrs. Dilshad Rashid and Mrs. Aisha Akhtar at SKIMS Srinagar, Kashmir (2017). The mean pre-test knowledge score was (19.40) which improved to (35.25) in post-test. A significant association was found between Age, Education, Residence, Occupation of, Monthly family income of study subjects and the pre- test knowledge scores. Whereas no association was found between Gender, Occupation of mother and the pre-test knowledge scores.[15]

CONCLUSION-

School is a training ground to develop a good human. It guides children on right path to become a productive member of the society. the students exchange their knowledge, it is a platform where behavior develop.

Students come and contact with each other and learn habits it can be either good or bed. Education plays a great role in everyone's life and even throughout the life. Good education is constructive in nature which constructs the future forever. It provides us a lot of confidence by using the knowledge in various fields.

The present study was conducted to assess the effectiveness of planned teaching programme on knowledge regarding traffic rules among higher secondary students, the following conclusion was drawn from the present study.

➢ The study reveals that the majority 64.29% of students belong to age group of 17 – 18 years, 55.71% of students were male, 31.43% of students father education is matrix, 48.57% of the students father are farmer/labor,

50% of students had their family income is 5001-15000, 68.57% of students belong to urban area, 32.86% of the students states that they are using bicycle. And 77.14% of students state that they having previous knowledge from books and journals.

➢ The study describes that the majority of the students 78.57% had inadequate knowledge in pre test whereas 58.57% of the students had adequate knowledge in post test regarding traffic rules.

➢ The study elicits that the majority of student 61.58% had highest men percentage in general questions on traffic rules in pre test whereas 82.33% of highest mean percentage in general questions on traffic rules.

Frequency and percentage distribution of pre-test and post-test knowledge score.

N= 70

KNOWLEDGE SCORE	INADEQUATE (0-20)		MODERATE (21-30)		ADEQUATE (31-40)	
	FREQUENCY	%	FREQUENCY	%	FREQUENCY	%
Pre test	48	68.57%	20	28.57%	02	2.86%
Post test	01	1.43%	28	40%	41	58.57%

The above table shows the frequency and percentage (%) distribution of pre test and post test knowledge score of higher secondary students of selected schools of Dehradun regarding traffic rules. The table depicts that in pre test 48 (68.57%) of the students had inadequate knowledge, 20 (28.57%) of the students had moderate knowledge and 02 (02.86%) of the students posses adequate knowledge.

In post test only one (1) of the student had inadequate knowledge, 28 (40%) students had moderate knowledge and majority of the students i.e. 41 (58.57%) possess adequate knowledge regarding traffic rules.
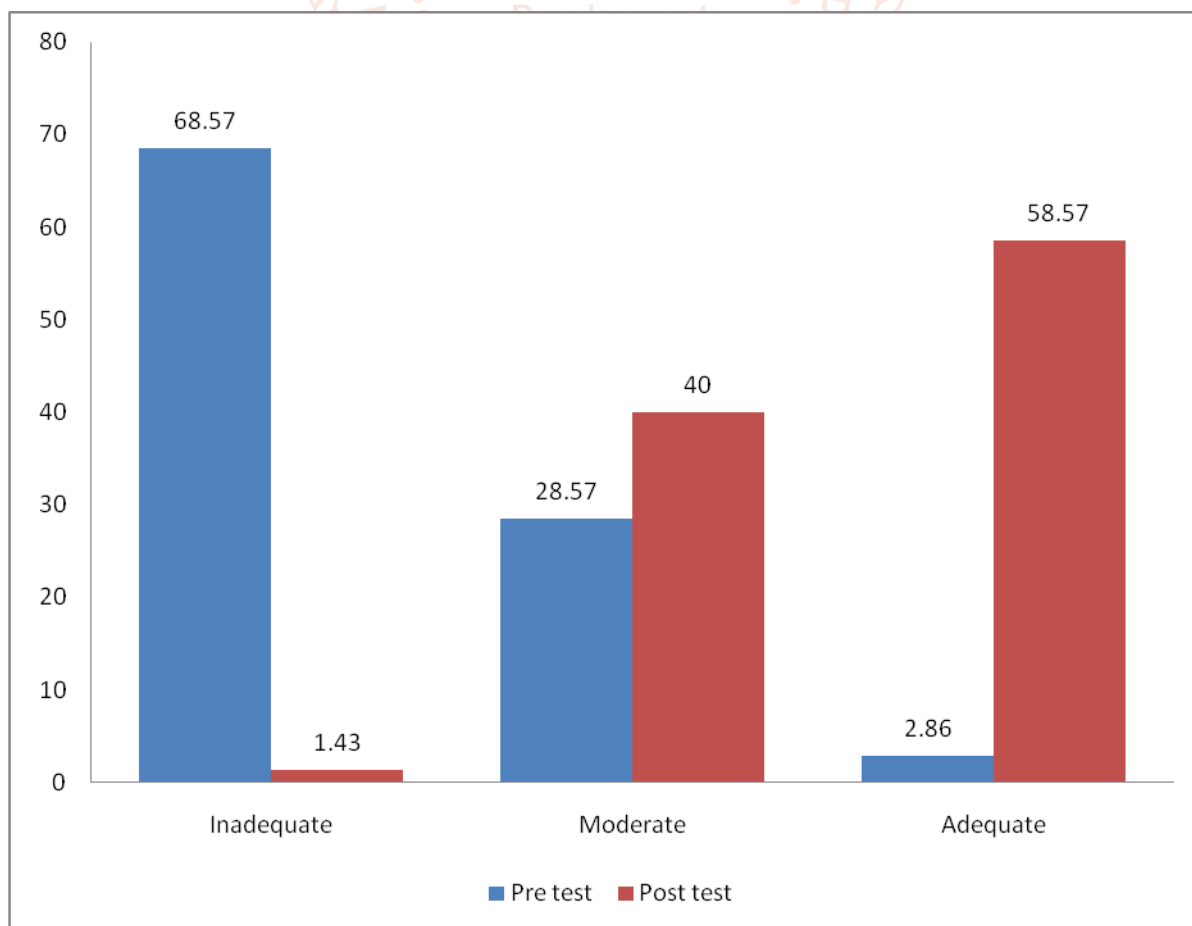
Figure No 4.1:-Bar diagram showing percentage distribution of pre test and post test knowledge score.

N=70

S.NO	DEMOGRAPHIC VARIABLE		FREQUENCY (f)	PERCENTAGE (%)
1	AGE	15-16 years	25	35.71%
		17-18 years	45	64.29 %
2	GENDER	Female	39	55.71%
		Male	31	44.29 %
3	PARENTS EDUCATION	Illiterate	12	17.14%
		Primary	16	22.86%
		10th	22	31.43%
		12th	14	20.00%
		Graduate	06	8.57%
4	FATHER OCCUPATION	Farmer/Labor	34	48.57%
		Private job	21	30.00%
		Government job	06	8.57%
		Other	09	12.86%
5	FAMILY INCOME	>5000	30	42.86%
		5001-15000	35	50.00%
		15001-25000	05	7.14%
		<25000	00	00%
6	RESIDENCE	Rural	20	28.57%
		Urban	48	68.57%
		Urban slum	02	2.86
7	VEHICLE USED	Bicycle	23	32.86%
		Two wheeler	21	30.00%
		Four Wheeler	2	2.86%
		No	24	34.28%
8	PREVIOUS KNOWLEDGE	Yes	54	77.14%
		No	16	22.86%
9	SOURCE OF INFORMATION	Books &Journal	21	38.89%
		Mass Media	17	31.48%
		Friends	14	25.93%
		Health Personnel	02	3.70%

According to the age the table reveals that 25(35.71%) studentsbelongs to age group of 15 – 16 years and 45 (64.29%) belongs to the age group of 17-18 years.

According to the gender the table depicts that the majority of 39 (55.71%) students were male and 31 (44.29%) of the students were female. It shows that majority of the students in the study was male.

According to the Father education the table shows that the 12 (17.14%) of the Illiterate, 16(22.86) having primary education, 22(31.43%) are matrix, 14(20.00%) are intermediate and 06(8.76%) are graduate. It shows that majority of the parents had 10th pass.

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Table No. 4.3:-Frequency distribution of Mean and Standard deviation (SD) of pre test and post test knowledge score.

N=70

KNOELEDGE SCORE	MINIMUM SCORE	MAXIMUM SCORE	MEAN	SD
Pre test	16	34	21.44	4.99
Post test	18	37	30.62	3.98

The table shows that the mean and SD distribution of pre test and post test knowledge score of the samples. The table reveals that in pre test the minimum score of the student was16 and the maximum score was 34.

The pre test mean was 21.44 with 4.99 SD. In the post test the minimum score was 18 and the maximum score was 37. The post test mean was 30.62 with 3.98 SD.
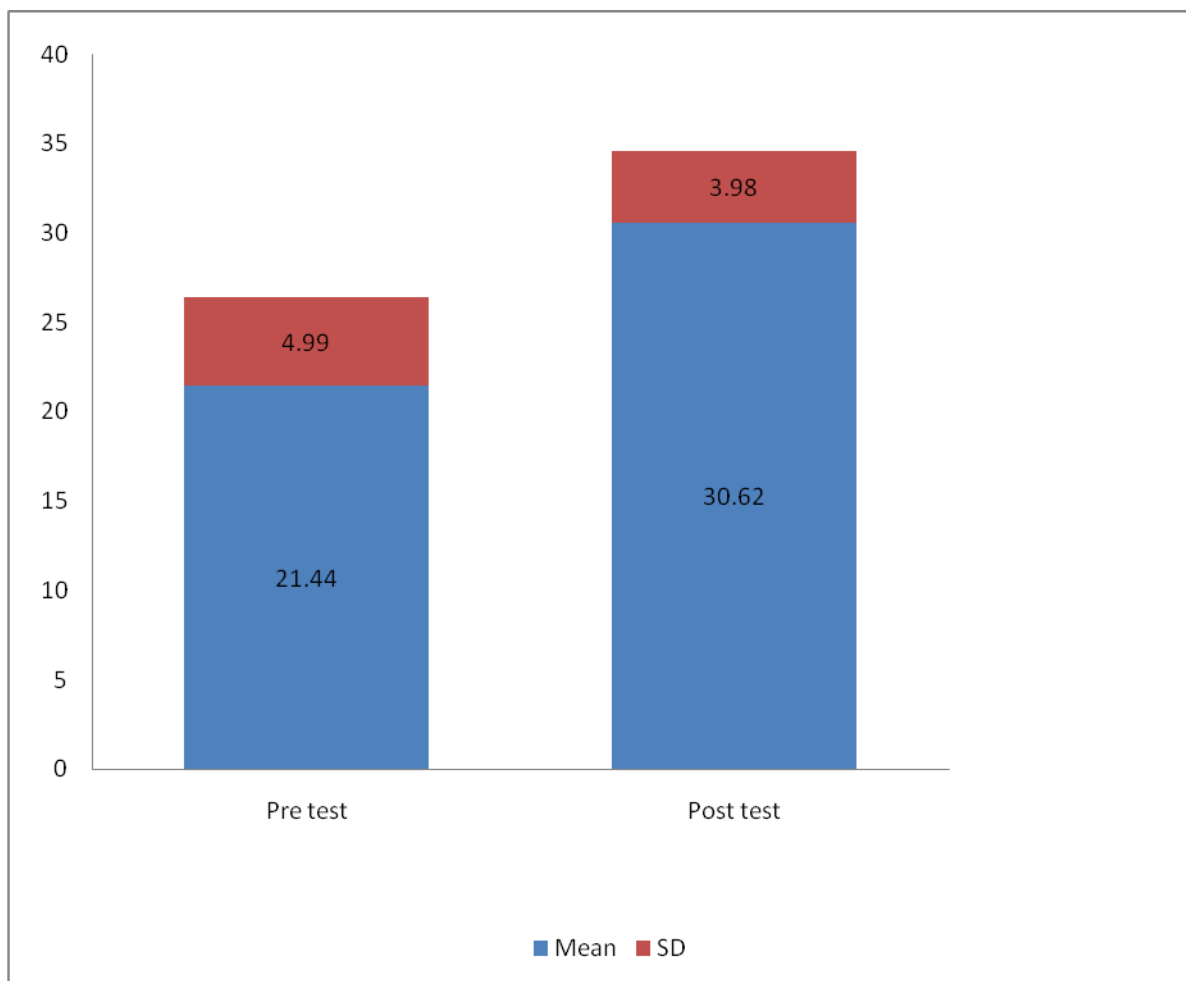
Figure No.4.2:- – Bar graph showing Mean and SD of pre test and post test knowledge.

Association of pre test knowledge score with demographic variable of higher secondary students.

DEMOGRAPHIC VARIABLE	LEVEL OF KNOWLEDGE						df	Calculated value	Table value	P value
	Adequate		Moderate		Inadequate					
	F	%	F	%	F	%				
AGE:- 15- 16 years 17-18 years	00 02	00% 4.44%	7 13	28% 28.89%	18 30	72% 76.67%	2	1.182	5.99	>0.05 **NS**
GENDER:- Male Female	1 1	2.5% 3.3%	10 10	25% 33.3%	29 19	72.5% 63.3%	2	0.668	3.84	>0.05 **NS**
Parents Education. Illiterate Primary 10th Pass 12th Pass Graduate	0 1 1 0 0	0% 6.25% 4.55% 0% 0%	5 2 7 4 2	41.6% 12.5% 31.8% 28.5% 33.3%	7 13 14 10 04	58.3% 81.2% 63.6% 71.4% 66.6%	8	4.7	15.51	>0.05

FATHER OCCUPATION										
Farmer/Labor	1	2.94%	6	17.7%	27	79.4%				
Pvt. Job	1	4.67%	10	47.7%	10	47.6%	6	7.275	12.59	<0.05
Govt. Job	0	0	1	16.6%	05	83.3%				
Other	0	0	3	33.3%	06	66.7%				
INCOME										
<5000	0	0%	9	30%	21	70%				
5001-15000	2	5.7%	10	28.6%	23	65.7%	4	2.296	0.682	>0.05
15001-25000	0	0%	1	20%	04	80%				
>25000	0	0%	1	0%	0	0%				
REDIDENCE										
Rural	0	0%	4	20%	16	80%				
Urban	2	4.17%	16	33.3%	30	62.5%	4	3.310	9.49	<0.05
Urban Slum	0	0%	0	0%	2	100%				
VEHICLE USED										
Bicycle	1	4.35%	5	21.7%	17	73.9%				
2 Wheeler	0	0%	8	38.1%	13	61.9%	6	3.130	12.5	>0.05
4 Wheeler	0	0%	0	0%	02	100%				
No Vehicle	1	4.16%	7	29.2%	16	66.7%				
PREVIOUS KNOWLEDGE										
Yes	2	3.7%	15	27.8%	37	68.5%	2	0.645	5.99	>0.05
No	0	0%	5	31.3%	11	68.8%				

Note:- Chi-square value is not significant (NS) at 5% level (p>0.05)

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TOOL FOR DATA COLLECTION
SELF STRUCTURED QUESTIONAIRE ON TRAFFIC RULES
PART- 1:- Deals with Socio-Demographic Variables
PART- 2:- Deals with Self-structured questionnaire on knowledge of traffic rules.
Sample Code No- ....
Instruction: -The sample is requested to read the questions carefully and put a tick mark (√) against the correct response. Attend all the questions.

PART- 1:- Socio-Demographic Variables.
1. **Age (year)**   ....

2. **Gender**
a) Male   ( )
b) Female   ( )

3. **Parents Education**
a) Non formal education   ( )
b) Primary   ( )
c) High School   ( )
d) Intermediate   ( )
e) Graduation   ( )

4. **Father occupation**
a) Farmer/labour   ( )
b) Private job   ( )
c) Government job   ( )
d) Any other   ( )

5. **Family Income (per month)Rs**
a) Below 5,000   ( )
b) 5001 – 15,000   ( )
c) 15001 - 25,000   ( )
d) Above 25,000   ( )

6. **Area of Residence**
a) Rural   ( )
b) Urban   ( )
c) Urban Slum   ( )

7. Which type of vehicle you are using
a) Bicycle   ()
b) Two wheeler ()
c) Four wheeler ()
d) None ()

8. Previous source of information
(I) (a) Yes ()
     (b) No ()
(II) If yes, then the source is
(a) Relatives/friends ()
(b) Mass Media ()
(c) Books and journals ()
(d) Health personal ()

PART- 2:- Self-Structured Questionnaire on knowledge of traffic rules
INSTRUCTIONS:-
➢ Respondents are requested to read each question carefully and tick (√) the correct answer. Please avoid overwriting
➢ Each question has various options, Choose only one alternative
➢ Please answer all the questions.
➢ The information provided will be exclusively used for the purpose of research study and will be kept confidential.

1. A traffic signal is situated at
a) Subway ()
b) Road-intersection ()
c) Flyover ()

2. Amber light on traffic signal indicates to
a) Stop ()
b) Get ready/wait ()
c) Go ()

3. What is the proper sequence for traffic light
a) Red, amber and green ()
b) Amber, green and then red ()
c) Red, green and then amber ()

4. Which type of clothes you should wear at night
a) Any colour clothes ()
b) White or light colour clothes ()
c) Dark colour clothes like black, brown etc. ()

5. Subway are for
a) Vehicular traffic ()
b) Pedestrian ()
c) For all ()

6. Red traffic light indicates
a) Vehicle can proceed with caution ()
b) Stop the vehicle ()
c) Slow down the vehicle ()

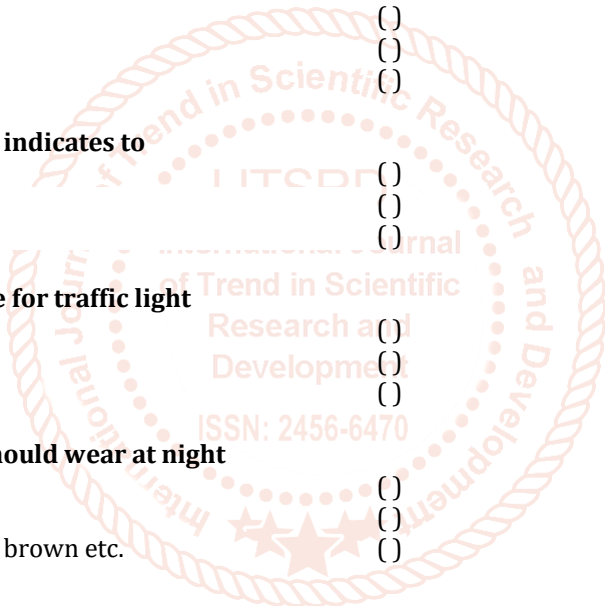**7. Which road marking divides the road**
a) Yellow line / White line ()
b) Red line ()
c) Green line ()

8. How many type of traffic signs are their.
a) Three ()
b) Two ()
c) Four ()

9. Green light in traffic signal indicates
a) Proceed if safe ()
b) Proceed fast ()
c) Reduce speed and proceed cautiously ()

10. What will you do if you stand near accident?
a) Inform to police.   ( )
b) Inform to ambulance.   ( )
c) To alert traffic.   ( )

11. Use of horn is prohibited
a) Near hospitals or in silence zone   ( )
b) Near Mosque, temple and church.   ( )
c) Near Hotel..   ( )

12. Minimum age for getting a license to drive motor cycle with gear is
a) 18 year   ( )
b) 16 year   ( )
c) 20 year   ( )

13.   The sign represents
a) Stop   ( )
b) No parking   ( )
c) Hospital ahead   ( )

14.   This sign represents
a) Mandatory   ( )
b) Cautionary   ( )
c) Informatory   ( )

15.   The sign represents
a) Roads for both sides   ( )
b) Narrow bridge ahead   ( )
c) Narrow road ahead   ( )

16.   The sign represents
a) Go straight   ( )
b) One-way   ( )
c) Prohibited in both directions   ( )

17.   The symbol represents
a) School ahead   ( )
b) Pedestrian crossing   ( )
c) Pedestrian crossing prohibited   ( )

18.   This sign indicates
a) Bicycle parking prohibited   ( )
b) Compulsory cycle track   ( )
c) Driving cycles prohibited   ( )
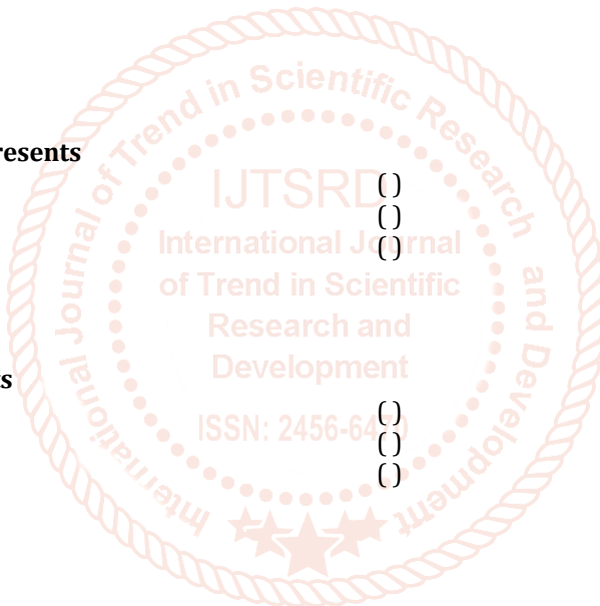
19. **This sign represents**
a) Students prohibited ( )
b) Pedestrian permitted ( )
c) Pedestrian prohibited ( )

20. **This sign represents**
a) May turn to left side ( )
b) Compulsory go ahead to turn left ( )
c) Side road left ( )

21. **This sign represents**
a) Narrow road ahead ( )
b) Narrow bridge ahead ( )
c) Road closed ( )

22. **This sign represents**
a) Hospitals ( )
b) Resting place ( )
c) First aid post ( )

23. **This sign represents**
a) U turn prohibited ( )
b) Right turn prohibited ( )
c) Overtaking through left prohibited ( )

24. **This sign represents**
a) Railway crossing ( )
b) River bank ( )
c) T- intersection ( )

25. **This sign represents**
d) Give way ( )
e) Stop ( )
f) Overtaking prohibited ( )

26. **This sign represents**
a) Park on both side   ( )
b) Park on left side   ( )
c) Park on right side.   ( )

27. **This sign represents**
a) Go   ( )
b) Stop   ( )
c) Turn left   ( )

28. Seat belts in car do not.
a) Save us from injury   ( )
b) Reduce our weight   ( )
c) Fear of challan   ( )

29. Maximum permissible speed of a motor cycle is
a) 60-70 km/hr   ( )
b) 90-100 Km/hr.   ( )
c) No limit   ( )

30. While fire tender or ambulance is following you, then
a) Give the way   ( )
b) Do not allow   ( )
c) Neglect it   ( )

31. If you possess a licences for car driving, it means you can drive
a) Motor cycle and car   ( )
b) Only car   ( )
c) All vehicles   ( )

32. Wearing a helmet on state and national highways is
a) Optional   ( )
b) Necessary   ( )
c) Mandatory   ( )

33. Using cell phone while driving is
a) Allowed on roads with less traffic   ( )
b) An offence   ( )
c) Allowed if driven carefully   ( )

34. Which of the following not distract the driver?
a) Listening music   ( )
b) Looking after children   ( )
c) Using sun glasses.   ( )

35. What number you will dial in case of a medical emergency to get assistance by the ambulance
a) 100   ( )
b) 102   ( )
c) 108   ( )

36. In a road without footpath, the pedestrians.
a) Should walk on Left side of road   ( )
b) Should walk on the Right side of road   ( )
c) May walk on either side of the road   ( )

37. Zebra lines are meant for
a) Stopping vehicle ( )
b) Pedestrian crossing ( )
c) Giving preference to vehicle ( )

38. Drunk driving
a) Allow in private vehicles ( )
b) Allow during day time ( )
c) Prohibited in all vehicles ( )

39. Preventive measures for road accidents is
a) Education and awareness ( )
b) Always walk ( )
c) Always use vehicle on the road ( )

40. Provision of penalty driving without licence is
a) 100Rs ( )
b) 1000Rs ( )
c) 5000Rs ( )

ANNEXURE X

ANSWER KEY FOR THE STRUCTURED KNOWLEDGE QUESTIONNAIRE

ITEM NO.	CORRECT OPTION	ITEM NO.	CORRECT OPTION
1	B	21	A
2	B	22	A
3	A	23	B
4	B	24	A
5	B	25	A
6	B	26	A
7	A	27	B
8	A	28	B
9	C	29	A
10	C	30	A
11	A	31	B
12	A	32	C
13	A	33	B
14	A	34	C
15	B	35	C
16	C	36	B
17	B	37	A
18	A	38	C
19	A	39	A
20	B	40	C