A pre-experimental one group pre-test post-test design was used for the study. Sample consisted of 60 school going children in selected schools at Udupi. The samples were selected by purposive sampling technique. A structured questionnaire was given to assess the knowledge regarding road safety measures among school going children. Before data collection the researcher introduces purpose of study, clarifies the queries and took verbal consent from subjects. The result shown that mean percentage of post test knowledge score (90.6%) was higher than the mean percentage of pre-test knowledge score (58.1%). The calculated ‘t’ value showed significant difference between mean pre and post-test knowledge scores. Calculated X² values showed significant association between age, sex, class, father’s education and type of the family with their pretest knowledge scores at 0.05 level of significance. The study concluded that the STP is effective in increasing the knowledge of school going children.

I. INTRODUCTION

The Children of today is the adults of tomorrow they deserve to inherit a safer, fairer and healthier world, safeguarding their environment. Road Traffic Accidents can be defined as “An event that occurs on a roadway or street open to public traffic resulting in one or more person being injured or killed, where at least one moving vehicle is involved. Thus RTA is a collision between two vehicles; between vehicles and pedestrians; between vehicles and animals; or between vehicles and geographical or architectural obstacles.” Road Accidents are an outcome of the interplay of various factors, some of which are ignorance, carelessness, thoughtlessness, overconfidence length of road network, vehicle population and human population etc. Road accidents are causes injuries, fatalities, disabilities and affects children’s growth and development. Road traffic accident is a leading cause of injury and death globally. The consequences of road traffic accidents are prominent in developing countries that can least afford to societal challenges. Nepal and Bangladesh is two developing country of south Asia who bear a large share of burden due to road traffic injuries. Death and injury due to motor vehicle crashes is the world’s fifth leading cause of mortality and morbidity. City and urban design might play a role in mitigating the global burden of road transport injury to an extent that has not been captured by traditional safe system approaches. Road traffic awareness among school going adolescents is one of the most important aspects towards safety concerning traffic rules. The students in adolescence may drive a thrill out of taking risks on road not realizing the consequences such risk may have. This age group is rapidly emerging as a major population of vehicle owners and also constitutes major number of accidents, making it very important to sensitize this population about road traffic rules, as they are the future of nation.

OBJECTIVE OF THE STUDY

1. To assess the existing knowledge of road safety measures among school going children in selected schools of Udupi.
2. To evaluate the effectiveness of structured teaching programme of road safety measures among school going children.
3. To find out the association between the pretest knowledge scores with their selected demographic variables.
Hypotheses:

H₁: The mean post-test knowledge score of schoolchildren will be significantly higher than their mean pre-test score.

H₂: There may be significant association between the pre-test level of knowledge of school children with their selected demographic variables.

CONCEPTUAL FRAMEWORK

FIG1: Conceptual framework of general theory modelled by Ludwing von Bertalanffy

METHODOLOGY:

A pre-experimental One group pre-test post-test design was used for the study. The purposive sampling technique was used. A descriptive research design used to collect information within a given population having same characteristics of interest. The sample size consists of 60 school going children who were fulfilling the inclusion criteria. Evaluative approach was adopted. A structured knowledge questionnaire was used to assess the knowledge and STP was provided to find its effectiveness. The group included only those study subjects who were present at the time of data collection.

RESULT AND ANALYSIS:

Section 1: Description Of Demographic Data

In relation to age majority of the subject 38.3% were of age 12 years followed by 35% were of 11 years, 26.7% were of 13 years and 51.7% of the subjects were males and 48.3% were females. In relation to class wise distribution 53.3% of the subjects were belongs to 6th standard. Whereas 46.7% of the subjects were belongs to 7th standard. In relation to mode of transport majority 46.7% of the respondents were by bus, 23.3% of respondents were by motorbike, 10% of respondents were by bicycle and remaining 10% were by walk. In relation to fathers education, majority 38% of the respondent’s fathers Educational Status were PUC, 36.7% of the respondent’s father’s educational status were Degree, 25% of the respondent’s fathers educational status were SSLC. In relation to mother’s educational status majority 40% of the respondent’s mothers educational status were PUC, 38.3% of the respondent’s mothers had degree qualification, 21.7% of the respondent’s mother’s educational status is SSLC.

In relation to Family Monthly income majority 38.3% of respondents was Rs.5000-10000 while 30% of them had an income between Rs 10000 - 20,000, 18.4% of them had an income between Rs above 20000-30000 per month, and remaining 13.3% had an income between Rs 30,000 -50,000 per month. In relation to the source of information majority 46.7% of the respondents were received information by parents, 31.7% of the respondents were received information from Mass Media, 15% of the respondents were received information by friends and remaining 6.6% of the respondents were received information by others.
Section II: Analysis of pre-test and post-test knowledge scores and effectiveness of structured teaching program

TABLE – 1

<table>
<thead>
<tr>
<th>Knowledge Level</th>
<th>Category</th>
<th>Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Number</td>
</tr>
<tr>
<td>Inadequate</td>
<td>≤ 50 % Score</td>
<td>21</td>
</tr>
<tr>
<td>Moderate</td>
<td>51-75 % Score</td>
<td>39</td>
</tr>
<tr>
<td>Adequate</td>
<td>&gt; 75 % Score</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>60</td>
</tr>
</tbody>
</table>

Data in table 1 shows the classification of respondent’s knowledge according to their knowledge level in pretest. The data showed that, respondents that 35% had inadequate knowledge, 65% had moderate knowledge and none of them had the adequate knowledge.

Table -2 : Classification of Respondents of Post test Knowledge level on Road safety measures

<table>
<thead>
<tr>
<th>Knowledge Level</th>
<th>Category</th>
<th>Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Number</td>
</tr>
<tr>
<td>Inadequate</td>
<td>≤ 50 % Score</td>
<td>0</td>
</tr>
<tr>
<td>Moderate</td>
<td>51-75 % Score</td>
<td>11</td>
</tr>
<tr>
<td>Adequate</td>
<td>&gt; 75 % Score</td>
<td>49</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>60</td>
</tr>
</tbody>
</table>

Data in table -2 shown that the classification of respondent’s knowledge level in the post-test. The data shows that majority of the respondents 81.7% had adequate knowledge, 18.3% had moderate knowledge and none of them had the inadequate knowledge.

II. SECTION 3 – Association between demographic variables and pretest knowledge level on road safety measure

Association of pre-test knowledge level of study participants and their selected socio-demographic variable and calculated $\chi^2$ values. The calculated $\chi^2$ values with regard to all the selected socio demographic variables viz. Age ($\chi^2=6.35*$), Sex ($\chi^2=4.35*$), Class ($\chi^2=4.25*$), Father’s education ($\chi^2=7.00*$), Type of family ($\chi^2=5.83*$)were more than the table value at 0.05 level of significance which indicates that there is a significant association between pre-test knowledge scores and Demographic Variables, hence the stated research hypothesis $H_2$ is accepted with regard to above mentioned demographic variables, but the calculated $\chi^2$ values with regard to mode of transport($\chi^2=0.87$), Vehicle owned ($\chi^2=0.23$), Mother’s education ($\chi^2=0.30$), Family income per month ($\chi^2=3.30$), and source of information ($\chi^2=3.54$), were less than the table values at 0.05 level of significance which indicates that there is no significant association between pre-test knowledge score and the demographic variables, hence the stated research hypothesis $H_2$ is rejected with regard to these demographic variables.
DISCUSSION:

The study findings can be supported by the study was conducted to assess the knowledge regarding traffic rules among higher secondary schools of Dehradun. The result revealed that the total of 70 samples, 1.43% sample has inadequate knowledge regarding traffic rules. The mean score of knowledge regarding traffic rules is 9.88. 35.71% sample were in the age group of 15-16 years and 64.29% were in the age group of 17-18 years. In this 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 demographic variable and the knowledge regarding traffic rules.9

CONCLUSION:

The study significantly proved that there is a remarkable improvement in the knowledge of school going children regarding road safety measures after structured teaching program. there was no significant association between mode of transport, Vehicle owned, Mother’s education, Family income, and source of information with regards to road safety measures (p<0.05), where as there was an association between Age, Sex, Class, Father’s education, Type of family and knowledge of school going children.

SUMMARY:

The researcher felt a deep sense of satisfaction and fulfillment for having undertaken the study. The study provided the investigator with deeper insight and empathy to the training needs of school going children on road safety measures. The expert opinions and direction from the guide and help from school staffs and cooperation from school children made the study fruitful and interesting. The study revealed that STP could be used as an effective teaching strategy.

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9) Naveen Chandra Pandey, Mrs Renu Sharma “ 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”,2020;4(6);513-526