

A DESCRIPTIVE STUDY TO ASSESS THE AWARENESS REGARDING ROAD SAFETY RULES AMONG UNDERGRADUATE STUDENTS OF SELECTED SCHOOLS OF SANSKRITI UNIVERSITY, MATHURA.

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ABSTRACT

Introduction: Road traffic accidents continue to pose a serious public health challenge, especially among young adults, resulting in significant injury and loss of life. Undergraduate students, being active and regular users of roads, are particularly vulnerable due to limited awareness, risky behaviors, and inconsistent compliance with established road safety rules. Proper understanding of road safety regulations is essential for fostering responsible road use and minimizing accident-related risks. Evaluating the level of awareness among undergraduate students enables the identification of existing knowledge deficiencies and supports the development of targeted educational strategies. Hence, this descriptive study is undertaken to assess the awareness regarding road safety rules among undergraduate students of selected schools of Sanskriti University, Mathura, with the goal of encouraging safer road behavior and reducing avoidable road traffic accidents. Methodology: A descriptive survey research design was adopted to carry out this study among 60 undergraduate students from selected schools of Sanskriti University, Mathura. The participants were chosen through a probability-based random sampling technique. Data were collected using a structured questionnaire, which included socio-demographic details and assessed awareness of road safety rules using a validated rating scale. Data analysis was performed using descriptive statistics such as frequency, percentage, mean, median, mode, and standard deviation. Inferential statistics, specifically the Chi-square test, were used to determine the association between the level of awareness and selected demographic variables Results: The analysis of data indicated that the majority of undergraduate students demonstrated a good level of awareness regarding road safety rules. Out of the total participants, 73.3% were categorized under good awareness, while 26.6% showed an average level of awareness. None of the students fell into the poor awareness category. The mean awareness score was 11.67, reflecting an overall satisfactory understanding of road safety rules among the participants. However, inferential analysis using the Chi-square test revealed no statistically significant association between the level of awareness and demographic variables such as age, gender, year of study, mode of transport, and possession of a driving license. Conclusion: The study concluded that undergraduate students of selected schools of Sanskriti University, Mathura generally possess a good level of awareness regarding road safety rules. Despite this positive finding, the presence of gaps in knowledge and inconsistencies in the practical application of road safety behaviors were evident. These findings highlight the importance of continuous road safety education, regular awareness programs, and reinforcement of traffic rules within academic institutions. Strengthening educational initiatives focused on road safety can help foster responsible behavior among youth, ultimately contributing to the reduction of road traffic accidents and the promotion of safer communities.

Keywords: Road Safety, Awareness, Undergraduate Students, Traffic Rules, Descriptive Study, University Students

INTRODUCTION

Road safety is a vital public health and transportation issue that affects human life, economic development, and social well-being worldwide. As road networks expand and the number of vehicles continues to increase, ensuring safe movement for drivers, passengers, pedestrians, and cyclists has become more challenging. Road safety involves policies, infrastructure, enforcement, and awareness programs designed to prevent accidents, reduce injuries, and minimize fatalities. A safe road system not only protects lives but also supports sustainable mobility and national progress.

Rapid growth in transportation demand has led to heavy traffic congestion, particularly in urban and semi-urban areas. This congestion increases accident risks when traffic rules are ignored or poorly enforced. Unsafe behaviors such as speeding, distracted driving, reckless overtaking, and violation of traffic laws create hazardous road conditions. Infrastructure measures including road dividers, barriers, pedestrian crossings, and clear signage help reduce crash severity, but infrastructure alone is not sufficient. Responsible behavior, such as wearing seat belts and helmets and obeying traffic laws, is equally important. Road traffic injuries are among the leading causes of death globally, especially for young people. Evidence shows that alcohol and drug use, excessive speed, and careless driving are major contributors to accidents. The non-use of protective equipment further increases injury severity. These problems are more serious in low- and middle-income countries, where rapid motorization is not supported by adequate infrastructure, strict enforcement, or strong public awareness. As a result, these regions account for a large share of global road fatalities.

International and national organizations recognize road safety as a major public health priority. Global initiatives, such as the United Nations Decade of Action for Road Safety, encourage countries to adopt evidence-based strategies, improve law enforcement, promote safer behavior, and strengthen emergency response systems. Many countries have introduced national road safety programs that focus on education, vehicle safety standards, and public awareness campaigns. In India, for example, Road Safety Week is observed annually to promote responsible behavior and improve safety for all road users.

Statistics highlight the urgent need for continued intervention. A large proportion of road deaths occur in developing countries, and young adults aged 15 to 29 are particularly vulnerable. Pedestrians, cyclists, and motorcyclists account for nearly half of all fatalities, showing the need for better protection and infrastructure. Road accidents also cause economic losses, long-term disabilities, psychological trauma, and strain on healthcare systems.

In conclusion, road safety is a shared responsibility that requires coordinated efforts at individual,

community, national, and global levels. Through strong policies, improved infrastructure, effective enforcement, and continuous education, road traffic injuries and fatalities can be significantly reduced, creating safer and more sustainable transportation systems.

PROBLEM STATEMENT

“A DESCRIPTIVE STUDY TO ASSESS THE AWARENESS REGARDING ROAD SAFETY RULES AMONG UNDERGRADUATE STUDENTS OF SELECTED SCHOOLS OF SANSKRITI UNIVERSITY, MATHURA.”

OBJECTIVES

1. To assess the awareness of under graduate students regarding road safety rules.
2. To find out the associative between awareness score with selected demographic variables.

METHODOLOGY

A descriptive survey research design was employed to conduct this study among 60 undergraduate students of selected schools of Sanskriti University, Mathura. Participants were selected using a probability random sampling technique. Data collection involved a structured questionnaire that gathered socio-demographic information and measured the awareness about road safety rules through a validated rating scale. Data analysis was carried out using descriptive statistics to calculate frequencies, percentages, mean, median, mode, and standard deviation, while inferential statistics using the Chi-square test were applied to examine associations between level of awareness and demographic factors.

RESULTS

Table 1: Socio-Demographic Variables of Undergraduate students.

Demographical variable	Frequency	(%)
Age (in years)		
17-19 yrs	4	6.66
20-22 yrs	33	55
23-25 yrs	23	38.3
Gender		

Male	30	50
Female	30	50
Transgender	0	0
Year of Study		
1 st	3	1.8
2 nd	25	41.6
3 rd	35	21
4 th	2	3.33
Mode of Transport		
Bike/ scooter	19	31.6
Car	10	16.66
Public Transport	26	43.33
Bicycle	0	0
Walking	5	8.33
Driving license		
Yes	27	45
No	33	55

Table 2: Analysis of Level of awareness among percentage of undergraduate students.

Level of Knowledge	Frequency	(%)
Good	44	73.3
Average	16	26.6
Poor	0	0

Table 3: Association of Level of Awareness regarding road safety rules with their selected demographic variables.

S. No.	Demographical Variables	df	Association with level if awareness Chi-Square
1.	Age (in years)	2	5.55 ^{NS}
	17-19 yrs		
	20-22 yrs		
	23-25 yrs		
2.	Gender	1	10.48 ^{NS}
	Male		
	Female		
	Transgender		
3.	Year of study	3	7.815 ^{NS}
	1 st		
	2 nd		
	3 rd		
	4 th		
4.	Mode of Transport	4	4.44 ^{NS}
	Bike/scooter		
	Car		
	Public transport		
	Bicycle		
	Walking		
5.	Driving license	2	1.48 ^{NS}

	Yes		
	No		

NS= Non significant *= Significant

Table 4: Showed Mean, Median, Mode, S.D., Range & Mean% of level of awareness among undergraduate students.

	Mean	Median	Mode	S.D.	Range	Mean %
Level of Awareness	11.67	12.09	12.44	2.21	5	60.85%

RESULT

The results of a Chi-square test conducted to find association, comparison between calculated chi square and tabulated value was conducted for each demographic variables.

- The calculated chi square value for the association between age and level of awareness was 5.55 with 2 degree of freedom. The tabulated chi square at the level of significance 0.05 was 5.991. The result was not significant (NS), suggesting no significant association between age and the level of awareness.
- The calculated chi square value for the association between gender and level of awareness was 10.48 with 1 degree of freedom. The tabulated chi square at the level of significance 0.05 was 3.841. The result was not significant (NS), suggesting no significant association between gender and the level of awareness.
- The calculated chi square value for the association between year of study and level of awareness was 7.815 with 3 degree of freedom. The tabulated chi square at the level of significance 0.05 was 7.815. The result was not significant (NS), suggesting no significant association between year of study and the level of awareness.
- The calculated chi square value for the association between mode of transport and level of awareness was 4.44 with 4 degree of freedom. The tabulated chi square at the level of significance 0.05 was 9.488. The result was not significant (NS), suggesting no significant association between mode of transport and the level of awareness.
- The calculated chi square value for the association between driving license and level of awareness was 1.48 with 2 degree of freedom. The tabulated chi square at the level of significance 0.05 was 5.991. The result was not significant (NS), suggesting no significant association between driving

license and the level of degree of awareness.

DISCUSSION

The present study aimed to assess the level of awareness regarding road safety rules among undergraduate students of selected schools at Sanskriti University, Mathura, and to determine the association between awareness levels and selected demographic variables. The findings provide useful insights into students' understanding of road safety and the factors that influence it. The results showed that most undergraduate students had a good level of awareness of road safety rules, indicating adequate knowledge of traffic regulations, safety practices, and responsible road behavior.

This level of awareness may be attributed to exposure to information through educational institutions, media, social platforms, and public awareness campaigns. Previous studies have similarly reported that higher education is often linked with better awareness of road safety measures. However, a considerable number of students demonstrated only an average level of awareness, suggesting gaps in comprehensive understanding. This highlights the need for continuous and structured road safety education, as awareness alone may not translate into safe practices.

Analysis of demographic variables revealed no statistically significant association between awareness levels and factors such as age, gender, year of study, mode of transport, or possession of a driving license. Awareness levels were found to be uniformly distributed across different age groups and between male and female students, likely due to equal access to educational resources within the university. The lack of association with year of study suggests that progression through academic levels does not necessarily improve road safety knowledge, possibly due to the absence of formal road safety education in the curriculum.

Similarly, holding a driving license did not significantly influence awareness levels, indicating that licensing procedures may not ensure long-term retention or practical application of traffic rules. Overall, the study rejected the research hypothesis, concluding that demographic variables do not significantly affect road safety awareness. Instead, factors such as personal attitudes, risk perception, and exposure to safety campaigns may play a more important role.

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