

Young Drivers' Attitude Regarding Seat Belt Use in Qatar

Khaled Shaaban

Abstract— Traffic accidents, one of the most important challenges of modern societies, are the third leading cause of death in most countries. In 2010, road traffic accidents were the cause of 228 people deaths and 568 major injuries in Qatar. Studies show that seat belts can save lives and significantly decrease motorists' injury severity in crashes. An observational survey conducted in 2012 indicated that a significant percentage of young drivers in Qatar do not wearing seat belts while driving. The objective of the paper was to understand the reasons behind the low percentage of seat belt use among young drivers using personal interviews. The results of this survey indicated that the main reasons for not wearing the seat belt included discomfort and not believing that seat belts can save lives. Other significantly cited reasons included depending on other safety features in the vehicle such as air bags, fear of being trapped, and taking time to wear.

Keywords—Driver, seat belt, young, attitude, survey.

I. INTRODUCTION

Traffic accidents are one of the main cause of death in modern societies. Next to circulatory diseases and cancer, road accidents are probably the third major cause of death in the developed world [1]. Traffic accidents kill 1.2 million people every year and injure or disable as many as 50 million more. They are the second leading cause of death globally among young people aged 5 to 29 years and the third leading cause of death among people aged 30 to 44 years [2]. There is no doubt that traffic accidents cause social and economic problems and leave a direct impact on people. With respect to economic problems, traffic accidents constitute a big burden on the society as a result of loss of life, injury and disability and increase in the amount of insurance and compensations. Although, in recent years, significant developments have been made in road safety in Qatar, and national traffic law was implemented, traffic statistics indicate that there is increasing in accidents in Qatar. In October 2007, a new traffic law was implemented in the State of Qatar.

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This law contained a package of rules and regulations in traffic system in addition to the awareness and preventive campaigns. The new law forced seat belt usage for all drivers and front-seat passengers. However, young drivers often do not wear seat belts.

After more than four years of the implementation of the traffic law, it was necessary to investigate the seat belt use among young drivers. Better understanding of the behavior of young drivers is important since it will shed more light on developing plans or strategies to improve the traffic safety of this vulnerable group in society. A research completed in 2012 investigated the seat belt use among university students drivers in Qatar after the implementation of the new traffic law using an observational survey. Two higher educational facilities in Qatar were selected to conduct the research. The results of this study suggest that a significant percentage of university students do not wear their seat belts and is a clear indication that driving habits in Qatar have not improved since the implementation of the 2007 traffic law [3].

Findings of this survey indicated that nearly 57.3% of the young drivers do not wear seat belts while driving. The number of male and female drivers in the random sample were 467 and 234 respectively. The results show that male drivers have a lower seat belt use rate with 71.5% of male drivers found not wearing seat belts compared to 29.1% of female drivers not wearing seat belts. In addition, it was found that Qatari students have a lower seat belt use rate than other non-Qatari categories. 76.1% of Qatari drivers were found not wearing seat belts compared to 32.9% non-Qatari not wearing seat belts. Finally, vehicle type seems to show a significant gap between unbelted and belted students. Students in SUV's have a higher non-seat belt use rate (65.9%) than those in other vehicle types (46.6%).

The results of this study suggested that a significant percentage of university students do not wear their seat belts and is a clear indication that driving habits in Qatar have not improved since the implementation of the 2007 traffic law. There are no simple remedies for drivers not wearing seat belts, however, there are a variety of countermeasures. These

countermeasures depends on understanding the reasons behind not wearing seat belts. The objective of the paper was to understand the reasons that behind the low percentage of seat belt use among university students drivers using personal interviews.

II. SURVEY DESIGN AND IMPLEMENTATION

Qatar University (QU), a higher educational facility in Qatar, was selected to conduct this research. QU was chosen due to the high number of students (approximately 8,200) compared to any other higher educational facilities in the country.

Four students pursuing their engineering degree were trained on methods and procedures related to conducting personal interviews and specifically on how to collect data in sheets prepared in a specific coded way to gather the information needed. The survey was designed to examine reasons for not wearing seat belts, familiarity with the current traffic law, experience in driving, possible solutions to the problem, involvement in traffic accident during the last two years, and demographics.

The survey was conducted during May and June of 2012 with 448 random students at QU by choosing students from random courses. The survey was distributed to students in classrooms after coordinating with faculty members. The interviews were presented as an opportunity to make a difference in saving the lives of young drivers in Qatar.

The survey forms contained a list of possible reasons for each of the questions. The response given by the participant was marked by the interviewer against the reason listed on the questionnaire. The response given by the participant was documented fully in a separate column if it did not correlate with any of the reasons listed in the questionnaire. All the responses were marked if a participant gave more than one reason. The questionnaire was developed in English language then was translated to Arabic language. Arabic survey forms used were translated back into English in order to ensure accurate and relevant meaning and intent of the questions. The interview duration ranged from 15 to 20 minutes.

III. ANALYSIS OF DATA

After conducting the survey, data was transferred from the field sheets to a main Excel spreadsheet by two team members and verified for accuracy by the other two team members. The verification for accuracy was achieved by comparing the survey forms against the Excel spreadsheet.

Four hundred forty eight students completed the interviews (52.2% male and 47.8% female). All students interviewed have a driver license. Age range was between 19 and 23 years. The majority of the students interviewed were driving a sedan car (54.7%) and not married (92.9%). The demographics of the drivers interviewed are listed in Table 1.

TABLE 1 DRIVERS' DEMOGRAPHICS FROM SURVEY

Characteristic	Number	%
Gender		
Male	234	52.2%
Female	214	47.8%
Driver age (years)		
19	153	34.2%
20	74	16.5%
21	122	27.2%
22+	99	22.1%
Nationality		
Qatari	167	37.3%
Arab – Non-Qatari	270	60.3%
Asian	11	2.5%
Married Status		
Married	32	7.1%
Not Married	416	92.9%
Working Status		
Junior	285	63.6%
Senior	140	31.3%
Training	23	5.1%
Vehicle Type		
Sedan	245	54.7%
SUV	175	39.1%
Sport	15	3.3%
Other	13	2.9%

A. Use of Seat Belt

As shown in Table 2, an overwhelming majority reported wearing seat belt while driving (75.6% male and 85.4% female) and while sitting in the passenger front seat (62.8% male and 65% female).

Fig. 1 shows the reasons for not wearing the seat belt among the students interviewed. Discomfort was the most commonly cited reason (46.2%) followed by not believing in its safety (14.5%). Reasons relating to size of vehicle, depend on other safety features in the vehicle such as air bags, fear of being trapped, and taking time to wear travel were the other significantly cited reasons.

TABLE 2 REPORTED ATTITUDE TOWARDS SEAT BELT USE

Question	% Responses			
	Yes		No	
	Male	Female	Male	Female
Do you wear the seat belt when driving?	75.6	85.4	24.4	14.6
Do you ask the front passenger to wear the seat belt as a driver?	54.7	63.6	45.3	36.4
Do you ask the back passenger to wear the seat belt as a driver?	9.8	14.5	90.2	85.5
Do you wear the seat belt sitting when next to driver?	62.8	65.0	37.2	35.0
Do you wear the seat belt when sitting in back seat?	29.4	9.8	70.6	90.2
Do you believe seat belt can save your life?	92.3	96.3	7.7	3.7
Do you think most people in Qatar wear the seat belts?	39.3	27.6	60.7	72.4
Do you think the length of the trip affect their decision?	54.3	51.9	45.7	48.1
Did you know back seat pass. can kill front seat pass. in a crash?	20.9	29.9	79.1	70.1

Why Not Wearing the Seat Belt?

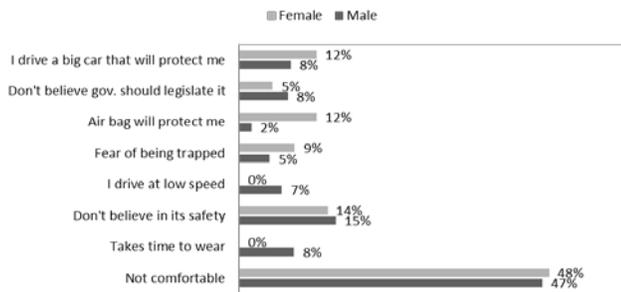


Fig. 1 Inspection Place Showing Visibility of Seat Belt Usage

Why Wearing the Seat Belt?

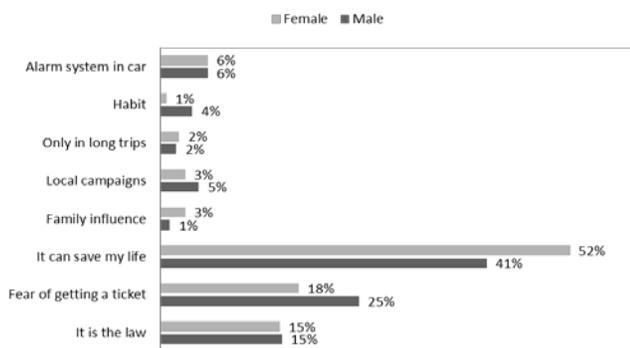


Fig. 2 Inspection Place Showing Visibility of Seat Belt Usage

Among the 360 drivers who reported wearing the seat belt while driving, 168 (46.7%) reported wearing the seat belt for safety, 77 (21.4%) fear of getting a traffic ticket, 54 (15.0%) want to follow the traffic law, and 61 (16.9%) reported other reasons.

B. Driving Behavior and Traffic Accidents

According to the survey, it was found that 44.4% of male drivers and 31.8 of female drivers interviewed were involved in an accident within the last two years. The majority (51.4% male and 66.1% female) reported wearing the seat belt at this time. Of the participants, approximately 20% reported suffering some kind on injury as a result of the accident. The

main reason for the accident was identified as speeding (34.7% male and 18.3% female).

TABLE 3 SELF-REPORTED ACCIDENTS IN THE LAST TWO YEARS

Question	% Responses			
	Yes		No	
	Male	Female	Male	Female
Have you been involved in an acc. within the last two years?	44.4	31.8	55.6	68.2
If involved in an accident, were you wearing the seat belt?	51.5	66.1	48.5	33.9
If involved in an accident, did you suffer any injuries?	19.8	20.2	80.2	79.8
If involved in an accident, was speeding the main cause?	34.7	18.3	65.3	81.7

III. CONCLUSIONS

The results of this survey provide a snapshot of the opinion of young drivers regarding seat belt use in Qatar. The number of male and female drivers in the random sample were 234 and 214 respectively. The majority reported wearing seat belt while driving (75.6% male and 85.4% female) and while sitting in the passenger front seat (62.8% male and 65% female). Findings of this survey indicated that the reasons for not wearing the seat belt among the students interviewed included discomfort (46.2%) and not believing that seat belts can save lives (14.5%). Other significantly cited reasons included depending on other safety features in the vehicle such as air bags, fear of being trapped, and taking time to wear. As far as reasons for wearing seat belts, reasons included for safety (46.7%), fear of getting a traffic ticket (21.4%), want to follow the traffic law (15.0%), and other reasons (16.9%).

The results of this study also indicated that a significant percentage of university students reported being involved in an accident within the last two years and not wearing their seat belts at the accident time. There are no simple remedies for drivers not wearing seat belts, however, there are a variety of countermeasures. These countermeasures include children education, driver education and awareness, legislation and enforcement. Not wearing the safety belt is a behavioral issue, so educational programs targeting the change of the driver's behavior will also lead to an increase in the safety use rate in the driving population. Previous research indicated that programs designed to encourage seat belt use in young children can increase seat belt use by the children and their parents, particularly in low income neighborhoods [10]. In addition, implementation of more restrict regulations will be necessary.

ACKNOWLEDGMENT

This research was made possible by a grant from the Qatar National Research Fund under its Undergraduate Research Experience Program award number UREP 11-109-3-022. Its contents are solely the responsibility of the author and do not

necessarily represent the official views of the Qatar National Research Fund.

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