

**Driver's Attitude Towards New Traffic Law in the State of Qatar**

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## Introduction

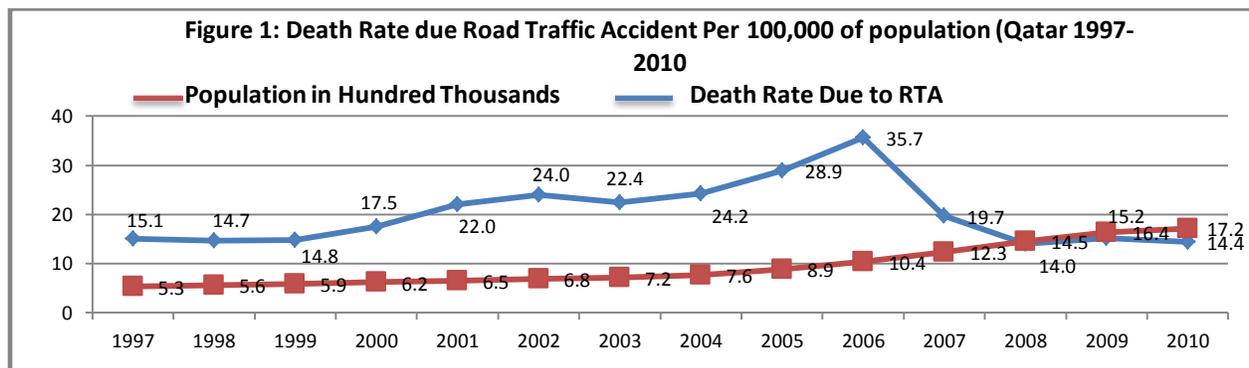
Reducing road traffic accidents (RTA) is one of the most important challenges of modern societies. There is no doubt that traffic accidents cause social and economic problems and leave a direct impact on people. With respect to socioeconomic problems, traffic accidents constitute a big burden on the society as a result of loss of life, injury and disability, and increase in the amount of insurance and compensations.

In October 2007, a new traffic law was implemented in the State of Qatar. This law contained a package of traffic rules and regulations in addition to the awareness and preventive campaign programs.

Road traffic accident rate (Per 100,000 Pop) doubled in Qatar in the last 10 years. The rate was 15.1 in 1997 then jumped to 35.7 in 2006. In addition, deaths due road traffic accidents became the second leading cause of death in Qatar. The traffic accident death rate (15.2/100,000 population) became the second leading cause of death in Qatar state, came directly after the disease of circulatory system (16.7/100,000 population) and before the neoplasm (12.1/100,000 population) according to annual health statistics in Qatar, 2009.

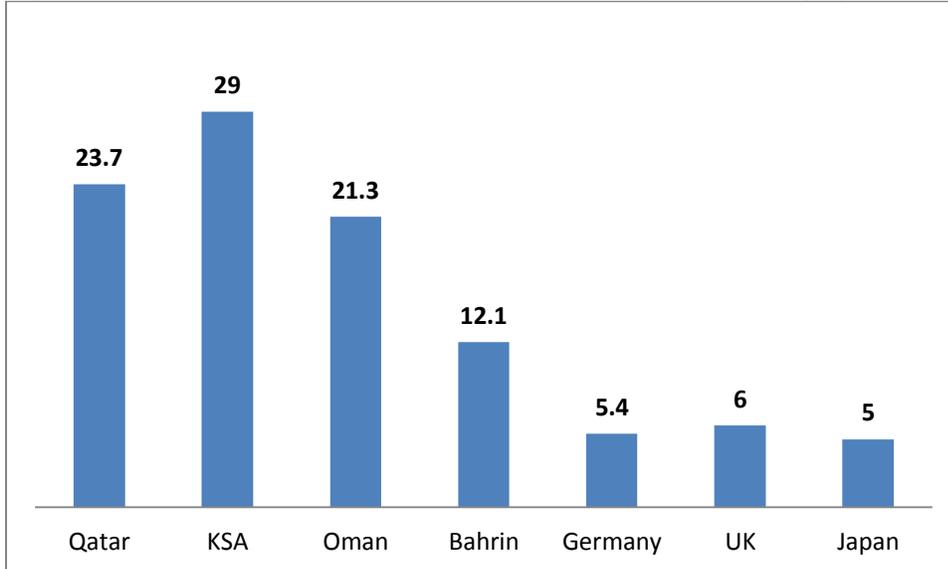
Despite the increase in the population size between 1997 and 2008, the death rate due to road traffic accident is almost stable (see Figure 1). However, road traffic accidents and associated problems are not new to Qatar. Eid (1978) raised the issues of traffic accidents in Qatar, which were later brought back to the forefront of the discussions by Benner (2005) then Benner and others (2010).

**Figure 1: Death Rate Due to Road Traffic Accident Per 100,000 of Population (Qatar 1997-2010)**



Regionally, death due to road traffic accident represent a great challenge face gulf Arab countries , and according to WHO, 2008 RTA report this rate is greater up to five time in Qatar comparing with developed countries (see Figure 2).

**Figure 2 : Deaths rate due road traffic accidents per 100,000 pop: WHO, 2008**



## **Objectives**

The objective of this study is to evaluate the effect of the new traffic law on reducing the traffic accidents in the State of Qatar by assessing its impact on the drivers' behaviors and Understanding the Qatari and non-Qatari drivers' behaviors and awareness towards 2007 traffic law .

## **Method**

### **The Sample Design**

The state of Qatar is divided into six municipalities. Each municipality contains a number of zones and each zone is divided into several blocks. For the purpose of this survey, the households in each municipality were ordered by geographic location in order to permit a well distributed sampling of housing units in the different areas. A stratified systematic sample was constructed for both Qatari and non-Qatari households. Each municipality was considered an independent administrative stratum; and after ordering the residences in each by location, a probability-based sample was drawn from each stratum.

## **Data Collection**

Interviews were conducted in June 2011 using Computer-Assisted Personal Interviewing (CAPI) technology. Interviewers and supervisors, most of whom had relevant prior data collection experiences, were recruited and carefully trained for the survey.

A total of 2,000 interviews were completed, including 992 Qatari nationals, 1008 non-Qatari residents. The response rate<sup>1</sup> was 69 percent for the Qatari sample and 79 percent for the non-Qatari sample. With a sample size of 1,000, the margin of error for a percentage at 50% is about  $\pm 3$  percentage points. The collected survey responses were weighted before analysis to adjust for the probability of selection and non-response.

## Results

**Figure 3: Qatari Knowledge of the Qatar 2007 Traffic Law by Gender**

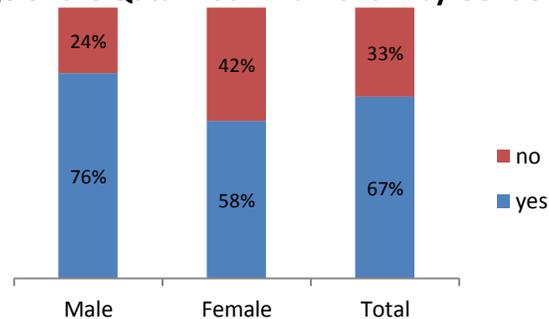
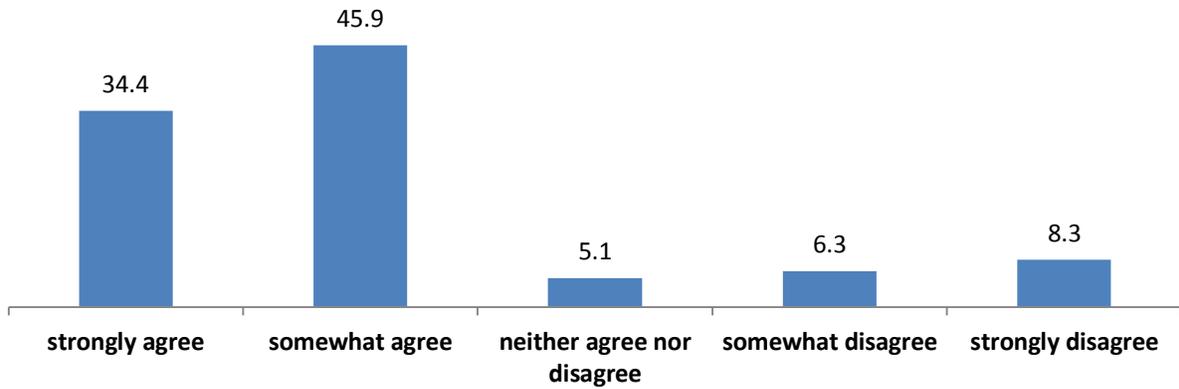


Figure 3 shows the level of respondents' knowledge of the new traffic law. Three out of ten (33%) respondents said they did not read or hear about the law. Female respondents were less knowledgeable than their male counterparts (58% versus 76%). Among respondents who said they had knowledge of the law, 36 percent obtained the information from the newspapers while 26 percent and 20 percent obtained the information from Television and friends (see **Error! Reference source not found.**).

**Figure 4: Respondents' Opinion Towards the Effect of the 2007 Traffic Law on Reducing the Traffic Accidents in Qatar**

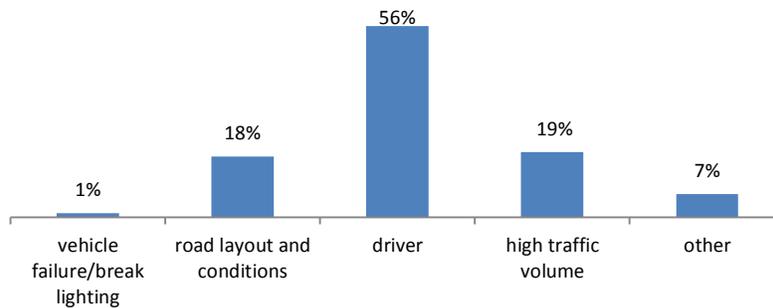
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<sup>1</sup> AAPOR Response Rate 4 (RR4) was used in the calculations of the response rate for the Qatari and non-Qatari samples. It includes the completes as well as the partials and estimates the eligible households from the proportion of the unknown eligibility.



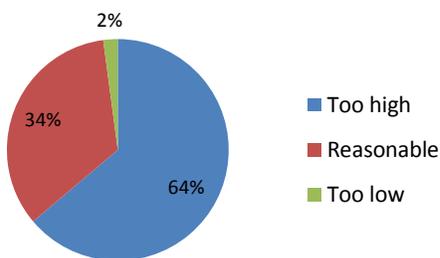
To assess people’s opinion about the impact of the traffic law, respondents were asked whether they agree or disagree with the statement saying “the traffic law helps to reduce traffic accidents in Qatar”. An Overwhelming majority of the respondents (80%) strongly agreed or agreed with the statement, while 14 percent disagreed or somewhat disagreed with the statement (see Figure 4.)

**Figure 5: Main Causes of Traffic Accidents**



About the main causes of the traffic accidents in Qatar, the majority of respondents stated that the main cause of accidents is careless drivers (56%). The second most cited cause of accidents is the high traffic volume (19%). Some respondents pointed out bad road layout and conditions (18%), vehicle failure/break lighting (1%), and other causes (7%) (see Figure 5).

**Figure 1: Assessment of the Current Traffic Penalties**



Since the adoption of the new traffic law, the level of penalties has been the topic of debate in the media. Many believe that these penalties are too high. In the survey, the respondents were asked about their assessment of these penalties. Six out of ten (64%) indicated that the current traffic penalties are too high. Slightly more than one third (34%) stated that the penalties are reasonable and 2 percent believed that the penalties are too low. (see Figure 6)

**Table (1): The Behavior Change in the Existence of Police or Speed Cameras According to Respondent's Gender and Nationality**

Respondent's Gender	Behavior Change	Respondent's Nationality		Total	Exact Sig (Chi-Square Tests)
		Qatari	Non-Qatari		
Male	Yes	57.1%	34.9%	43.0%	0.000
	No	42.9%	65.1%	57.0%	
Female	Yes	52.0%	37.7%	42.9%	0.000
	No	48.0%	62.3%	57.1%	

The survey also asked respondents whether they would change their driving behavior in the presence of a police or camera. Slightly more than half of the respondents male and female (57%) stated that they would change their driving behavior while 43 percent stated that they would not. Analyses of the data indicate statistically significant differences across the age categories (see Table 1)

**Table 2: The Behavior Change in Case of Receiving Traffic Penalty According to Respondent's Age**

Respondent's statement	Age Groups
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		18 - 24	25- 34	35 - 44	45 - 54	55 +	Exact Sig (Chi-Square Tests)
Receiving Traffic Penalty Last Year	Yes	66.7%	48.7%	42.0%	45.2%	44.4%	0.001
	No	33.3%	51.3%	58.0%	54.8%	55.6%	
Behavior Change in the Existence of Police or Camera	Yes	60.4%	48.7%	47.0%	39.5%	44.4%	0.014
	No	39.6%	51.3%	53.0%	60.5%	55.6%	

The proportion of drivers who change their behavior only in the presence of speed camera or police is higher among young drivers and decreased with age. The proportion is also higher among drivers who received traffic penalties for the same age group as shown in Table 2 (significant).

## Conclusions

The result obtained in this study showed that there are differences in the driver's level and sources of knowledge regarding the 2007 traffic law. An overwhelming majority of respondents (80%) strongly agreed or agreed with the statement "the traffic law helps to reduce traffic accidents in Qatar". The respondents also stated that the current traffic penalties are too high. In addition, the respondents agreed that the main cause of traffic accidents in Qatar is the driver. The results showed that young drivers receive penalties more than other drivers. The results also showed that the drivers tend to change their behavior in the presence of law enforcement agents or tools (policeman, speed camera, , etc.). Finally, according to the respondent's answers, the 2007 traffic law has positive affect on the driver's behavior and the drivers believed that this law helped in the reduction of traffic accident in Qatar.

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