# Trinidad Motorists' Understanding of Safety Belt Issues

M Mutabazi

## INTRODUCTION

Road traffic fatalities in Trinidad and Tobago (T&T) have been on the increase for the past decade without concomitant increase usage of seatbelts (personal communication). Safety belt effectiveness ranges between 27 and 77% (1) prompting many countries to introduce safety belt laws. Trinidad and Tobago introduced the law in 1995 for front seat occupants, two years or older, in light vehicles. It is against the law to carry passengers in open trays of pick-ups and trucks. Infants are carried on adult's laps and many children are seen standing, playing and overloaded in the back seats without child seats (personal communication). Children using safety belts are at risk, because the strap fits across the neck instead of the shoulder and the lap belt fits across the stomach instead of the hip. Taxi drivers do not wear belts (personal communication), hiding them to make enough room for passengers thereby maximizing revenue. Police officers cite court bureaucracy as a hindrance in enforcing the law. Study results on belt law effectiveness are inconclusive (personal communication, 1). With the target of 90% by 2030 (2), the need to raise belt usage is apparent. Belt wearing depends on motorists' willingness, their understanding of belt issues is important in promotion of safety belts. Table 1 summarizes drivers' attitudes and understanding of safety belts in T&T (personal communication). Blending of public education, engineering, legislation and enforcement measures is the key to raising safety belt usage.

# **METHODS**

The study used a cross-sectional survey in three groups. The "Mail" (n = 300) group composed of drivers entering/leaving at three shopping centres. The "Campus" (n = 110) group made-up of members of the University of West Indies – St Augustine campus. The "Field" (n = 202) group was made-up of drivers selected from traffic streams at two locations. Safety belt usages were observed for the "Field" group. Questionnaires, self-addressed pre-paid stamp envelopes were distributed to the "Mail" group drivers. Sixty-seven questionnaires were returned. "Campus" and "Field" respondents filled the questionnaires on the spot. The questionnaires addressed four safety belt issues: 1) effectiveness, 2) relationship with air bags, 3) comfort and 4) mitigation meas-

From: Department of Civil and Environmental Engineering, The University of the West Indies, St Augustine, Trinidad and Tobago.

Correspondence: Dr M Mutabazi, Department of Civil and Environmental Engineering, The University of the West Indies, St Augustine, Trinidad and Tobago. Fax: (868) 6457691, e-mail: mutabazi@yahoo.com.

ures. Respondents' gender, age, and period of driving were solicited because of correlation with safety belt usage (3, 4). SPSS software was used in analysis.

### RESULTS

Groups were combined because they were not statistically different. Study response rate was 62%.

## Safety Belt Effectiveness

All groups were asked on the effectiveness of safety belts. Eighty-seven per cent thought they were effective while nine per cent disagreed and four per cent were uncertain. Responses were independent of age, gender, driving experience and belt usage.

## Safety Belt and Airbag Relationship

In vehicles with both airbags and safety belts, a driver might feel secure without wearing the safety belt (personal communication). "Mail" and "Campus" respondents were asked about the relationship between airbag and belt. Only 10% had a correct understanding (supplement), 54% indicated "compliment" while 36% were uncertain. Responses were independent of age, gender, and period of driving experience.

#### **Measures to Increase Usage**

Only the "Field" respondents were asked on measure(s) that could increase belt use. Education received the highest score (46%) and was associated with both gender and driving experience (p=0.003 and 0.031 respectively). More females (85%) than males (57%) subscribing to education may reflect differences in level of risk taking and/or concerns with confronting enforcement officers. Enforcement received a score of 31% and was associated with belt usage (p=0.012), 61% of them wearing belt. Legislation received a score of 22% and only 2.5% felt that none can increase belt usage.

## Comfort

"Mail" and "Campus" respondents were asked on belt comfort. Safety belt comfort level depicted in Figure 1 was not associated with gender, age or driving experience. The mean score of 3.9 and with 70% of respondents indicating a rank below the mid-range (5.5) suggests that comfort does not affect belt usage and this is similar to another study (8).

## DISCUSSION

Difference between previous studies seen in Table 1 may be attributed to difference in questionnaire set-up and/or weak

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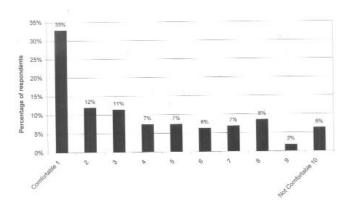


Fig. 1: Safety belt comfort level.

Table 1: Proportion of motorists with perceptions on aspects of safety belt

Safety belt issue	1998	2003	2004
Attitude			
Safety belts are effective	39	55	87
Safety belt is comfortable	68		
Wears safety belt out of habit	7		
Safety belt negatively affect driving ability	3		
Safety belt are useless	3		
Fearful being trapped in vehicle in case of			
collision	4		
Wear safety belt because it is a law		70	
Don't expect crash, else can hold on to the			
steering wheel.		30	
Airbags can save them		6	
Education to increase safety belt wearing			46
Enforcement to increase safety belt wearing			31
Legislation to increase safety belt wearing			22
Education, enforcement, legislation can't			
increase wearing safety belt			2.5
Practice			
Wearing safety belts	40	65	50
Wearing safety belts and agree that they are			
effective	46	NA	52

association between wearing safety belt and understanding of its effectiveness. Most believe in the effectiveness of safety belts but few were wearing them. Reasons other than comprehension of belt effectiveness could be the reason for lowusage.

These results differ from the 2003 poll by a local television station in hich 96% of callers attributed the road safety problem to lack of enforcement. Favouring education could be attributed to its non-liability to the driver. Enforcement could be more effective in bringing about compliance faster. However, society norms that promote belt use should be shaped by educational measures even if it takes longer.

A similar proportion (68%) considered safety belt comfortable in 1998 (personal communication). Safety belt comfort may be biased by the type of vehicle because some are fitted with more comfortable safety belts.

Motorists should be educated on the relationship between safety belt and airbag.

## **ACKNOWLEDGEMENTS**

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