A STUDY ON MEDIA EXPOSURE FOR THE HIGHEST RISK GROUP OF ROAD USERS IN MALAYSIA

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ABSTRACT

Road safety is a serious issue in Malaysia, especially among youngsters. In 2010, a total of 6,874 road users died on Malaysian roads, with about 25% involving aged 16 to 25. One of the key interventions undertaken by the government is through road safety campaigns. This research attempts to look at media exposure among the highest risk group of road users; made up of male aged 16-25, from the ethnic Malay in the rural areas. This segmentation from the general population of road users would help campaign implementers in preparing better media plan, and hence making the road safety advertising campaign cost effective. A total of 1133 respondents were surveyed nationwide. The findings reveal the group's exposure towards the media in terms of preference for newspapers, television, radio and the internet. Thus, this study would be useful for media planners to determine the right media to deliver road safety messages effectively.

Keywords: Social marketing, road safety campaign, media exposure, online media, social media.

INTRODUCTION

In 2010, there were 6,872 deaths on Malaysian roads (Royal Malaysian Police, 2011). For a country with a population of 28 million, this figure reflects a poor statistics that warrants serious and immediate interventions from the government and road users. A study by Nagaraj, Tey, Ng and Balakhrisnan (2008) indicated that road crashes are the fifth leading cause of death among Malaysians, after several non-communicable diseases relating to heart ailments. Road crashes account for the third leading cause of death among males and tenth most common cause of death among females. In 2009, there were 3.55 deaths per 10,000 vehicles and 28.8 deaths for 100,000 populations

(MROADS, 2009). This figure is far poorer from those of developed countries. In addition, there is also increasing trend on the number of casualties on the Malaysian roads, as depicted in the **Table 1**.

Table 1: Fatalities, injuries and crashes for 2006-2010

	2006	**2007**	**2008**	**2009**	**2010**
Fatalities	6,287	6,282	6,527	6,745	6,872
Injuries	29,138	27,717	25,747	24,672	21,397
Crashes	341,252	363,319	373,071	397,330	414,421

Source: MROADS (2011)

Road accidents certainly come with cost, both economically and socially. In terms of economy, Mohamad (2010) estimated that annual losses from road accidents is amounting to RM 10 billion (USD 3.3 billion), or equivalent to 2.65 per cent of Malaysia's Gross Domestic Product. This is relatively high compared to a mere 0.5 to 2.0 per cent in developed countries. Of the victims, motorcyclists constitute 59 per cent of death or about 4,000 deaths in 2010 alone, followed car drivers and passengers, and pedestrians in the third place as demonstrated in **Figure 1**.

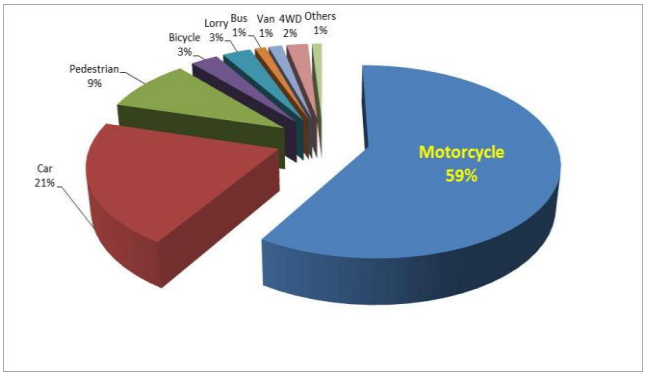

Figure 1: Fatality by road user category for 2010

Following further analysis, it was identified that young motorcyclists in the rural areas are the riskiest group on the roads. This group is made up of the ethnic Malay, aged 16-25, male, and normally travel along the federal or state roads when the accidents occur. In 2010, a total of 853 of 6,872 or 12.41% of the death involve this group of road users (MROADS, 2011). The data also revealed that the accidents among them occur past midnight. It is not difficult to attribute the most number of accidents are involving the motorcyclists as the machine does not come with proper safety protection compared to the four-wheelers. Furthermore, motorcycle is the most preferred mode of transportation among the rural populations due to cheaper price, that make it more affordable compared to the cars. By 2010, motorcycles made up about 50% of about 20 million registered motorised vehicles in Malaysia. In 2009 alone, there were 441,545 new motorcycles registered. Several factors are attributed to the popularity of motorcycle in Malaysia, namely affordability, reduced travel time, cost saving, and manoeuvrability (Ibrahim Sheikh, A.K. 2006).

In view of the seriousness of the problem involving this particular group of road users, the Malaysian government is using the social marketing approach which focuses on advertising campaigns and awareness programs for intervention. This approach is best to deal with the behaviour change, whereby the behaviour is known as the main contributor to road crashes. In Malaysia, more than 60 per cent of the crashes are attributed to the behaviour, or the failure to adhere to the traffic rules and regulations. Therefore, road safety campaign is commonly used as intervention for this group. Delhomme, et al. (2009) defines road safety campaign as purposeful attempt to inform, persuade, and motivate population (or sub-group of a population) to change its attitudes and/or behaviours to improve road safety, using organized communications involving specific media channels within a given time period. It is often supplemented by other self-promoting activities such as enforcement, education, legislation, personal commitment, rewards, and others. The Malaysian government has been committed towards this effort through mixed media plan, namely paid advertising and publicity efforts in national television, radio, newspapers and the internet. The private sector has also played similar role in promoting road safety as part of the companies' corporate social responsibility, particularly during festive seasons. Nevertheless, there has not been much success despite all these efforts even though the cost is relatively high. The death toll continues to rise each year and the motorcyclists in the rural areas, especially among the young Malays, make up most of the casualties. This study, therefore, aims to look at the media exposure for the high risk group of road users in Malaysia which would enable a more effective advertising media plan to be drawn out. This is in line with segmentation approach which will be more cost effective when the messages are delivered right to the target group. A better understanding on the audience's exposure to the media would allow a better preparation of the media plan that would enable road safety messages to be delivered right to the intended audience.

METHODOLOGY

The survey was carried out nationwide, in urban and rural areas of Malaysia. Self-administered questionnaires were handed out to 1,133 respondents who were selected through purposive sampling. This was to ensure that the data collected represents the Malaysian population which made of three major ethnics and the indigenous people, labelled as 'other races'. The respondents were carefully selected to ensure that the gender and age group are well represented in both rural and urban areas. Data collection was carried out in six regions, namely the central, north, south and east of the West Malaysia, and additional two regions in the states of Sabah and Sarawak in East Malaysia. For each of the region, the data were collected in both rural and urban areas.

The locations of the data collection are listed in **Table 2** below:

Table 2: Locations of survey

Region	Urban	Rural
North	Sungai Petani	Baling
South	Johor Bahru	Segamat
East	Kota Bharu	Gua Musang
Central	Shah Alam	Banting
Sabah	Kota Kinabalu	Semporna
Sarawak	Kuching	Sri Aman

The first part of questionnaire was designed to gauge exposure towards the media, and hence divided under sub-category of television, radio, newspapers, and internet. The respondents were also asked on their exposure to a particular medium, the frequency of exposure, time of exposure, the preferred channels (for television and radio), the sections (for newspapers) and the most watched programmes. They were allowed to give more than one answer on the channels and programmes watched. The respondents were also allowed to give more than one answer under the newspaper category. Similarly, they were also asked on the preferred websites and also social sites such Facebook, YouTube, Twitter, blogs and relevant ones. The questionnaire also attempted to find how respondents access the internet. Questions on whether they are into the online newspapers, television and radio were also asked. The reasons to surf the internet were also included. The questions pertaining to demographic such as race, age, education level and income were included as to enable cross tabulation to be carried out during analysis.

THE ANALYSIS OF THE SURVEY

The data were collected and analysed for its demographic composition. The racial composition obtained mirrored the actual Malaysian populations. The ethnic Malay was represented by 58 per cent, followed by the ethnic Chinese (28%), the ethnic Indian (11.2%) and other races (7.4%). Male made up for 53 per cent of respondents while female respondents were 47 per cent. As for the age group, 34.25 per cent of respondents were in the 26-35 years of age, followed by 25.24% for those in the 16-25 age brackets, who are the most the highest risk group of road users in Malaysia. Those aged 36-45 were represented by 21.36% while the remaining 19.15 per cent were those above 45. Both distribution of income and education among respondents showed were represented by a normal curves. The highest frequency were those who earn between RM 1000 to RM 2000, while for education, a typical one would be high school graduate. In short, the bell curve for the income distribution was also a representation of the distribution of the income for the rest of Malaysians. This was also true for the education levels, with about 40% of the respondents were high school graduates.

As stated in the objective of this study, specific analysis was carried out among the highest risk group of road users; male between aged 16 and 25, of the Malay ethnic.

They mostly ride motorcycle in the rural areas. A good understanding on the media exposure among this group would increase the chance of delivering effective messages to them, and hence influencing them to behave on the road. Firstly, this study compares the exposure on different types of media, namely the television, radio, newspaper and the internet. The result shows that television is the most popular source of information, followed by the radio, newspaper and the internet as in **Figure 2** below:

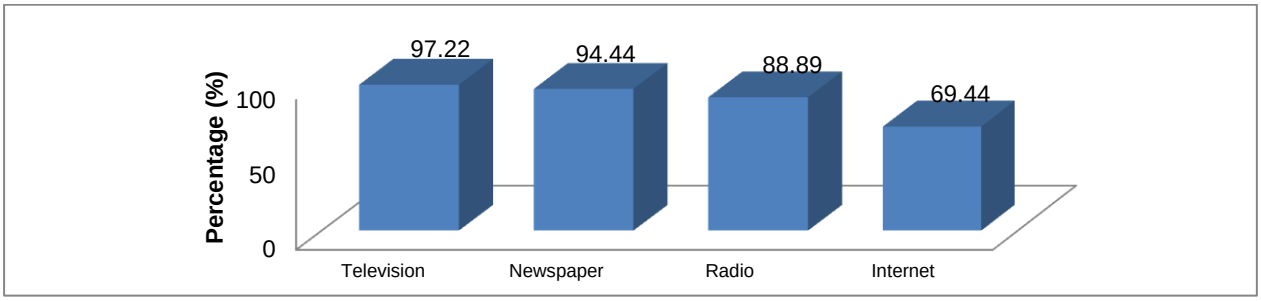

Figure 2: Exposure to the media among the highest risk group of road users

Since television advertisement is expensive, it is very important to know which channels that this particular audience tuned to. The study would be able to assists media planner to identify the right television channel in delivering the message to the intended audience. Of those who watch the television, 80% would tune to the free-to-air national television TV3, followed by the paid satellite television Astro, with 48.57 per cent. Nevertheless, this study does not specifically identify which channels under the Astro's 100-channel package that are mostly preferred by them. **Figure 3** below indicates the television channels which are mostly preferred by this group:

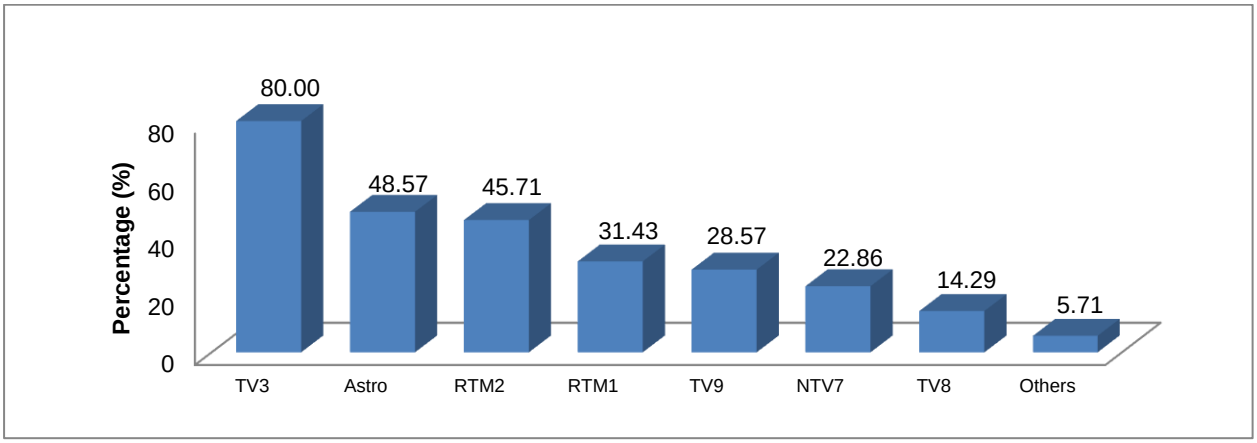

Figure 3: Frequently watched channels among the highest risk group of road users

Apart from knowing the channel, it is also important to identify the time of television viewing in order to come up with a more accurate media plan, and hence making the air-time purchase for advertisement cost effective. From this study, it is learned that majority (74.29%) of young male Malays in the rural areas spend their time watching television during the night prime time, from 8pm to 11pm, way exceeding any other times of the day. This is explained in **Figure 4**:

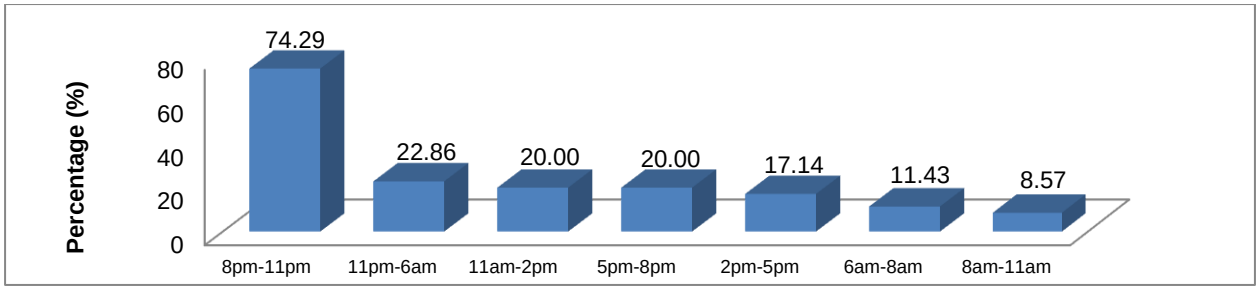

Figure 4: Time of television viewing among the highest risk group of road users in Malaysia

It is also interesting to note these youngsters are mostly interested in news, movies and sports above any other programmes on television. Therefore, the media planner must take this factor into account in selecting the programme to air road safety advertisement or messages. **Figure 5** shows the programmes preferred by the highest risk group of road users in Malaysia:

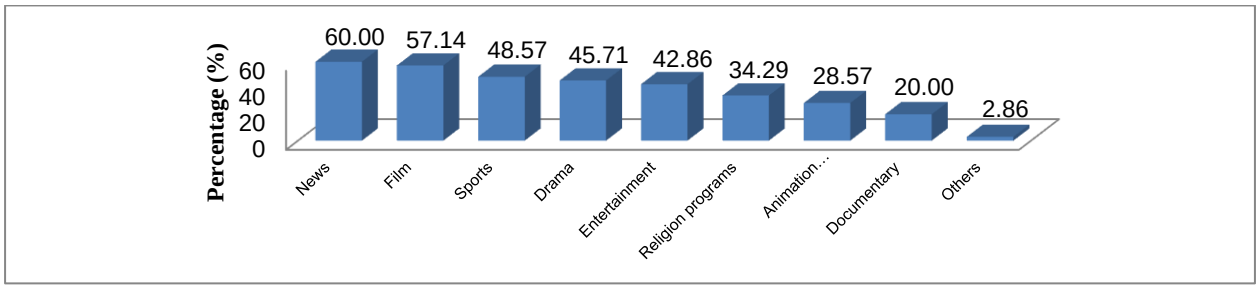

Figure 5: Television programmes watched by the highest risk group of road users in Malaysia

This study indicated that newspaper is the next important medium among this group of road users as 94.44% of the young Malay males in the rural areas admitted that they do read newspapers, with preference for the Malay newspapers. Malay daily Harian Metro, which offers more sensational news, tops the list. This is followed by two other Malay dailies, Berita Harian and Utusan Malaysia. The result of this survey is in line with the circulation figure released by the Audit Bureau of Circulation in June 2010. It listed Harian Metro as the top selling newspaper in Malaysia (Audit Bureau of Circulation, 2010). This is also reflected among English dailies, which resulted in higher score for The Star as compared to its closest rival, The New Strait Times, The Malaysian Today and The Malay Mail. Though the survey questionnaire also listed the Chinese and Tamil dailies, the respondents did not respond due to the absence of understanding towards the language. **Figure 6** shows the most read newspapers among the highest risk group of road users in Malaysia.

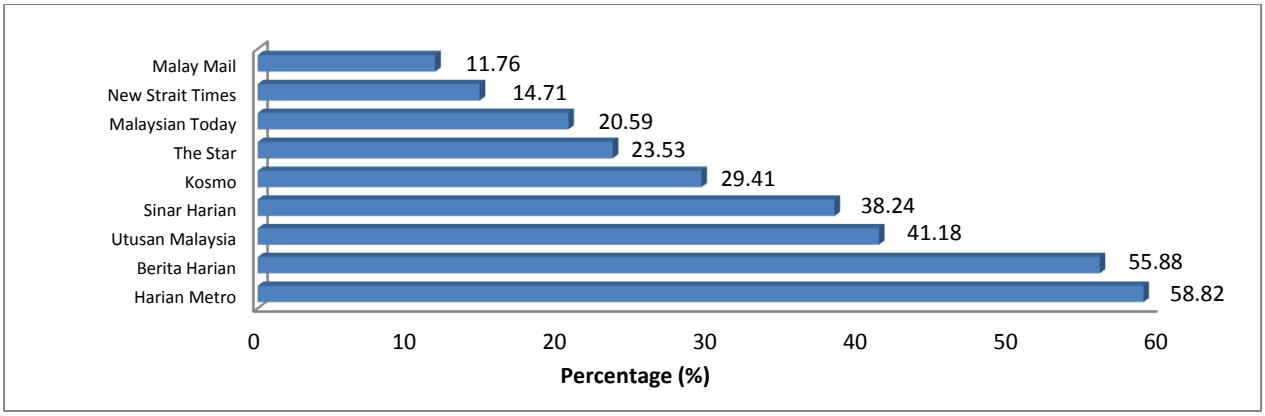

Figure 6: Favourite newspaper segment among the highest risk group of road users in Malaysia

When it comes to the newspaper content, the Malay youth in the rural areas choose to read sports, local news and entertainment. This is important for the media buyer to plan the advertising space to catch the targeted audience. **Figure 7** below indicates the most read segments by the highest risk group of road users in Malaysia.

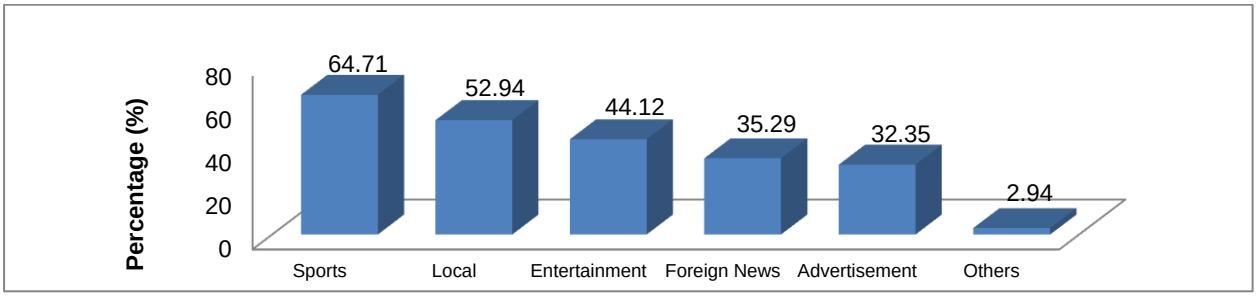

Figure 7: The most read segments by the highest risk group of road users in Malaysia

Radio is another important media to deliver messages. The survey says that most of the Malay youths in the rural areas listen to the leading Malay radio station Era FM, leaving behind another popular stations, Sinar FM and Hot FM. As for the English radio station, Hitz FM tops the list among this audience and ranked fourth overall. **Figure 8** below shows the most popular radio stations among the rural youths.

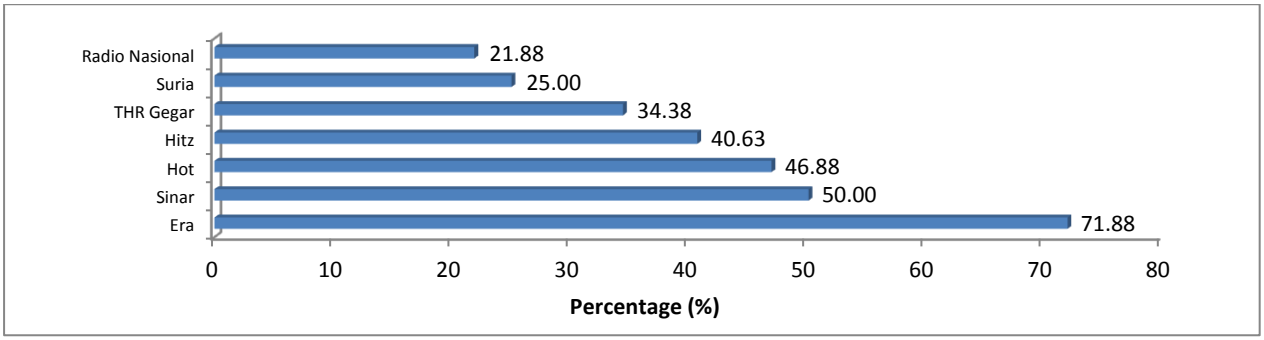

Figure 8: Favourite radio stations among the highest risk group of road users in Malaysia

As for this particular group of road users, time of radio listening is not concentrated during driving hours, since most respondents in this study travel on motorcycles rather than cars. Yet, the 8am to 11am slightly scored higher percentage compared to other times of the day. The details are shown in **Figure 9**.

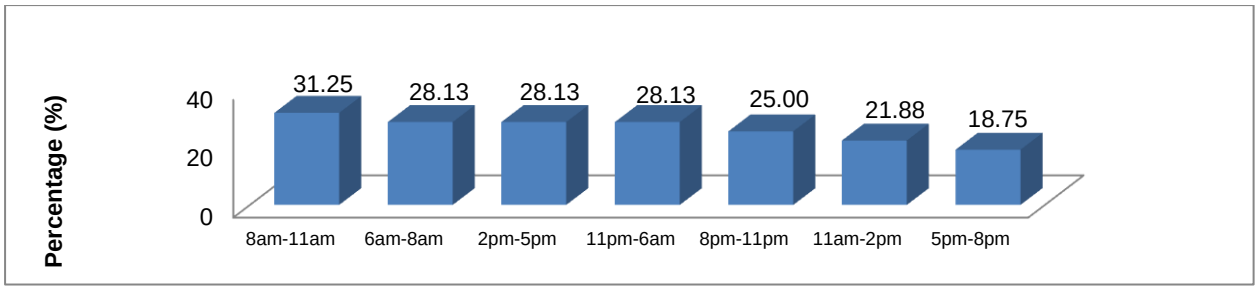

Figure 9: Time of radio listening among the highest risk group of road users in Malaysia

When the online media is concerned, Malaysia enjoys a relatively high internet penetration, including in the rural areas. According to the Malaysian Communication and Multimedia Commission, the internet penetration in Malaysia has increased exponentially from 15% in 2000 to 62.8% in 2008 (Digital Media Across Asia, 2010). Generally, this study reveals that internet penetration is higher in the urban area (88.13%) compared to only 63.71% for the rural area. As of July 2010, when the data was collected, about seven out of 10 Malay youths in the rural area admitted that they have access to the internet. It is also interesting to note that smartphones have penetrated the rural areas with that 24% of the respondents said that the internet access is available through this mean. Nevertheless, the main internet access for this group comes from the cyber café, home and office, as shown in **Figure 10**.

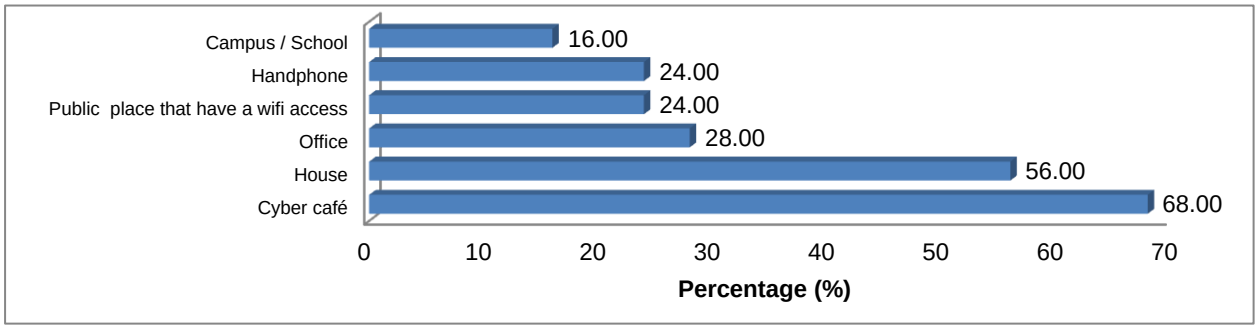

Figure 10: Internet access among the high risk road users in Malaysia

Next, it is interesting to find out which websites are regularly visited by this vulnerable group of road users. The study reveals that social media such as the YouTube and Facebook is the most popular sites for this group. The YouTube scored 88% while Facebook is equally high with 84% as explained in **Figure 11**.

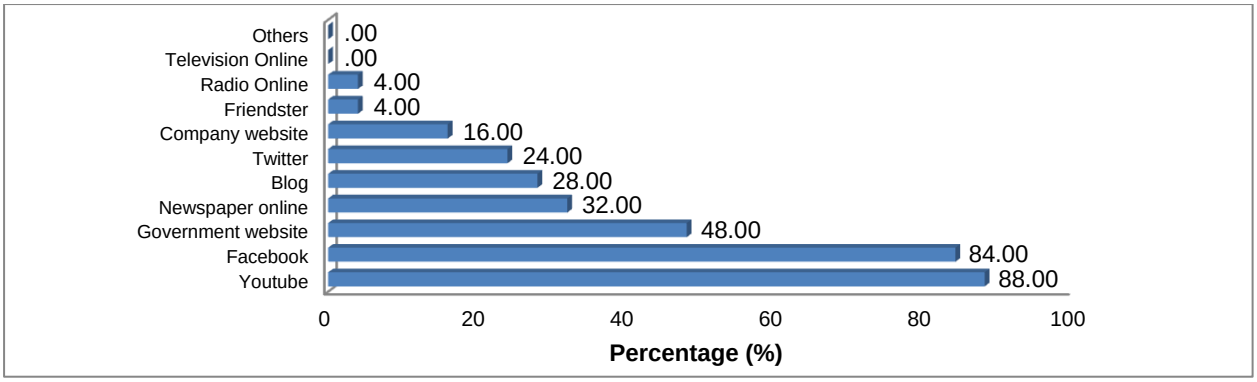

Figure 11: Favourite websites among the highest risk group of road users in Malaysia

The study also revealed that entertainment, information search, emails, online newspapers and socialising are the reasons why they are hooked on the net, particularly on the social media. In addition, it is learned that 32% of them access internet at least an hour a day, with 8% hook on the line for more than four hours. This data is important to provide a better platform for media planner to come up with effective strategy to reach the target audience in the cyber space.

DISCUSSION OF FINDINGS

The findings of this study will be useful in outlining the media plan for the advertising campaigns to reach the highest risk group of road users in Malaysia. In the past, the road safety campaigns were carried out in the absence of the evidence and did not have any specific audience analysis. Rather it is akin to one-size-fits-all strategy. Audience analysis and segmentation is one of the most significant phases in road safety campaigns. A campaign targeting a specific segment of a population rather than a large heterogeneous population is more likely to be successful (Kopfman and Smith, 1996). The evidence obtained from this study would only become worthy when it is applied by the advertising agency awarded by the government to carry out the road safety campaign. For a road safety campaign to be effective, the advertising planner must look into three aspects, namely getting the right target audience, the right message, and the right channel. While the target audience have been identified through road accident data, this study helps to identify the right channel or the right medium of communication. Perhaps, another study that looks into the right message would be necessary to provide effective messages for the highest risk group of road users.

This study has also revealed a few important evidences which are useful in planning advertising campaign. Firstly, this study has identified the main channel of information that could be used to deliver messages. It was learned that traditional media such as television, newspaper and radio, remain relevant to reach the audience in rural areas. However, the significant increase in internet usage among the rural audience would probably change the media landscape in the future. Therefore, periodical study needs to be carried out to investigate changes in media usage. This will provide evidence for strategy in media planning from time to time and hence making message delivering more effective.

Secondly, this study has been useful in understanding the audience interest when they are exposing themselves to the respective media. This provides good evidence for space and airtime buying for advertisement or messages on road safety. Thirdly, it is interesting to note from this study that social media is making inroads into the rural areas. This would be useful for media planners to reach the audience to compliment advertisings in the traditional media. One of the limitations identified in this study is that no question was asked on the preferred channels among the Astro's 100-channel package.

CONCLUSIONS

There is no doubt that effective social marketing campaign involving advertising would create awareness and behaviour change and thus lead to reduction in deaths and injuries. Proper research in this area, particularly on the media exposure, is very important as selection of media – or the right media to be exact – would have a lot in influencing the outcome of the intervention. Better understanding on the right media for the right target audience would certainly lead toward greater effectiveness and optimisation of the advertising expenditure. From this study, it has been identified that in order to effectively reach the highest risk group of road users in Malaysia, the media planner should choose TV3 station during the prime time, especially during the prime time news and movies. As for the radio, the advertisement should be placed on Era FM with preference during the morning peak. For the newspaper, messages should be advertised on Harian Metro, especially on the sports pages. For the internet, creative content must be made to reach them via YouTube and Facebook where they mostly spent their time. Prior to this research, the little evidence available to guide the media planning was based on the media rating provided by the Annual Media Planning Guide which is more suitable for promoting products and services, and not specifically for social good. In short, social marketing initiative through advertising campaigns would be more effective when backed by evidence rather than gut feeling or experience, at best.

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