EFFECTIVENESS OF GOVERNMENT POLICIES TO CURB DRUNK DRIVING IN MALAYSIA

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ABSTRACT

Drunk driving is an irresponsible attitude of driving or in control of a motor propelled vehicle while the sobriety of the driver had been impaired by consumption of alcohol or drug prescription thus renders the driver incapable of operating such vehicle safely. Despite the latest figure from both the World Health Organization (WHO) and Malaysia Transport Ministry show that Malaysia has one of the lowest rates of road deaths caused by drunk driving as a whole, the number of persons who died due to drink driving accidents were continuing increasing on a general upward trend since year 2014. In this context, previous research hypothetically define the driver personal attitude instead of government policies as the determining factor of continuance increase of drunk driving phenomena in Malaysia and the world as a whole. To reject this hypothesis, this study adopted doctrinal research that employ the techniques of library research via e-library by critically analyzing the government policies in terms of legislation and enforcement policy practiced in Malaysia. The result of this study established that there were lacuna in the government policies whereby the legislation and enforcement policy were insufficient in term of regulating or restricting the accessibility of driver consumed alcohol or drug prescription to any motor propelled vehicle. Finally, this study will propose viable recommendation to remedy the lacuna in the government policies to curb the occurrence of such drunk driving phenomena.

Keywords*: Drunk Driving, Road Traffic Accident, Government Policies, Traffic Enforcement, Traffic Policies.*

INTRODUCTION

There can be no question that drunk driving is bad. Theoretically road traffic accidents resulted from irresponsible drunk drivers in control of a motor propelled vehicle are tragedies that could have been prevented, but still such drunk driving phenomena continue to occur throughout the world and also in Malaysia.

It is hypothetically define the driver personal attitude instead of government policies as the determining factor of continuance increase of drunk driving phenomena in Malaysia and the world as a whole. Some finding concluded peer pressure, emotional stress and social gatherings are some major factors that prompt younger generation to consume alcohol which lead to more than half of them involved in road traffic accidents and social problems **(Ajitha Nancy Rani, R, 2016).** Other study concluded that aggressive driving behavior such as drunk driving is associated with sociodemographic factors, including the level of education, marital status, and other socioeconomic factors **(Akalanka, E.C., et.al., 2012).** Research further stated the economic factor affect the income of individual need such as income and retirement pension need to be addressed by government lawmakers in term of legislation and enforcement policy if government wishes to find solutions to traffic-related issues such as drunk driving **(Møller, M., et.al., 2015).**

To counter the hypothesis that driver personal attitude serves as the determining factor of drunk driving, this study adopted doctrinal research by employ the techniques of library research via e-library by focusing and analyzing the scope and effectiveness of government legislation and enforcement policy to curb drunk driving. Throughout this research we identify the lacuna that hamper the effectiveness of government legislation and enforcement policy thus able to put forward viable recommendation to improve its effectiveness to curb the phenomena of drunk driving in Malaysia as a whole.

LITERATURE REVIEW

It is established that drinking patterns are associated with national drunk-driving policymaking **(Cheng., et.al., 2018).** In Malaysia, the government penalized the drunk driving behavior under the legal authority of Road Transport Act 1987 (Act 333 or RTA 1987). First, section 44 RTA 1987 provides for offence of driving while under the influence of intoxicating liquor or drugs that causes the death of or injury to any person. Second, section 45 of RTA 1987 also provides for offence of a person in charge of a motor vehicle under the influence of intoxicating liquor or of a drug to such an extent incapable of proper control of a motor vehicle. Thirdly, section 45A RTA 1987 further provides for offence of driving or being in charge of a motor vehicle with alcohol concentration above prescribed limit under section 45A RTA 1987.

As public support for policy is a key element of determining the direction of government policymaking **(Hope, A., 2014),** study had shown that media attention and high profile drunk driving road traffic accident triggered the lawmakers to push for subsequent changes in government policy regulate drunk-driving behavior **(Nakahara, et.al., 2013).** In light of numerous drunk driving incident occurred in recent period of pandemic Covid-19, the Malaysia government had since 23 October 2020 revised the legislation and increased the penalties of all the relevant provision under RTA 1987 by decreasing the Blood Alcohol Concentration (BAC) threshold, impose mandatory imprisonment and hefty fine.

By decreasing the Blood Alcohol Concentration (BAC) threshold, study by **Nistal-Nuño B. (2017)** shows that there is a reduction in traffic injuries related to drunk driving offences following introduction of new law that decrease the BAC threshold. On the other hand, by applying harsher sentence, a study by **Rodríguez-López J., et.al. (2019)** found that heavier monetary fines indicates a downturn in the external costs of drunk driving over the last decade. In fact, in a study conducted by **Tsai, W.-D. (2019),** enactment of harsher sentence

for drunk driving offences had spillover effects of lessening both the number of alcohol-related traffic accidents and the total number of road accidents. Meanwhile, a study by **Malta, D.C., et.al. (2014)** observed that the frequency of adults who drove after abusive alcohol consumption was reduced and significant reductions were observed in the years immediately after the publication of new laws that punish severely to the offence of drunk driving. In the process of enhancing the legislation to curb against drunk driving offences, a study by **Cheek, S.M., et.al. (2013)** suggested that legislation must be enacted in a way that empowering law enforcement agencies to obtain evidence needed for prosecution of drunk driving offences.

Traffic enforcement has been an important mechanism to improve traffic safety. Many studies established evidence of connections between the level of police enforcement and occurance of drunk driving offences **(Stanojević, P., et.al., 2013).** However, relying on the law can be considered as "basic", since enforcement will face many challenges such as limited resources in term of manpower and equipment **(Zulhaidi Mohd Jawi et al., 2015).** A major pitfall to many current government policy of curb drunk driving is that the fragmented structure of road safety authorities that complicates collaboration and coordination of effective enforcement policy to enforce the legislation. Enhanced and strict legislation towards drunk driving is ineffective to decrease the prevenatable drunk driving road traffic accidents if there is no proper strategy in enforcement policy. **(Pechansky, F., et.al., 2012).** In term of formulating strategy in enforcement policy, the integrity and resources of enforcement agency must be enhanced at the first place. For integrity part, eliminate of bribe-taking behavior among enforcement agency must be produced prior to implementing any strict legislation **(Akalanka, E.C., et.al., 2012).** While for resources part, the enforcement agency in particular police must have adequate manpower or equipment to conduct regular and frequent roadside checking for drivers who have been drinking. **(Ngoc, L.B., et.al., 2012).** Study shown that the intensity and force of traffic enforcement does contributes to the reductions in alcohol-impaired road traffic accident **(Yao, J., et.al., 2016).**

Having an overview of the literatures available, it appears that researches tend to focus on the overall concept of studying or looking at the effect of government policy that regulate the aftermath of drunk driving offcences, ie the government policy in term of legislation and enforcement strategy to "punish" the offenders after the offence had been committed but instead prevent the happening of drunk driving offence from occur at the first place. Affirmed in a study conducted by **Jones, A.W., et.al. (2010),** the legislation had created an environment whereby many people suspected of driving under the influence of alcohol are not apprehended sitting behind the wheel but some time after the driving, such lacuna is not easy for the prosecution to disprove and render the drunk driving charge is dropped or the person is acquitted if the case goes to court for trial. To remedy such lacuna, this research suggests that there should be effective government policy in term of legislation and enforcement strategy in regulating or restricting the accessibility of driver who consumed alcohol or drug prescription to any motor propelled vehicle, thus prevent the drunk driving from happening at the first place.

As Malaysia had increased the penalties for drunk driving, the government should create an awareness of legislation in form of education to citizens with knowledge of drunk driving regulations and the effects of impaired levels on driving ability in order to significantly affect drivers' choice of driving after they drink **(Chang, L.-Y., et.al., 2013).** A study by **Eensoo, D., et.al. (2011)** also concluded that education program in form of continuous psychological intervention adopted in the driving school studies can be an effective primary prevention activity against drunk driving. Research by **Odeigah., et.al. (2020)** found that awareness program by displaying health warnings on alcohol product labels would have the potential for reducing harmful alcohol consumption and related drunk driving incident. Similar study in European Union had also found that labelling of alcohol products similar to cigarette packet healt warning could help to promote moderate alcohol consumption and increase

people's capacity to monitor and regulate their alcohol consumption **(Furtwængler, et.al., 2013).** Health promotion in the method of discourage alcohol consumption and over-reliance of drug prescription would contribute to decreasing the number of road traffic accidents and traffic-related injuries **(Aleksanin S.S. et al., 2021) (Allsop R., 2020).**

There should be improvement in term of availability for alternative transport to drunk person in order to deter the drunk driving offence from occur at the first place. Research by **Calafat, A., et.al. (2009)** found that recreational nightlife activities involving alcohol consumption happened during night time with limited public transport services available, thus it is necessary for the government to improve the public transport services to complement the effort to deter the driving of private cars by drunk person. For instance, the designated driver service available in South Korea offers a convenient alternative for drunk drivers to reach their destinations safely with their own vehicles and research found that the increase in designated driver firms significantly reduces both alcohol-involved and total traffic fatality rates **(Chung, J., et.al., 2014).** To encourage the use of alternative transport instead of self-driving, the government coupon program encourages ridesharing service that currently practiced in Ohio State of USA, can be considered a cost-effective drunk-driving intervention **(Miller, T.R. et.al., 2020).**

With the policies of awareness program and alternative transport, the government should also complemented such policies by implement stricter control in term of regulating the price and the location offering alcohol product. Some study found that alcohol bans can contribute to substantial reductions in road traffic accident caused by drunk driving behavior **(Nakaguma, et.al., 2018),** while other study suggested that such stricter control is necessary as researches strongly supports the view that alcohol tax and pricing policies can be used to reduce the extent of drunk driving. **(Ponce., et.al., 2019).** Similarly, in a research by **Wang S. et.al. (2020)** and **Levine, N. (2017)** also shown that location of establishments primarily serving alcohol can affect the frequency of drunk driving incident in the particular locality.

With the technological advancement of 21ˢᵗ century, Malaysia government can consider various type of driver monitoring software device to curb drunk driving in Malaysia, such as ignition interlock, handphone software, in-vehicle sensory device and smart helmet for motorcyclist. Ignition interlock are a life-saving technology that merit wider use **(Kaufman, et.al., 2016**) whereby it is a form of device that is wired into the ignition system of a vehicle by compell driver to blow into the alcohol detector device before can start their vehicle. Study by **Mandal N., et.al. (2020)** and **Karim A.H., et.al. (2020)** suggest that ignition interlocks are an effective mechanism in curbingdrunk impaired driving . It is agreed that a strong incentive for drunk driving offenders to install ignition interlocks as an alternative to traditional penalties of imprisonment and fine indicated that such policy had produced substantial reductions in reoccur of drunk driving offence. Handphone software aimed to monitoring driver soberity had been proposed in study by **Phanama. et.al. (2016)** and **Dai, J., et.al. (2010)** whereby the software will evaluate driver's awareness by text-to-speech before and during driving, the system will alert the driver and notify a chosen contact containing the location of the driver if the system detects abnormal awareness of the driver. On the other hand, for in-vehicle sensory device, such device seek to detect any drunk driving by various methods ranged from analyze the facial expression **(Wu, P.-C., et.al., 2016) (Raorane., et.al., 2020)**, driving pattern **(Ramprasad M., et.al., 2019)** to the air quality for alcohol element in the vehicle cabin **(Sharma P., et.al., 2020) (Valenzuela., et.al., 2019)**.

Apart from monitoring device for lorry and car driver, motorcyclist also can be monitored in form of smart helmet initiative. In a study by **Suman A. et.al. (2020)** and **Patel, D.H., et.al. (2019),** similar monitoring device to motorcyclist can also be implemented in such a way that

the two-wheeler motorcycle will only ignite when the sensor in the safety helmet and motorcycle handle detect the motorcyclist is sober and wear the safety helmet properly.

METHODOLOGY

In this research, we will seek to determine the questions of independent variables (IV) in term of government policy via legislation and enforcement policies thus reach to a conclusion for dependable variable (DV) of drunk driving incident frequency occurred in Malaysia. This reseach will employ doctrinal research by the techniques of library research via SCOPUS e-library to analyse the existing government legislation and enforcement policies as a whole. The database from the SCOPUS are extracted and analyzed in systematic literature review (SLR) method through the adherence to the "Preferred Reporting Items for Systematic Reviews and Meta-Analyses" (PRISMA) steps consist of "Plan Identify Evaluate Collect Explain Summarize" (P.I.E.C.E.S).

EMPIRICAL RESULTS

The five (5) keywords used for this research in search of the online database are drunk driving, road traffic accident, government policies, traffic enforcement and traffic policies. In addition, the search strategy by five keywords were further enhanced by practice of Boolean operators. The Boolean operators were used by combining words and phrases using the words AND, OR, NOT in order to limit and define searches for literatures.

Figure 1 : Symbol And Coding In A Search/Query String Developed In Scopus.

(TITLE-ABS-KEY (drunk AND driving) AND TITLE-ABS-KEY (road AND traffic AND accident) OR TITLE-ABS-KEY (government AND policies) OR TITLE-ABS-KEY (traffic AND enforcement) OR TITLE-ABS-KEY (traffic AND policies))

This research had employed the method of SLR by compiling and analysing the literatures through content analysis method by adapting deductive and inductive reasoning. The data analysed will be deductively displayed in form of matrix tables (Microsoft Excel format). All literatures in form of publication were then sorted into different categories according to the variables such as field of study and publication year. Range of year involved in this research are limited to the recent period of year 2010 until 2020. In comparison of all 218 recent literatures gathered from SCOPUS online database, differences were recorded and analysed to get the scopes and trend of the studies. Table 1 below demonstrate the number of publication in by years.

Table 1 : Number Of Publication By Years

Year of Publication	Number of Publications	Percentage (%)

2021	3	1.3
2020	24	11
2019	27	12.4
2018	22	10.1
2017	27	12.4
2016	25	11.5
2015	16	7.3
2014	23	10.6
2013	15	6.9
2012	15	6.9
2011	12	5.5
2010	9	4.1
TOTAL	**218**	**100**

CONCLUSION

In a study conducted by **Miller, T.R., et.al. (2018),** the government policy of enact legislation and enforcement strategy to reduce drunk driving offences can be viewed as a public health measure improving traffic safety thus provided large health gains in developing nations. However, there is no standard package of legislation or enforcement strategies that is suitable for all situations, environments, and cultures. **(Khaled Shaaban , 2017).** In a study carried out by **García-Echalar, A., Rau, T. (2020),** despite government policy of enact harsher sentence for drunk driving offences, research found that there is no reductions in alcohol intake are found for heavy drinkers. The effectiveness of government policy can be achieved if law enforcement agencies can make a sustained effort and states enact stricter laws for drunk driving offences **(Dong, C., et.al., 2018).** As such, to combat the issue of drunk driving, it is utmost important that the government legislation and enforcement policies to be conclusive and effective to curb the initial occurance of drunk driving incident from occur at the first place.

The result of this study established that there were limitation in the government policies whereby the legislation and enforcement policy were insufficient in term of regulating the accessibility of driver consumed alcohol or drug prescription to any motor propelled vehicle. Therefore, it is hoped that the outcome of this research can address the lacuna in the government policy thus able to contribute effort in enhance the effectiveness of the government policies to reduce drunk driving incident in Malaysia.

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