Automated Enforcement System (AES) in Reducing Speeding Behaviours in Peninsular Malaysia: Perception of Being Caught (POBC)

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Abstract: The Automated Enforcement System (AES) is a device used in Malaysia to enforce traffic regulations for speeding drivers on federal roads, highways, and motorways. Many drivers, however, were still caught speeding on the road. The purpose of this paper is to investigate drivers' perceptions of being caught (POBC) speeding by AES cameras on the North-South Highway (PLUS). Using deterrence theory as an underpinning theory, this study examined perceived severity, certainty, and celerity of punishment. A survey was distributed, and 200 drivers who use PLUS Highway responded. The findings revealed that the perception of being caught speeding has a significant relationship with the certainty of punishment. The perceived severity and celerity of punishment, on the other hand, have no significant relationship with the perception of being caught speeding. The findings of this study suggested that if drivers are certain and confident that they will be punished for speeding, they may change their behaviour to comply with the speed limit on the highway.

Keywords: Road safety, Road accidents, Driver behaviour, Speeding, Perception of being caught, Deterrence theory

1. INTRODUCTION

Every year, 1.35 million people are killed in road traffic accidents (RTA). RTA cost approximately 3% of a country's GDP each year, making them an economic problem (World Health Organisation, 2018). The World Health Organisation has identified four of the most significant traffic violations that have a direct impact on road safety. They are - not wearing a seatbelt, texting while driving, exceeding the legal blood alcohol content limit, and speeding. This study focused on speeding.

Speeding not only affects the degree of accidents but also involves the risk of accidents. Speeding makes the incidence of RTAs more severe than other illegal acts. Studies have shown that excessive and unadjusted speed is the cause of one-third of all fatal road accidents (Abdul Hanan, King, & Lewis, 2011; Weller, 2016; Fleiter & Watson, 2005). In Malaysia, RTA is one of the leading causes of casualties and death. Figure 1 and Figure 2 show the number of RTA and RTA deaths in 10 years. In 2019, RTA was 567,516, resulting in 6,167 deaths, with 80.6% due to driver behaviour (JKJR, 2020). One of them is speeding. However, it is essential to point out that the data that was presented was based on the police report; hence, crash figures stated here may underestimate the real problem, which is something that common in countries with low and middle incomes (Peden et al., 2004).
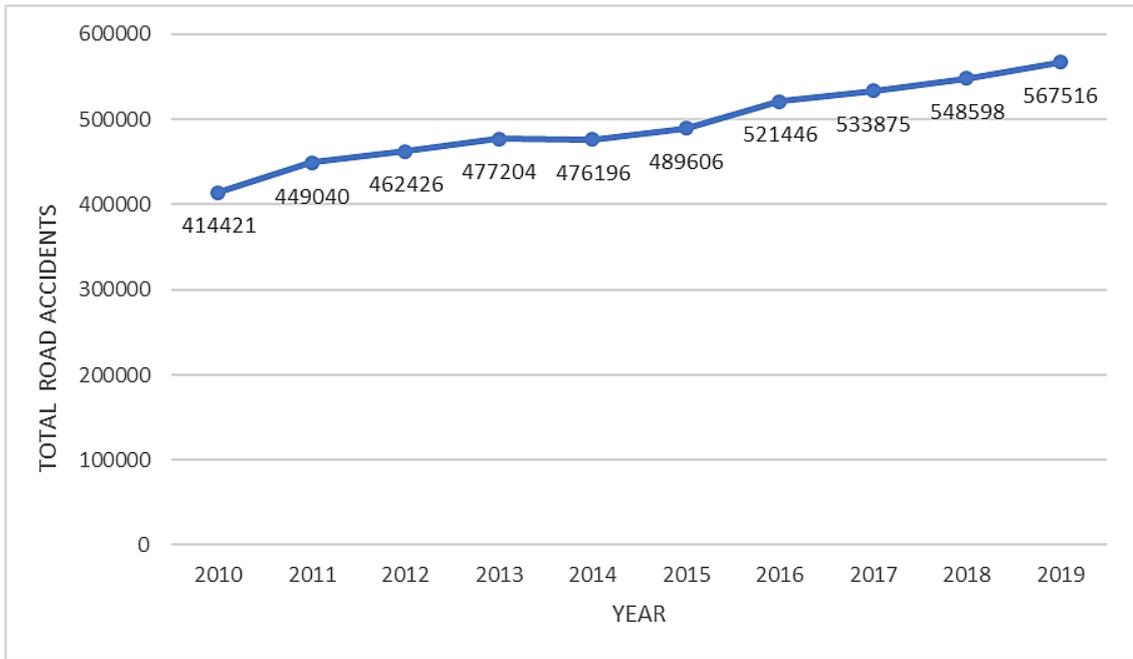
Figure 1. Malaysian road traffic accidents statistics from 2010 to 2019
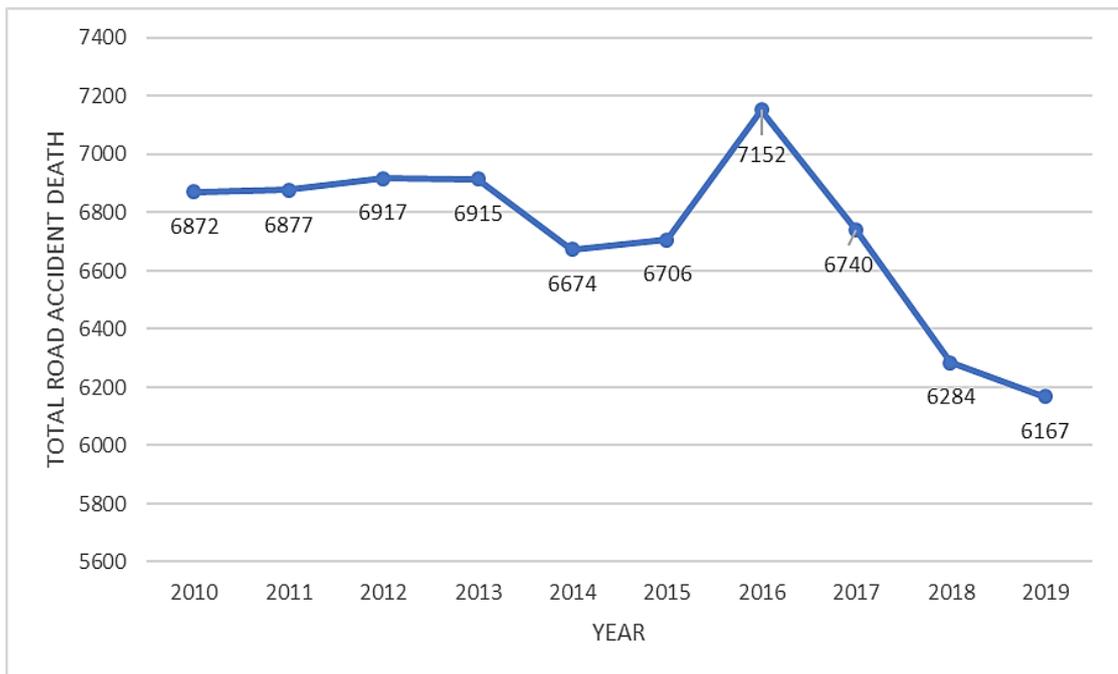Source: JKJR (2020)

Figure 2. Malaysian road traffic accidents death statistics from 2010 to 2019
Source: JKJR (2020)

When it comes to driver behaviour and traffic violations, the Malaysian government made a commitment to reduce road accidents and improve road safety. Thus, intervention in-term of enforcement, engineering, environment and education has been implemented. These interventions are a continuous effort of road safety-related agencies. Thus, in order to reduce

the risk of RTA, managing vehicle speed is the most effective method. Thus, on September 23, 2012, seven (7) Automated Enforcement System (AES) cameras were installed and operated. Seven (7) more cameras were subsequently installed and operated on September 28, 2012. AES is a tracking system that automatically records traffic offenses using sensors installed on the road and an imaging system that captures photo and video images of traffic violations. AES could do 24-hour law enforcement, and seasonal and driverless intervention. The installation of AES is to detect driving violations (i.e., running red lights and speeding). Once caught in the camera, the message will be sent online to the Automated Enforcement System control centre at Malaysian Road Transport Department (RTD). The information is processed to identify the driver or owner of the vehicle, and that individual will be receiving a traffic ticket for speeding. AES cameras are placed on the location based on historical accident information obtained through the Royal Malaysian Police (PDRM) national accident database. Today, there are 566 AES speeding cameras and 265 traffic light cameras in Malaysia. Through this continuous and active enforcement, road users are expected to comply with traffic rules, thereby creating a safer driving environment and decreasing the country's fatal accidents (Allyana et al., 2014).

However, despite the installation of AES cameras and enforcement, RTA continue to occur on a daily basis (JKJR, 2020). In fact, the number of traffic tickets issued for speeding remains high. For instances, in 2018, there were 385,547 traffic tickets has been issued for traffic violations, an increase from 255,392 in 2017 (JKJR, 2020). Moreover, during the 11 days Aidil Fitri 2019 road safety operation, the PDRM reported that 241,144 traffic tickets for traffic violations, including speeding, were issued in Malaysia (Kumara, 2019). So, why do people speed when an AES camera is installed and in operation?

The purpose of this study is to investigate drivers' perception of being caught (POBC) speeding by AES cameras on North-South Highway (PLUS) in Peninsular Malaysia. This paper begins with a literature review of previous research focusing on Automatic Enforcement System (AES), deterrence theory and the variables. Then, the research methodology is explained. Next, findings and discussion are presented. This paper concludes the overall study and recommends practical interventions to increase road safety.

2. LITERATURE REVIEW

The automatic Enforcement System (AES) is a road safety enforcement system used to monitor all federal roads, highways, and expressways. The automated law enforcement system uses electronic cameras to enforce traffic laws by assisting in detecting violations and providing photo files of vehicles or drivers that violate traffic laws (Poole, Johnson, & Thomas, 2012). Speed cameras use a low-power Doppler radar speed sensor, which triggers the camera to take pictures of vehicles travelling at speed exceeding a preset speed passing a specified point (Ziolkowski, 2019). The camera records the vehicle's time, date, and speed and is generally set to activate only when the vehicle's speed significantly exceeds the published limit. Speed camera is usually accompanied by visible law enforcement personnel to maximize deterrence, but the cameras can also be deployed unattended. As a result, the photo evidence was reviewed, and a traffic ticket was issued to the car owner (Turner & Polk, 1998).

Previous studies have proven that if AES is installed in a critical location, it could effectively reduce speed, crash frequency and damage (Rudjanakanoknad, Prarom, & Panwai, 2012). For instance, researchers evaluated the effectiveness of speeding cameras in the UK and found that the use of speeding cameras can reduce personal injury accidents by 30%, and deaths and severe injuries by 40%. The number of dead or seriously injured pedestrians also has reduced by 35% (Gains, Heydecker, Shrewsbury, & Robertson, 2005). Additionally, AES cameras make speed limit enforcement more effective and have a favourable effect on traffic

safety and, particularly, on the occurrence of severe crashes (Carnis and Blais, 2013). In summary, enforcement increases driver deterrence, which subsequently reduces speed of vehicle, which in turn reduces the risk of road crashes. AES is one way to ensure that people understand and accept their responsibility for observing traffic laws, thus reduce traffic violations and creating road safety awareness.

2.1 Deterrence theory & perception of being caught (POBC)

Deterrence is a psychological process that involves balancing individual beliefs about possible punishment and expected gain. The classic form of deterrence theory explained that crime could be deterred by threats of punishment (Anderson, Harris, & Miller, 1983). In order words, deterrence is anything that exerts a preventive effect on crime (Kennedy, 1983). Perceptual deterrence research usually investigates the impact of Perceived Severity, Certainty and Celerity of punishment on crime prevention. The theory of deterrence is embodied in the theory of rational choice. Therefore, it focuses on the individual, which means that the individual is the participant who decides (Mendes, 2004). In other words, the choice of crime can now be regarded as one choice or as another choice; that is a rational calculation. The potential benefits of crime weigh the possibility of punishment in a certain way, and it is up to the individual to decide whether to commit a crime (Anderson, Harris, & Miller, 1983). This implies that legal threats are most effective when potential offenders perceive a high likelihood of apprehension and a prompt, severe punishment. In short, the central hypothesis of deterrence theory is that crimes can be prevented with severity, certainty, celerity of punishment. The term "certainty" refers to the anticipated possibility that an offender will be arrested and punished for their act of criminality (Davey & Freeman, 2011). People need to have a reasonable belief that there is a good chance that they will be apprehended for breaking the law in order for the concept of "fear of punishment" to work effectively (Homel, 2012). Severity of punishment can be describes as the perspective of an individual in which individuals will be unwilling to commit an offence if they feel that the penalty for such an offence is severe (Truelove et. al,2017). Finally, when it comes to the administration of consequences for illegal action, celerity refers to the practice of doing so as quickly as possible after the criminal act (Davey & Freeman, 2011).

In order to deter actions that effectively affect humans, individuals are required to understand the provisions of the law at a minimum. This understanding and knowledge of the law can convince them that the risk of being caught is high (certainty), that the consequences of being caught are severe enough to cause concern or fear (severity), and that the application of punishment is swiftly done (celerity) (Wikström, Tseloni, & Karlis, 2011). For example, the driver is aware of the AES camera beside the road, but they exceed the speed limit. They also understand that the chance of being caught is high; thus, if they receive a speeding ticket within a day or two of the violation, the driver might change their behaviour toward complying behaviour. The theory believes that an individual's habits, moral rules and related moral emotions are the key personal characteristics that affect their perception of action choices. This theory conceptualizes crime as behaviour that violates the moral rule of conduct prescribed by law. Whether explicitly or implicitly, a philosophy centered on deterrence is the foundation of many criminal justice systems (Watson, 2004).

Many roads safety-related research utilized deterrence theory as the underpinning theory to understand drivers' violation and the impact of traffic enforcement on such behaviour (Bates, Darvell, & Watson, 2017a; Carnis, 2011; Truelove, Freeman, & Davey, 2019; Truelove et al., 2021). They indicated that in the process of deciding to comply with the law, drivers with a high sense of being caught might not speed, not because they are worried about the consequences,

but because they believe that speeding is an "alternative action"(Jateikienė & Vaitkus, 2017). Simply put, the term "perception of being caught" (POBC) refers to the degree to which the motorist believes that they can be caught on the road if they commit an offense while they are behind the wheel. In this study, the offense is speeding. Therefore, those who are more aware of being caught are less likely to be speedy than those who are less aware of being caught. In contrast, people with a low perception of being caught tend to drive at a speed deemed "feel safe" without an obvious and immediate threat of being caught. Thus, a form of law enforcement aimed at solving this problem, such as AES, may develop the perception of being caught, and increase the perceived detection risk and deterrence, thus, preventing drivers from violating traffic laws in the first place (Retting, Farmer, & McCartt, 2008).

Since the traffic law enforcement function can supervise the behaviour and attitude of drivers on the road, it can also be used as a mechanism for driver behaviour control. The basic concept is that human behaviour can be changed by making people worry about the consequences of their illegal actions. This worry is a "feeling" related to the perception of being caught (Fakhruddin, Ali, Jaffar, & Rehman, 2020). Traffic law enforcement and the perceived perception can be significantly related. If traffic law enforcement is efficient, it will show a high sense of being caught among the drivers (Isah, Jawi, & Ali, 2019). An automated Enforcement System (AES) is an enforcement method that can increase the perception of being caught by road users and indirectly reduce road traffic injuries and deaths.
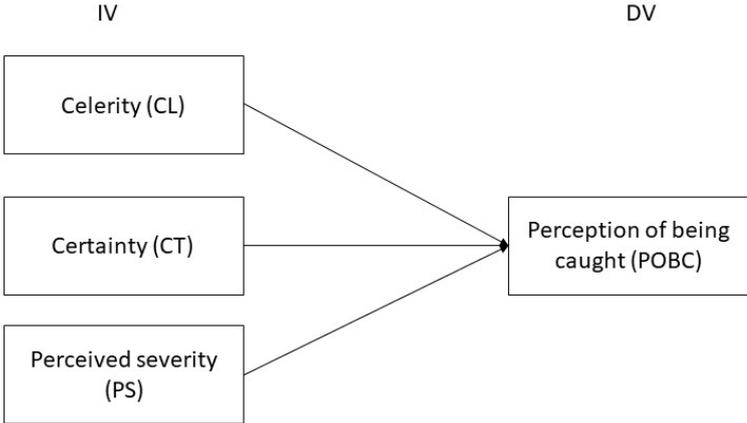

Figure 3: Research Framework

Figure 3 shows the research framework that is used in this study. Fleiter and Watson (2005) and Fleiter et al. (2009), concluded that there is no significant relationship between celerity in the delivery of penalties and the POBC speeding. In addition, according to Freeman, Kaye, Truelove and Davey (2017), when it comes to crimes detected by cameras, individuals will feel certain punishments, but not necessarily quickly. Therefore, the overall deterrent effect of high-speed cameras may be weakened. However, based on the same research, the result shows that drivers generally believe that penalties should be imposed quickly. This finding may reflect a higher percentage of "face-to-face" penalties rather than automatic law enforcement practices (Fleiter et al., 2009). It is acknowledged that the swiftness with which impending penalties are imposed is a significant factor in achieving deterrence for road safety. Therefore, the following hypothesis is proposed:

H1: There is a significant relationship between celerity and the perception of being caught speeding.

People who think they are likely to be arrested are less likely to commit crimes than people who think they are unlikely to be arrested. According to Fleiter and Watson (2005), the lower the certainty of punishment, the higher the frequency of speeding. Research has found that drivers have a higher certainty of punishment for violations discovered by cameras than violations discovered by police officers (Carnis & Blais, 2013). That is, those who believe they have a high possibility of being arrested are more likely to refrain from committing a crime than people who think they have a low chance of being caught. Road safety initiatives that heighten the sense of certainty surrounding being apprehended for participating in illegal behaviour are therefore likely to have a positive impact on discouraging offenders (Homel, 2012). Therefore, the following hypothesis is proposed:

H2: There is a significant relationship between certainty and the perception of being caught speeding.

Finally, Klepper and Nagin (1989) indicated that the severity of sanctions has a weak negative correlation to a series of illegal actions. In other words, as the perceived severity increases, the likelihood of an individual committing the crime decreases. However, there was also research that shows that the perception of the severity of punishment does not have a significant deterrent effect once assumed. For example, Fleiter & Watson (2005) reported that if someone is arrested for speeding, the more likely they are to be fined or lose points, and the more they evade punishment in the past, the more often they report speeding. Thus, it is suggested that people who have never committed an offense may experience the highest deterrent impact in terms of the severity of sanctions, as opposed to frequent offenders (Homel, 2012). The following hypothesis is therefore proposed:

H3: There is a significant relationship between perceived severity and the perception of being caught speeding.

3. METHOD

To achieve the research goal, this study used a quantitative design with hypothesis testing. This technique permits the researcher to examine the relationship between perceived severity, certainty, and celerity of punishment and the perception of being caught (POBC) speeding.
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3.1 Sampling Approach and Sample Size

There are 15,240,536 registered cars in Malaysia, with over 15 million license holders (Malaysia Ministry of Transport, 2021). Because not all roads in Malaysia have Automated Enforcement System (AES), the researchers focused exclusively on the North-South Highway (PLUS) in West Peninsular Malaysia. PLUS highway has an average of 1 million daily road users, which increases during the holiday seasons (Redzuan Muharam, 2019). In this study, an approach known as purposive sampling was used. This can be accomplished by using the first question of the survey to act as a filter. "I am a user of North-South Highway (PLUS)" was the filter statement. The survey will continue if the responder selects "YES." They will be taken directly to the thank you page if they respond "NO." The user of PLUS highway has been asked voluntarily to answer the survey.

3.2 Questionnaire

The survey was divided into two sections, designated A and B. Part A comprises questions regarding the background of the driver, such as gender and age, with a nominal scale used to measure it. The Likert Scale was employed in Section B to examine the POBC speeding, perceived severity, perceived certainty, and perceived celerity. The items were adapted from several sources. This area allows responders to indicate their agreement with a specific questionnaire item. The Likert scale is represented as follows: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, and 5 = Strongly Agree. Table 1 contains examples of survey items.

Table 1 Example of survey items

No.	Example of survey items	Adapted from:
1	Perceived Severity	
	- A penalty for speeding would be severe to me. - The penalty I would receive for speeding would cause a considerable impact on my life.	Truelove, et al., 2017
2	Certainty	
	- The chances of getting caught for speeding are high. - If I were to speed, I am worried that I would get caught.	Truelove, et al., 2017
3	Celerity	
	- There is a long delay between getting caught for speeding and receiving legal consequences (fines or points deducted). - Penalties are rarely applied quickly in the criminal justice system.	Fleiter, Watson, Lennon, King, & Shi, 2009
4	Perception of Being Caught (POBC) Speeding	
	- I will reduce my speed when I see a "camera photo" sign. - I will reduce my speed when I see a speed camera.	Rudjanakanoknad, Prarom, & Panwai, 2012

3.3 Data Collection Procedure

The survey was developed with Google Forms and distributed over online social media platforms such as WhatsApp, Facebook, and Instagram by sharing the link. Online surveys have grown in popularity in recent years, potentially allowing for a larger number of participants, facilitating faster response times, and potentially increasing response rates that are more convenient for participants in terms of the freedom to participate at their own pace (Abdul Hanan, King, & Lewis, 2013). A pilot test was conducted prior to the launch of the survey. Amendments to the questions were made based on the responses. This amendment was made to ensure that the terms and phrases used were easy to understand. Two hundred (200) licensed drivers that use PLUS highway completed the survey.

3.4 Data Analysis

This study utilized the formula provided by Tabachnick, Fidell, and Ullman (2007). The equation used to calculate the minimum sample size is as below:

$$N \geq 50 + 8m$$
$$\geq 50 + 8 (3)$$
$$\geq 74$$

where,   N = number of Participants
             m = number of IVs

In the research, the total numbers of independent variables are 3. Therefore, the sample size calculated using Tabachnick and Fidell's sample size can be equal to or greater than 74. 200 questionnaires were completed by respondents in this research. Therefore, the data collected was sufficient for the analysis.

Before the data was analysed, the raw data was checked for missing values manually. For the demographics, the descriptive statistics from SPSS version 27 were used to determine the demographic of respondents such as age, gender and level of education. Then, the SMART PLS 4.0 program was employed to address the research objective.

4. RESULT

4.1 Demographic Profiles

Based on Table 2 shows the demographic profile of the respondent for this study. The total number of the respondent is 200. The result shows that, most of the respondents, 80% (i.e., 160 respondents) are between 21 and 30 years old. In addition, slightly less than two-thirds (62%) of respondents, with a total of 124 respondents, are female and 76 respondents are male (i.e., 38%). Almost more than two-third (67%) of respondents, with a total of 134 respondents are from bachelor's degrees of education.

Table 2: The Frequency and Percentage of Demographic Profiles

	Frequency (n=200)	Percentage
Age		
20 years old and below	20	10%
21-30 years old	160	80%
31-39 years old	6	3%
40 years old and above	14	7%
Gender		
Male	76	38%
Female	124	62%
Education Level		
PMR and Below	1	0.5%
SPM	9	4.5%
STPM	31	15.5%
Diploma/Certificate	18	9%
Bachelor's Degree	134	67%
Master/PhD	7	3.5%

4.2 Measurement Model Assessment

Figure 4 illustrates the measurement model assessment to examine the indicator loadings of each construct. Loadings more than 0.50 are recommended as they indicate acceptable item reliability (Hair et. al, 2021). A total of three latent constructs are displayed in Figure 1, such as CL, CT and PS, as independent variables and POBC as the dependent variable. The values directed to the items in the box represent the item loadings, and the value inside the circle represents the average variance extracted (AVE).
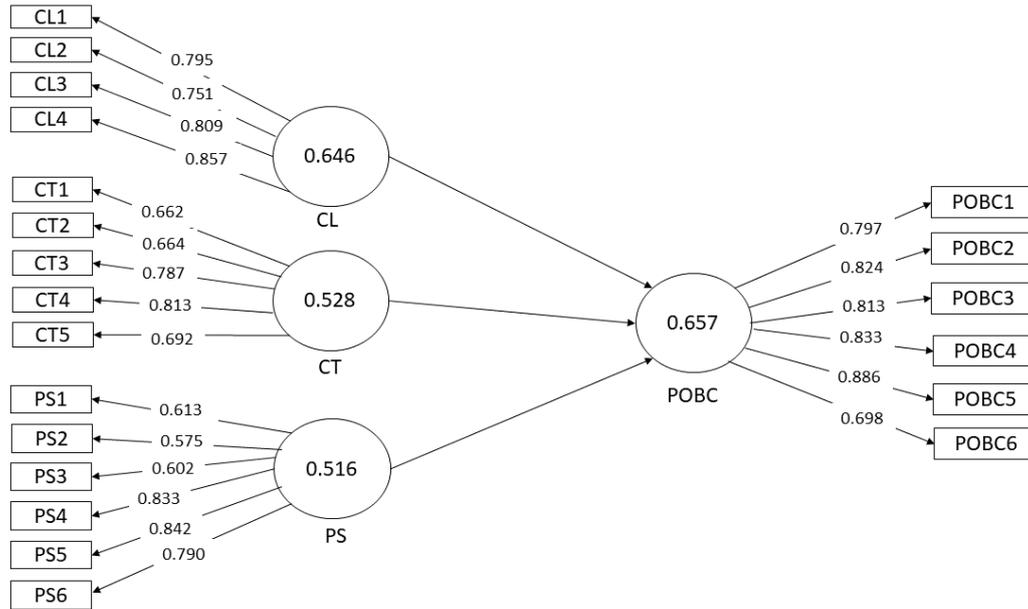
Note: CL – Celerity, CT – Certainty, PS- Perceived severity, POBC – Perceived of being caught

Figure 4 Measurement model

Table 3 Result of the measurement model

	CL	CT	PS	POBC	CR	AVE
CL1	0.795				0.879	0.646
CL2	0.751					
CL3	0.809					
CL4	0.857					
CT1		0.662			0.847	0.528
CT2		0.664				
CT3		0.787				
CT4		0.813				
CT5		0.692				
PS1			0.613		0.862	0.516
PS2			0.575			
PS3			0.602			
PS4			0.833			

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PS5	0.842		
PS6	0.790		
POBC1		0.797	0.92	0.657
POBC2		0.824	
POBC3		0.813	
POBC4		0.833	
POBC5		0.886	
POBC6		0.698	

Note: CL – Celerity, CT – Certainty, PS- Perceived severity, POBC – Perceived of being caught

Table 3 shows the outer loadings, composite reliability (CR), and average variance extracted (AVE) for each component. The CR and AVE values of all constructs were more than the minimum values, indicating that they had good CR and acceptable AVE.

Table 4 Result of the discriminant analysis

	CL	CT	PS	POBC
CL				
CT	0.667			
PS	0.703	0.779		
POBC	0.407	0.569	0.458	

Note: CL – Celerity, CT – Certainty, PS- Perceived severity, POBC – Perceived of being caught

The heterotrait-monotrait ratio of correlation (HTMT) is used to measure discriminant validity for each construct in Table 5. As seen in Table 4, all of the HTMT values are less than the usual threshold value of 0.85 (Hair et. al, 2021). As a result, discriminant validity is attained between all construct pairs.

## 4.3 Structural model assessment

In this study, the structural model is used to evaluate the path coefficient model and test the hypotheses. Path analysis was performed to ascertain the path coefficient results as well as verify the hypotheses of the study.

Table 5: Path Coefficient Table

	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values	R Adjusted
CL -> POBC	0.087	1.000	0.317	0.264
CT -> POBC	0.086	4.199	0.000	
PS -> POBC	0.095	1.518	0.129	

Note: CL – Celerity, CT – Certainty, PS- Perceived severity, POBC – Perceived of being caught
*Significant at p-value < 0.05
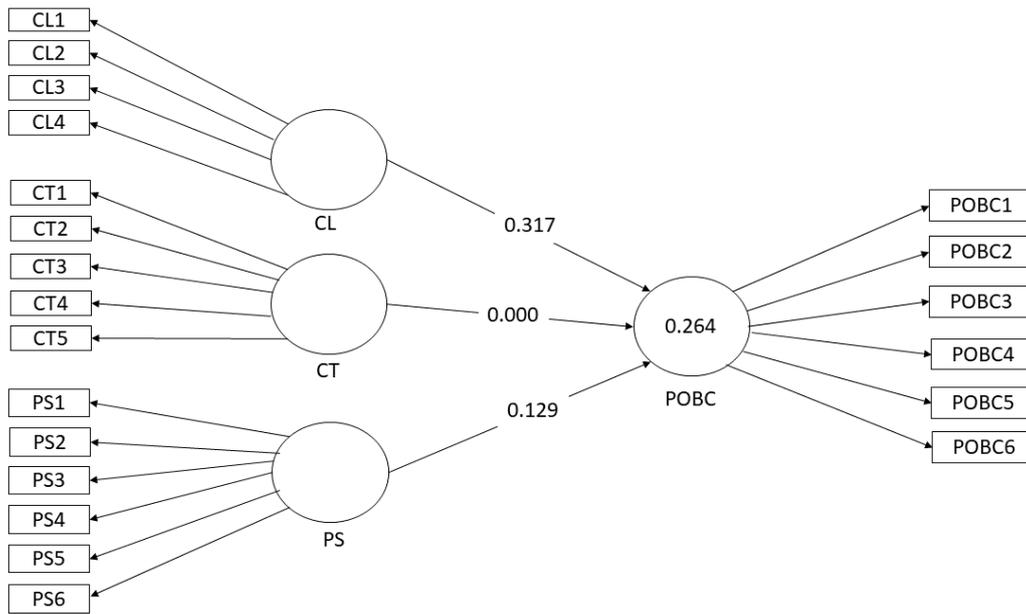
Note: CL – Celerity, CT – Certainty, PS- Perceived severity, POBC – Perceived of being caught

Figure 5 Structural model

The findings demonstrate that drivers' perceptions of being caught speeding (POBC) are considerably influenced by the certainty of penalty. Regarding the insignificant direct paths, the drivers' perception of being caught speeding (POBC) is unaffected by the Celerity and perceived severity.

Table 8: Hypotheses Summary

No.	Hypothesis	Result
H1	There is a significant relationship between celerity and the perception of being caught speeding.	Rejected
H2	There is a significant relationship between certainty and the perception of being caught speeding.	Accepted
H3	There is a significant relationship between perceived severity and the perception of being caught speeding.	Rejected

4. DISCUSSION

This study aimed to investigate drivers' perception of being caught speeding (POBC speeding) by AES cameras on the North-South highway (PLUS). In particular, the researchers examined the relationship between perceived severity, certainty and celerity with the POBC speeding.

First, the p-value Celerity (CL) was 0.317 more than value of 0.05. The relationship between celerity and POBC speeding was not significant; most probably because the speeding driver may get the traffic ticket later, and a bit long time taken to receive it. These findings are in line with other researchers (e.g., Freeman et al., 2017; Verity Truelove, Freeman, Watson, Kaye, & Davey, 2020). Accordingly, previous researchers reported that an individual driver believed they will get certain punishments, but it is not quick or fast. The speeding ticket should be given or received by the driver within one or two days and not more than one week late. For

example, in Australia, drivers who speed will get a speeding ticket or monetary penalty delivered to their address within two days. This action can make the driver careful next time they are driving, and it makes the instant of the result on reducing speeding behaviour.

In this research, when the researcher examined the relationship between Certainty and POBC speeding, the p-value of Certainty (CT) was 0.000, which indicates that Certainty was a significant predictor of POBC speeding. The relationship between the POBC speeding and certainty was significant because people knew that when they are speeding, they will be sure will get a traffic ticket. These results are supported by research by Carnis and Blais (2013). They reported that drivers have a higher certainty of punishment or penalties for traffic violations discovered by cameras.

Finally, Perceived severity and POBC speeding, the p-value of Perceived Severity (PS) was 0.129, and the result indicates it was not a significant predictor. The explanation of this result is that there is a probability that traffic tickets in terms of monetary value are not much for the driver. In other words, the driver could pay for the penalty if they received it. These findings were in line with previous studies (e.g., Bates et al., 2017b). They stated that perceived severity has a more significant impact on the highest level of certainty of punishment. If the driver knew they will get traffic ticket and the punishment is severe in their perception, they will comply with the traffic rules.

This study provided evidence that certainty of sanction or punishment due to speeding had a significant relationship with the perception of being caught. Certainty of punishment after being caught by AES will bring impact to driving speeding behaviours. In Deterrence theory, the certainty of punishment is the aspect that means ensuring that punishment is carry out when the crime occurs. According to Beccaria (2016), if individuals know that their bad behaviour will be punished, they will not commit a crime, or in this case speeding violation. In addition, they must be punished quickly to stop the violation (Freeman & Watson, 2006; Truelove et al., 2020).

Therefore, to improve safety on the road, this research suggests that related government agencies could improve the tracking system to track the drivers that AES had caught speeding. The speeding drivers should receive the speeding ticket or monetary penalty within 48 hours or 2 days, by sending it to their home address so that the drivers will be careful and drive safely in the future to avoid getting caught speeding. The government also could increase the value of the traffic ticket for speeding. So that, the drivers know about the seriousness of traffic violation enforcement, particularly the consequences of speeding on the road. The government could also increase the severity of the punishment for those who received several traffic tickets in a year. This action will show that the government is serious about improving road safety and reducing road accidents.

While the study's strength was well understood, there were also limitations of this study that should be noted. To begin, the use of self-report measures to assess driver speeding behaviour may not have been a reliable indicator. Some individuals may have exaggerated their responses. However, the likelihood is low because the study made sure that all participants knew that the questionnaire was anonymous. Second, most of the respondents were between 21 to 30 years old, and the sample of this survey was considered moderate in size. As a result, their demographics could not represent the typical drivers that utilise the North-South Highway (PLUS). Even though this is not an exceptional case, it still necessitates replication of the survey with a bigger and more diverse sample, which can provide more general explanations. Finally, the present study was quantitative. Hence, a qualitative study is suggested to gain in-depth information to identify the other variables or situations involved with the perception of being caught speeding.

5. CONCLUSION

In conclusion, this study examined the relationship between perceived severity, certainty, celerity and perception of being caught speeding (POBC speeding). The result has shown that the certainty of receiving a traffic ticket has a significant relationship with the perception of being caught speeding. The drivers believe the certainty of the traffic ticket will affect them such that they will reduce their vehicle speed on the highway. Thus, in addition to public road safety campaigns and advocacy about speeding, the government could strengthen rules and regulations and, the process of being caught speeding by the Automated Enforcement System (AES). Then, the system's effectiveness could easily be seen by reducing people caught speeding and indirectly reducing road accidents.

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