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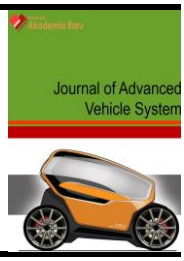

The Comparison of Intention to Purchase Safer Car Between Indonesia and Thailand: An Application of Theory of Planned Behaviour

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ABSTRACT

Road accident injuries are expected to become the fifth leading cause of death by 2030. With the worrying road accident rate in Indonesia and Thailand, this paper presents the comparison of the intention to purchase a safer car between consumers in Indonesia and Thailand using Theory of Planned Behaviour. TPB postulate that an individual's behavioural intention is influenced by determinants such as their attitude, subjective norms, and perceived behavioural control. Primary data were collected and 500 respondents from each country were involved in this study. The data were analysed using Descriptive Statistics in IBM SPSS Statistics 23 to generate the mean value of each determinant of TPB. The findings indicate that Thailand have a better attitude and subjective norms, and stronger perceived behavioural control compared to Indonesia. This resulted in a stronger safer car purchase intention in Thailand.

Keywords:
ASEAN NCAP; Vehicle Safety; Road Safety;
Purchase Intention; Road Traffic Accident;
Theory of Planned Behavior

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1. Introduction

Road accident have taken away many lives of people. According to World Health Organization (WHO), road accident injuries are expected to become the fifth leading cause of death by 2030 [1]. WHO [14] stated that an individual, family, and the nation experience economic losses due to crashes, which results from the cost of treatment as well as lost productivity for those killed or disabled by their injuries. In most countries, road accidents cost 3% of their gross domestic product.

With a road network of 503,604 km, Indonesia is the largest and most populous country in Southeast Asia [11]. In a paper on road safety management system in Indonesia that is written by Yahya, Faulks, Hambleton, and Wass [16], it is noted that Indonesia is committed to reducing its traffic fatalities by 50% by the end of 2020. Meanwhile, Thailand has a road network of 180,053 km and suffers on average of 25 road deaths daily, which is approximate to one loss of life per hour [11].

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The worrying road accidents rate in Indonesia and Thailand need to be put to attention. More damage will be caused and more lives will be affected in the coming future if the problem is still not resolved. Elevating road traffic safety is one of the ways to ensure a safer traffic environment. In accord to Global Plan for the Decade of Action for Road Safety 2011–2020, road traffic safety includes road safety management, safer roads and mobility, safer vehicles, safer road users, and post-crash response [14].

2. Study Objective

This research aims to analyze customer's intention to purchase safer car between Indonesia and Thailand by using the Theory of Planned Behavior and Descriptive Statistics.

The objectives of this research are:

i. To compare the consumer's attitude in purchasing a safer car between Indonesia and Thailand.

ii. To compare the subjective norms among consumer's intention in purchasing a safer car between Indonesia and Thailand.

iii. To compare the perceived behavioral control among consumer's intention in purchasing a safer car between Indonesia and Thailand.

3. Methodology

3.1 Data Acquisition

A primary data has been used in this research. A self-administered questionnaire has been distributed to selected sample. Sample consisted of engineers, scientists, government officers, lecturers, and self-employed person. A self-administered questionnaire is convenient because no bias can be introduced from the way questions are asked since there is no presence of interviewer to inject bias toward respondents.

The questionnaires contained a few demographic questions such as gender, age, marital status, and several other questions to create a profile for each respondent in this research. There were a five-point Likert-type scales of questions to measure the constructs. Respondents were asked to range themselves from strongly disagree (1) to strongly agree (5), very unimportant to most important, very impossible to very possible and other ranges.

3.2 Theory of Planned Behavior

In 1985, the Theory of Planned Behavior (TPB) is proposed by Icek Ajzen that is developed from the theory of reasoned action [3]. TPB is implemented when a researcher aims to understand consumer's intention or decision making. Human behavior is difficult and complex to be understand but it can be interpretable with an extreme concern on biological and environmental factors on behavior. Therefore, social attitude and personality trait played a big part in explaining human behavior. Figure 2 depicts the conceptual framework of theory of planned behavior for this research.

The first predictor variable is Attitude. Attitude is when a person evaluates their behavior of interest favorably or unfavorably [9]. Secondly, Subjective Norm is a belief for a person to perform a given behavior as expected by significant others [2]. Significant others refer to the group of people that can influence one's intention in making decision. Other than that, subjective norm and attitude is independent. People can favor a given behavior but perceive social pressure not to perform it. Lastly, Perceived Behavioral Control is the perception of the ease or difficulty of a person to perform

the behavior of interest. LaMorte adds that a person usually results having varying perceptions of behavioral control depending on the situation.

To apply the TPB, construct domain and measurement items are adapted from several researchers [4,5,7,8,10] is shown in Table 1.

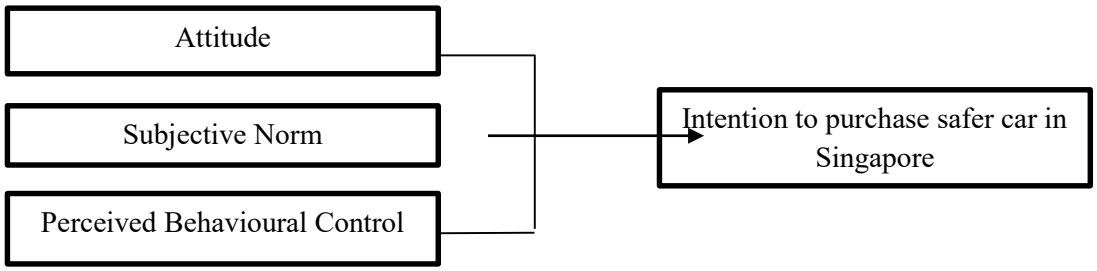

Fig. 2. Conceptual Framework of Theory of Planned Behaviour

Table 1
Adapted Construct Domain and Measurement Items

Construct	Literature Source
Attitude (ATT) [4 items]	ATT1 [7] ATT2 [10] ATT3 [7,10] ATT4 [7,10]
Subjective Norms (SN) [6 items]	SN1 [7,10] SN2 [7,10] SN3 (Explanatory study) SN4 [10] SN5(Explanatory study) SN6 (Explanatory study)
Perceived Behavioral Control (PBC) [5 items]	PBC1 [10] PBC2 [2] PBC3 [5] PBC4 [5] PBC5 (Explanatory study)
Purchased Intention (PI) [3 items]	PI1 [4] PI2 [4] PI3 [4]

Khairil Anwar et al. [8] also stated in their research that the hypothesis for this construct is proposed as follows:

H_1: There is a positive correlation between attitude and intention to purchase safer car.

H_2: There is a positive correlation between subjective norm and intention to purchase safer car.

H_3: There is a positive correlation between perceived behavioral control and intention to purchase safer car.

3.3 Descriptive Statistics

According to Jaggi (n.d), descriptive statistic summarized and presented a collection of data in a clearer and informative way from the given numerical and graphical procedures. This method helped to transform a large amount of data into a simple summary. This method has been used to describe the demographic profile in this study. Since descriptive statistic produces a numerical and graphical output, this method is suitable for the purpose of describing.

4. Results and Discussion

Descriptive statistics will be used to compare the safer car purchase intention between the consumers in Indonesia and Thailand. 18 questions in total will be analyzed from four TPB constructs which are attitude, subjective norms, perceived behavioral control and consumers' purchase intention. Mean and standard deviation for each construct will be generated to see which country engage better in safer car purchasing behavior based on five-point Likert scale (1 to 5).

4.1 Attitude

In the first determinant of TPB, four questions were asked in the questionnaire regarding consumer's favorable or non-favorable attitude towards safer car purchasing behavior. Table 2 presents the mean and standard deviation of the constructs for Indonesia and Thailand.

Table 2
The items for attitude

Items		Indonesia		Thailand	
		Mean	Std. Deviation	Mean	Std. Deviation
ATT1:	For me, buying a safer car is important	17.4	2.78	18.33	5.25
ATT2:	For me, buying a safer car is a smart decision				
ATT3:	For me, buying a safer car is a good decision				
ATT4:	For me, buying a safer car is useful				

According to Table 2, respondents in Indonesia rated 17.4 for attitude while respondents from Thailand rated 18.33. This shows that majority of respondents in Thailand had more positive attitude towards safer car purchasing due to the higher mean value. Figure 3 shows the percentage of each item in attitude for both countries.

The bar chart in Figure 3 shows that Thailand has higher percentage for all of the items in attitude although there are only small differences between the two countries for ATT2, ATT3, and ATT4.

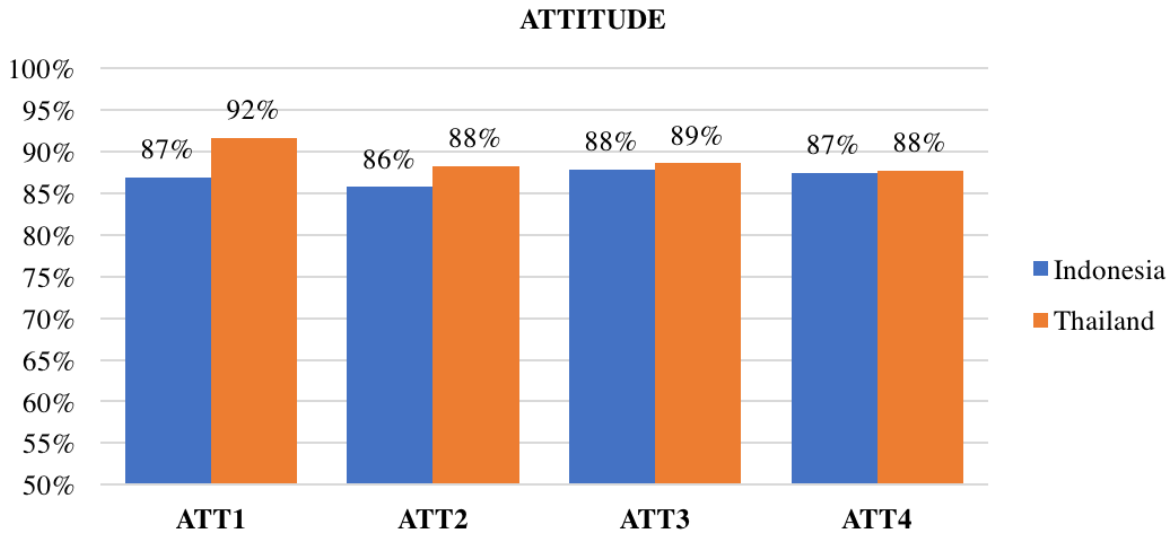

Fig. 3. Bar Chart for Attitude in Indonesia and Thailand

4.2 Subjective Norms

The second determinant of TPB analyzes a person's beliefs about whether peers and important people to the person engage in his/her behavior to purchase a safer vehicle. In this study, respondents were analyzed whether they are affected by their family members, friends or colleagues, sales person, and media. 6 items were used as shown in Table 3.

Table 3
The items for Subjective Norms

Items		Indonesia		Thailand	
		Mean	Std. Deviation	Mean	Std. Deviation
SN1:	Encouragement by my family members influence me to buy a safer car	23.84	3.86	24.88	4.82
SN2:	Encouragement by my friends or colleagues influence me to buy a safer car				
SN3:	Information from sales person influence me to buy a safer car				
SN4:	Information from media influence me to buy a safer car				
SN5:	My family members who own safer cars influence me to buy a safer car				
SN6:	My friends or colleagues who own safer cars influence me to buy a safer car				

The mean value for Indonesia and Thailand is 23.84 and 24.88 respectively. The higher mean value in Thailand indicate that respondents in Thailand hold the opinion that they are influenced by others better than Indonesians. Figure 4 depicts the overall percentage for Subjective Norms between the two countries.

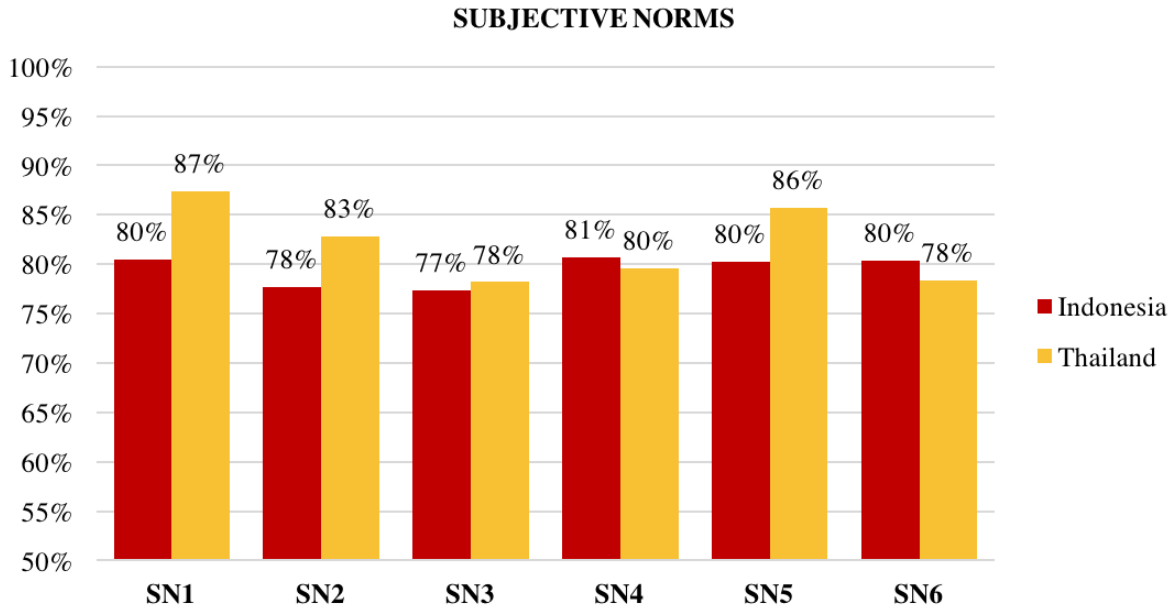

Fig. 4. Bar Chart for Subjective Norms in Indonesia and Thailand

Figure 4 shows that Thailand people are more influenced by their family members, friends or colleagues, information from sales person, and their family members who own safer cars.

On the other hand, Indonesians were more influenced by information from media and their friends or colleagues who own a safer car. This may be due to a better exposure about safe vehicle that is given by the media in Indonesia compared to in Thailand, and people in Indonesia may respond better to the message that is delivered by the media.

4.3 Perceived Behavioral Control

The last determinant that is used to predict consumer's purchase intention is Perceived Behavioral Control. PBC reflects the consumer's belief about their ease or difficulty to carry out the behavior of purchasing a safer car. Regarding to their ability in performing the behavior of interest, 5 items were used to measure PBC as shows in Table 4.

Table 4 shows that respondents in Thailand have a stronger PBC with the mean value of 21.31, compared to Indonesians with the mean value of 20.75.

Based on Figure 5, the percentage for Thailand is higher for PBC1, PBC4, and PBC5, while Indonesia has a higher percentage for PBC2. This shows that safer cars are more affordable towards Thailand people, and they are more convinced to buy safer cars when there are concessions in car insurance. Consideration by car manufacturers on safety also have an impact on Thais better than Indonesians.

Other than that, PBC2 indicates that 85% of Indonesians answered that the decisions to buy safer cars solely depends on them, while only 81% of Thailand people are in accord. Although there is only

4% difference, Indonesians may be more independent and does not get worked by the idea from other people. Hence, they make their own decisions to buy safer cars.

Table 4
Items in Perceived Behavioral Control

Items		Indonesia		Thailand	
		Mean	Std. Deviation	Mean	Std. Deviation
PBC1:	I can afford to buy a safer car	20.75	3.20	21.31	4.78
PBC2:	Decision to buy a safer car solely depends on me				
PBC3:	Tax reduction for car equipped with better safety features convinced me to buy a safer car				
PBC4:	Insurance reduction for car equipped with better safety features convince me to buy a safer car				
PBC5:	Consideration by car manufacturers on safety convince me to buy a safer car				

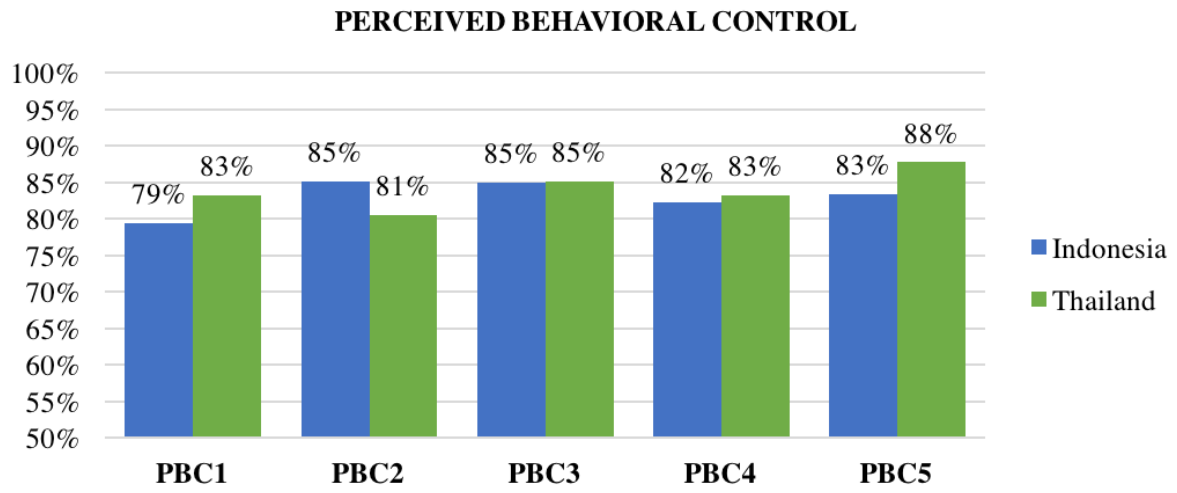

Fig. 5. Bar Chart for Perceived Behavioral Control in Indonesia and Thailand

For PBC3, respondents were asked whether tax reduction for car equipped with better safety features convince them to buy a safer car. According to Euro NCAP, one of the ways to increase consumers uptake of safer vehicles is by reducing tax to vehicles with a five-star safety rating [12]. The bar chart in Figure 5 shows that the percentage for both countries are the same, which is 85% respondents answered that tax reduction for car equipped with better safety features convinced them to buy safer cars.

4.4 Purchase Intention (PI)

Purchase Intention is influenced by attitude, subjective norms and perceived behavioral control. According to University of Twente [13], the general rule of thumb for TPB is the behavior intention

will be stronger as attitude and subjective norms become more favorable and perceived behavioral control becomes stronger. Table 5 shows the items that is used to measure purchase intention.

Table 5
Items in Purchase Intention

Items		Indonesia		Thailand	
		Mean	Std. Deviation	Mean	Std. Deviation
PI1:	If I plan to buy a car in the next 5 years, I will buy a safer car	12.71	2.03	12.99	2.50
PI2:	Most likely, my next car would be a safer car				
PI3:	I will propose to other people to purchase a safer car				

In Table 5, the mean scores for Thailand is 12.99, which is higher than Indonesia by 0.28. Despite the small difference in the mean scores, respondents in Thailand have a stronger intention in purchasing safer cars. Previously, analyses had been done on the three independent variables and people in Thailand appear to have a stronger and better attitude, subjective norms, and perceived behavioral control due to the higher mean scores. Hence, this is in accord with the general rule of thumb stated by University of Twente which results in a stronger purchase intention by Thailand people. Figure 6 shows the percentage of consumer's purchase intention in the two countries.

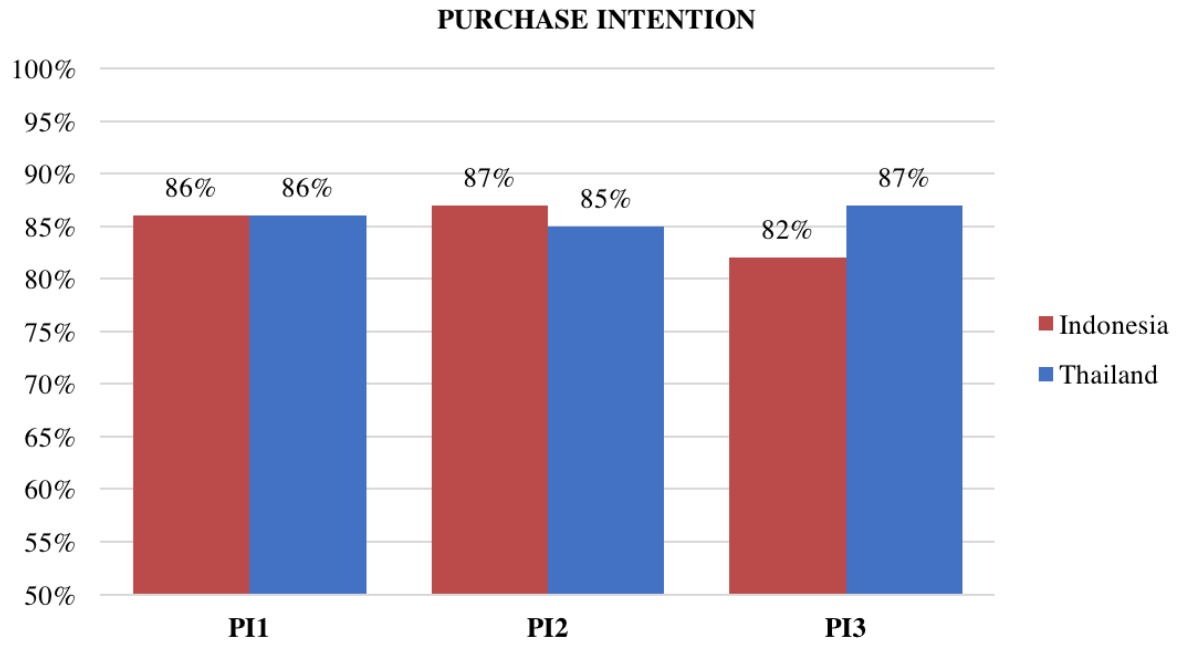

Fig. 6. Bar Chart for Purchase Intention between Indonesia and Thailand

For PI1, respondents were asked about their plan in the next 5 years. Based on Figure 6, 86% of respondents in both countries said that they will buy a safer car in their next five-year car purchasing plan. Next, 87% of Indonesians responded that they will most likely choose a safer car as their next car, and 85% of Thais hold the same opinion. For PI3, respondents were asked about whether they

will propose other people to purchase a safer car. From the bar chart, there is a possibility that 82% of Indonesians and 87% of Thais will propose safer car to others.

5. Conclusions

It can be concluded from the result of this study that TPB is an effective method to predict the safer car purchase intention. The objective of this study in comparing the safer car purchase intention among consumers between Indonesia and Thailand have been successfully achieved. Thailand have higher mean scores in attitude, subjective norms, and perceived behavioural control. Hence, it resulted in Thailand people have a stronger intention to purchase a safer car compared to respondents in Indonesia.

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