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The Effect of Risk Readiness and Perception of Values on Decisions of Using Motorcycle with The User's Involvement as Intervening

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Abstract: This study aims to reveal how the role of Risk readiness, perceptions of values that influence the decision to use a motorcycle through the user's involvement. The population in this study were motorcycle users in Palembang city who had at least used it for six months. This study uses a sample of 201 people with data analysis techniques using Structural Equation Modelling (SEM). Based on the results of data analysis carried out, it is known that consumer involvement is not an intervening variable between Risk readiness and consumer decisions, and nor between consumer perceptions and consumer decisions. On the contrary, both exogenous variables actually influence consumer decisions directly. Consumer perceptions also do not require deep thinking but directly have an impact on consumers to decide using a motorcycle.

Keywords: Risk Readiness, Perception of Value, Consumer Involvement, Consumer Decisions

Introduction

The use of motorbikes in the city of Palembang in the last eight years has always increased. Motorbikes are used by many people for transportation to their destination. These objectives include going to work, to campus, to school, delivering children to school, to relatives or friends' homes and even to recreational places. So it is not surprising that daily transportation activities in various city streets are always filled with these two-wheeled vehicles or motorbikes. This phenomenon certainly has an impact on the density of vehicles on the roads in the city of Palembang. In other words, motorbikes are a contributor to congestion in this city apart from four-wheeled vehicles. Another reason for

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the increase in the number of motorbikes is the decree issued by the Mayor of Palembang in 2008 against the non-extension of city and city bus routes in several departments or destinations within the city of Palembang. So, people prefer to use their own vehicles, especially motorbikes.

According to data sourced from the South Sumatra Provincial Revenue Agency, which was released by the South Sumatra Central Bureau of Statistics, in 2015 motorcycle type vehicles in the city of Palembang totaled 397,747 units, in 2016 sharply increased to 667,786 units. The data is the number of motor vehicles paid for the tax, so there would be a possibility that more vehicles exist because there is motorcycle owner who has not paid the tax, yet.

From the marketing aspect, a motor vehicle selling companies see that Palembang's largest population among all city districts in South Sumatra is a very promising potential to become a market share so that promotions made by companies along with easy payment methods in such a way are made to influence people to buy. If you pay attention to these strategies can affect the community.

The decision to use a motorbike by the community is of course based on many considerations, including being considered more efficient, faster or time-saving and even part of a style. So it is not surprising that most households in this city have a motorbike of at least one unit, with the type of motorbike purchase that is found is to add or replace the old one (Tuan & Shimizu, 2005).

In the theoretical aspects of consumer behavior, motorbike users decide to use a motorbike consider several things such as price, quality or product durability, ease of use, to cultural, family, friends and habits. According to Chen & Chao (2011) that the purchase or use of a type of means of transportation begins with the interests or intentions of consumers. Interest can be influenced by things that come from within the consumer itself, and from the external side.

The number of motorbike use in Palembang is also carried out by the community with consideration of the expected and obtained value. Value is what we get from consuming the product, value is also a comparison of sacrifices that have been spent to get a product with the benefits obtained from consuming the product (Zeithaml, 1988). The consideration of using a motorbike is faster, cheaper or stylish. So, the interest to buy then use, based on observation, information search, and consideration of the benefits obtained. Hopefully, the community will also consider the risks besides the various benefits. Negative things undesirable from using motorbike include accidents, safety problems during driving, motorcycle loss and violent crimes that cause pain or body injury to lose lives.

Thus it can be concluded that there are new factors that can affect the use of motorbikes, namely anticipation of risks will probably arise. From the description above, it is deemed necessary to conduct research that the number of people in Palembang City uses motorbike vehicles which may be influenced by consumer perceived value, Risk readiness that may arise, involvement of consumers to use motorbikes and the decision to use a motorbike vehicle which is the behavior of a consumer or motorcycle user. The reason for conducting this research is that marketing research in the area of transportation is very rarely found in the country, especially for the use of motorbikes. Even though it has been done by several researchers, among others, Chen & Chao (2011), and Chen & Lai (2011). This research aims to provide a model that predicts motorcycle users decision using their involvement which risks readiness and perceived value. Hopefully, this research could become consideration the improvement of various regulations, services, infrastructure, as well as the awareness of safe driving for road users, especially motorcyclists in order to create security for road users.

Literature Review

Perceive Value

Consumer perceptions of the value of the product can be seen from the side of the product used by consumers, namely, everything that consumers want from a product (Zeithaml, 1988). So what is desired by consumers of a product then consumers will find out whether what is desired is contained by a product, the product will have the higher value if the product has the features desired by consumers.

Security and Risk readiness Problems

Using your own vehicle is followed by fairly high risk, ranging from road safety to readiness to overcome the various risks that might occur. Security issues should be a high priority by motorcycle users.

Security while driving, understanding the rules of traffic, equipment and clothing prepared are anticipatory actions against the possibility of bad things that can happen. Thus one of the bad things that can be avoided is an accident. Therefore this should be taken into consideration and requires deep involvement by motorcycle users. Knowledge, learning, and care by motorcycle users on safe driving can affect road accidents (Taylor & Vasconcellos, 2013).

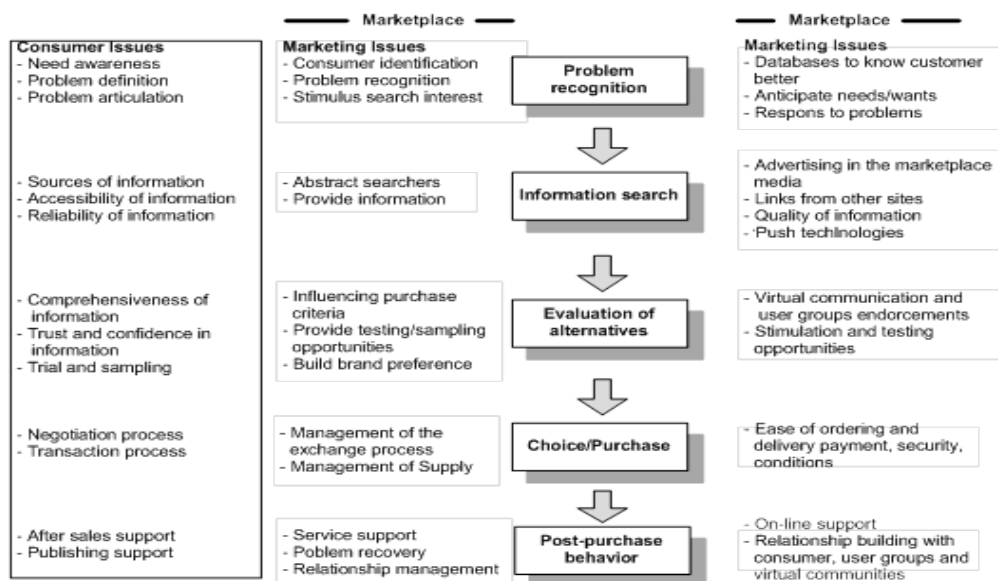
Consumer Involvement

Consumer involvement is a consideration that consumers make logically about the impact and benefits of consuming a product by finding information and processing the information obtained. There are a number of things that are the main concern of consumers and this can be a demand or guarantee for consumers for their availability using public transportation, consumer involvement will be higher when the risks that can be borne by consumers are also higher (Laurent & Kapferer, 1985).

Consumer Decision

Consumer decisions are decisions made by consumers, decide to use or buy what products are of course in accordance with the expected capabilities of the product. In this case, using a motorcycle can theoretically refer to consumer decision theory. Decisions made by consumers are based on various considerations and information that is absorbed and studied.

Fig 1. Consumer Marketing in Marketplace and the Marketplace



Source: Butler & Peppard (1998)

In deciding to use or buy certain products through several processes. The purchasing decision process according to Butler and Peppard, (1998) can be seen as shown in Figure 1. The process of deciding on a purchase starts from someone knowing or realizing what is needed, then he will look for information to further evaluate some of these alternatives. The best-considered alternative will be chosen.

Table 1. Relevant Previous Research

No	Research & Author	Variable & Analysis Technic	Result/Finding
1	(Taylor & Vasconcellos, 2013)	Variables used include the number and for what motorbikes to use, safety and traffic arrangements, social costs for motorbike use, political and social conditions. The analysis technique is qualitative	This study analyzes the road safety process and its effects. Improperly planned management of roads & traffic, the increase in motorcycle users with the sophisticated technology in Brazil has endangered pedestrians and cyclists resulting in high accidents
2	(Suki, 2013)	Variables used: concern for the environment, green product, price, brand image, and consumer decisions. Analytical technique: Multiple Linear Regression	Price and brand image has a significant effect on the decision to purchase a green product, the influence of the brand image concern is the strongest.
3	(Chen & Chao, 2011)	Perceived usefulness, perceived ease of use, attitude toward public transport, habit, perceived behavior control, subjective norms and switching intention toward public transit Analysis technique: structural equation modeling (SEM)	Attitudes, subjective norms and behavioral controls influence the intention to move to public transportation are positively significant, but habits affect intention to move negatively. So that motorcyclists have a small intention to switch to public transportation.
4	(Lai & Lu, 2007)	Variables: Travel time, transportation costs Analysis technique: Multiple Linear Regression	Efforts to reduce ownership of motorized vehicles are still difficult to realize even though services by public transport are improved.
5	(Joewono, 2006)	Variable: Safety facilities in vehicles and security during travel by public transportation Analysis technique: Factor analysis	From the point of view of public transport users that the good security of the facilities in the vehicle and during the trip is considered the most important thing
6	(Ellaway, Macintyre, Hiscock, & Kearns, 2003)	Variables: self-esteem, mastery, ontological security from cars, protection, autonomy, prestige. Analysis technique: different test (chi-square)	Households who have the ability to use private vehicles psychologically have many benefits

Methods

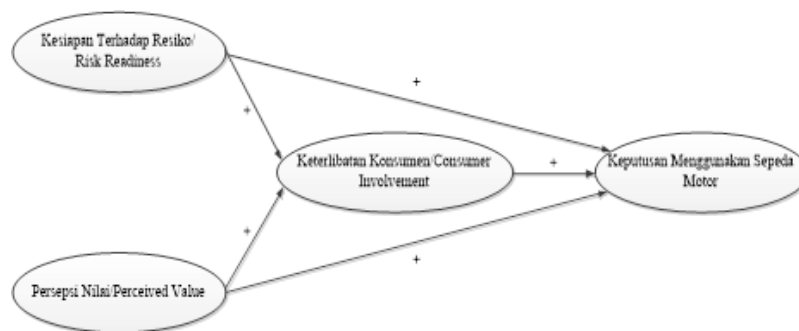
This research was conducted in the city of Palembang, with the variables studied were Risk readiness and perceptions value of motorcycle users as exogenous variables. The population in this study is motorcycle users in the city of Palembang who had used it for at least six months. Samples were taken based on purposive sampling method which the criteria are people who use motorcycle actively for going to the workplace, the sample size was 201 people, based on 50 calculations multiplied by 4 variable/ construct in the study. The construct measurement is using the Aaker et al (semantic-differential scale) with the scale 1-9. The operationalization of variables can be seen in table 2.

Table 2. Operationalization of Variables

Variables	Definition	Indicators
Readiness is at risk	The readiness of motorbike riders while driving in meeting the various risks that might be faced	<ul style="list-style-type: none"> - Having documents required as a driver - Understood traffic regulations properly - Has a strategy to deal with crime on the highway - Have motorized equipment and machinery and understand it - Motor maintenance / routine service
Perceived Value	Perception or response to the value of what is contained and the ability of a motorcycle, and in accordance with what is desired by the rider	<ul style="list-style-type: none"> - Save fuel - Saving time - The destination is easily reached by motorcycle - Cheap repair costs - Looks stylish
Involvement	Consideration of some things that are considered important for using a motorcycle	<ul style="list-style-type: none"> - Looking for information about the economic benefits of motorcycle use - Arrived on time to destination - Understand the risk of using a motorcycle - Use motorbikes carefully
Decision to use a motorcycle	Decision made for using a motorcycle	<ul style="list-style-type: none"> - Prefer to use a motorcycle instead of other vehicles - Advise relatives or acquaintances to use motorbikes by using a motorcycle - Many jobs / activities can be completed on time - Prepare correspondence, equipment and supplies for the safety & comfort riding

A description of the background, literature review and previous research in this study can be made a framework as in Figure 2

Fig 2. Research Framework



Based on the research framework, the hypothesis can be made as follows: for the community before using a motorcycle, it certainly has a number of considerations (involvement) (Taylor & Vasconcellos, 2013), (Laurent & Kapferer, 1985), while involvement has a precedent, namely their readiness to risk will be faced, but also the benefits of using a motorcycle are also considered. therefore this relationship can be made a hypothesis, namely

H₁ = Readiness for risk and perceptions of value influence the decision of motorcycle users to use it through their involvement

other than that risk preparedness is estimated to directly influence the decision to use a motorcycle, the hypothesis can be made as follows:

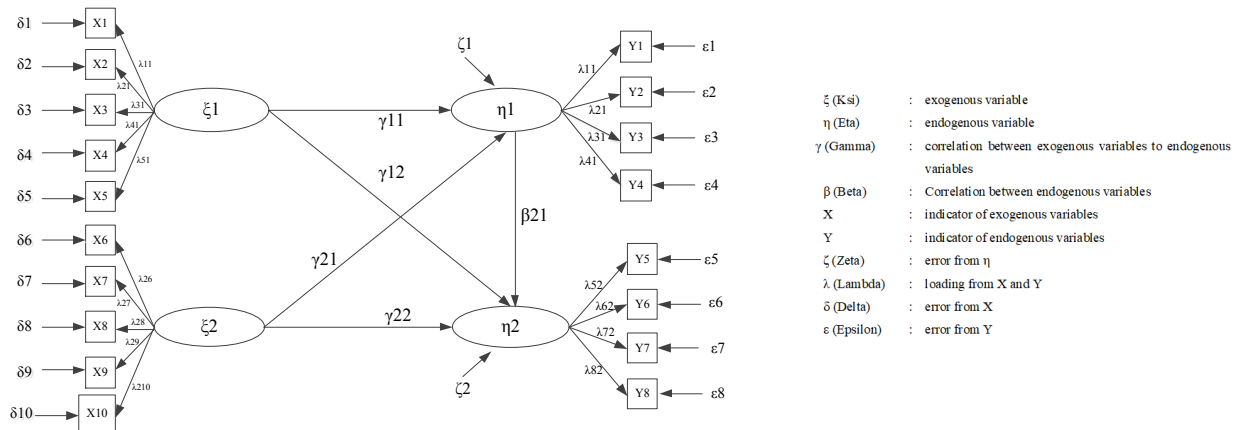
H₂ = Readiness for risk directly affects the decision to use a motorcycle

the perception of the value of using a motorcycle is also expected to affect decisions directly, so the hypothesis can also be made as follows:

H₃ = Perception of value directly affects the decision to use a motorcycle

This research is using Structural Equation Modeling (SEM) as an analysis technique to answer the problem statement. SEM is a combination of multiple regression with path analysis. The model made has two exogenous variables (the risks readiness and value perceptions of motorcycle users) and two endogenous variables (the user's involvement and the decision to use a motorcycle). The paths that can be made are:

Fig 3. Path of the Research Model



Path diagram as shown in Figure 3, can be translated into mathematical equations, namely structural models (Wijanto, 2008). The equation of the structural model is:

1. $\eta_1 = \gamma_{11} \xi_1 + \gamma_{12} \xi_2 + \zeta_1$
2. $\eta_2 = \gamma_{21} \xi_1 + \gamma_{22} \xi_2 + \beta_{21} \eta_1 + \zeta_2$

Findings

Respondent Profile

Data taken from 201 people with the profile described in the following table:

Table 3. Gender of the Respondent

Gender	Frequency	%
Male	115	57,2
Female	86	42,8
Total	201	100,0

Source :Output SPSS

Almost half of respondents taken were male (57.2%) while female 42.8%. This actually shows the number of female motorcycle users is not too far different from the male motorcycle driver.

Table 4. Age of Respondent

Age	Frequency	%
< 19 tahun	30	14,9
20-24 tahun	132	65,7
25-29 tahun	12	6,0
30-34 tahun	6	3,0
35-39 tahun	7	3,5
>40 tahun	14	7,0
Total	201	100,0

Source : Output SPSS

The age of respondents who use motorbikes is mostly in the range of ages 20 to 24 years (65.7%), respondent with the age under 19 years is the second largest amount (14.9%).

Table 5. Motorbikes Use

Use for	Frequency	%
Working	63	31,3
School transportation	64	31,8
Pick up children from school	7	3,5
Other	67	33,3
Total	201	100,0

Source : Output SPSS

From data result, respondent use motorbike for school transportation (31.8%), to work (31.3%), pick up children from school only 3.5% and other purposes 33.3%.

Table 6. The Length of Using a Motorcycle

The Length of Using a Motorcycle	Frequency	%
1 month- 3 month	8	4,0
3 month - 6 month	2	1,0
6 month - 9 month	4	2,0
> 9 month	187	93,0
Total	201	100,0

Source: Output SPSS

Most of the respondents have used motorbikes for more than 9 months (93%).

Table 7. Frequency of Using a Motorcycle in a Week

Frequency of Using a Motorcycle in a Week	Frequency	%
> 10 times	92	45,8
once – 5 times	53	26,4
5 times – 10 times	56	27,9
Total	201	100,0

Source: Output SPSS

The frequency of using motorcycle by respondent is 10 times a week (45.8%).

Table 8. Expenditures for Motorbikes/month

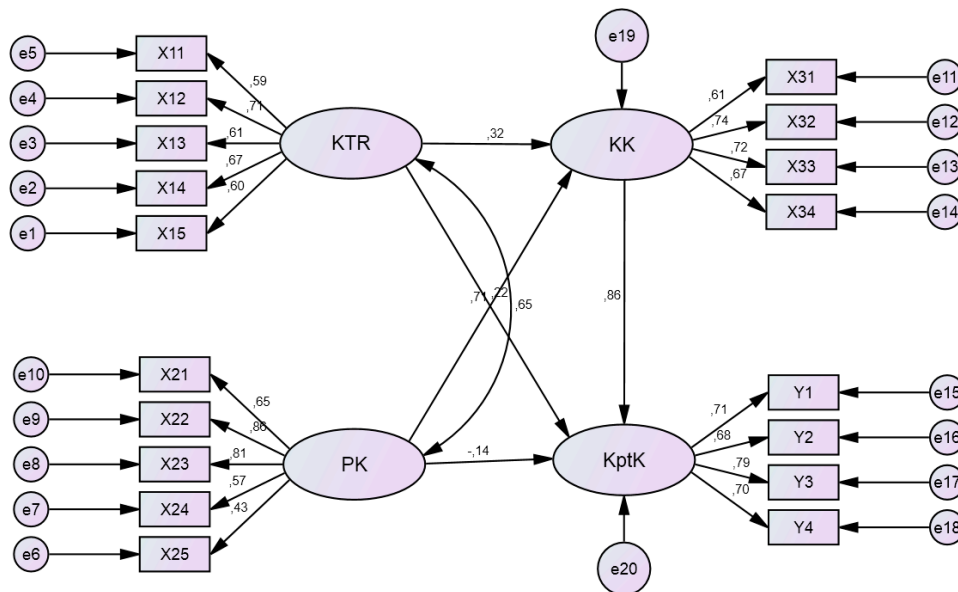
Expenditure/month	Frequency	%
> Rp. 600.000	9	4,5
Rp. 100.000 – Rp. 300.000	152	75,6
Rp. 300.000 – Rp. 600.000	40	19,9
Total	201	100,0

Sumber : ouput SPSS

Most of the respondent expended Rp.100.000-300.000/month for motorbikes (75.6%).

Data Analysis

Figure 4. Model SEM



Source : Output AMOS

The results of the SEM model in Figure 4 show that there are several loading values of the indicator already above 0.5, so that the model can explain the variable. The value of the Goodness of Fit Index is as follows:

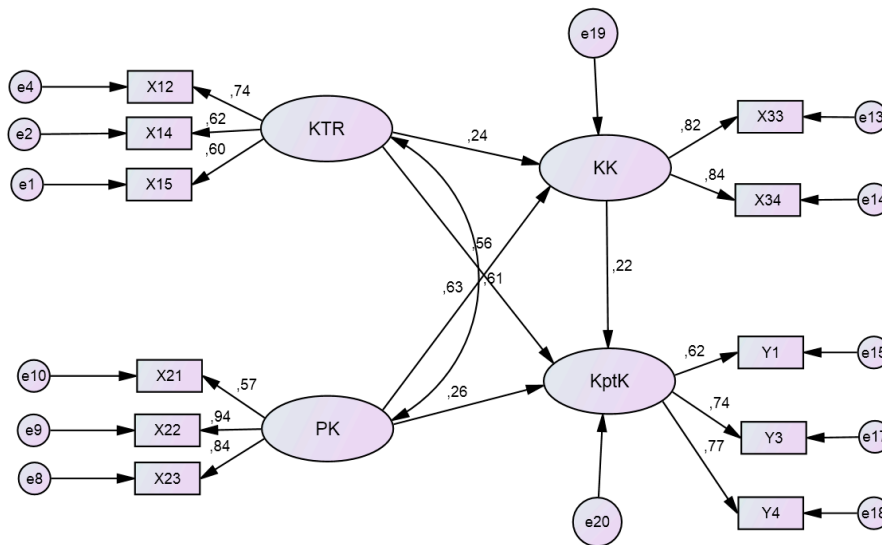
Table 9. Goodness of Fit Index)

Category	Indeks	Indeks value	Description
Absolute fit	Chi Square	600,657	Small value
	RMSEA	0,049	< 0,008
	GFI	0,135	> 0,9
Incremental Fit	AGFI	0,627	> 0,9
	CFI	0,754	> 0,9
	TLI	0,708	> 0,9
	NFI	0,709	> 0,9
Parsimonious Fit	Chisq/df	4,656	Chisquare/df < 3,0

Source : Output AMOS

In table 9 above shows that only RMSEA that fit and meet the model requirements. To increase the fit, modifications need to be made by removing several indicators that have relatively small loading values, which are close to 0.5 and give an increase in GOF (Goodness of Fit Index). Figure 5 shows the value of loading and regression after modification.

Fig. 5. SEM Modification Model



Source : Output AMOS

The above model produces better GOF values as can be seen in table 10.

Table 10. Goodness of Fit Index Modification

Category	Indeks	Indeks value	Description
Absolute fit	Chi Square	88,467	Small value
	RMSEA	0,081	< 0,08
	GFI	0,926	> 0,9
Incremental Fit	AGFI	0,871	> 0,9
	CFI	0,950	> 0,9
	TLI	0,928	> 0,9

	NFI	0,917	> 0,9
Parsimonious Fit	Chisq/df	2,328	Chisquare/df < 3,0

Source : Output AMOS

Table 10 shows that most of the values have met the feasibility requirements of the model, although Chi Square, AGFI and Chi Square / df do not meet the requirements. According to Haryono & Wardoyo (2012), at least one of the GOF requirements are met, the model can be used in research.

Table 11. Regression Estimation Value

	Estimate	C.R.	P
KK <--- KTR	,185	2,403	,016
KK <--- PK	,508	6,651	***
KptK <--- KTR	,601	4,318	***
KptK <--- PK	,293	2,189	,029
KptK <--- KK	,302	1,695	,090

Source : Output AMOS

Table 11 shows that the relationship of Consumer Involvement (KK) does not significantly influence Consumer Decisions (KptK) to use a motorcycle (probability value above 0.05). However, each Risk Readiness and Perceived Value (PK) directly affects consumer decisions. Therefore Consumer Involvement is not the intervening variable between the Risk readiness and Consumer Decisions, and Perceived Value with Consumer Decisions.

Tabel 12. Squared Multiple Correlations

	Estimate
KK	,637
KptK	,840

Source : output AMOS

Table 12 shows that consumer involvement in explaining Risk Readiness is 63.7%, while Consumer Decisions are able to explain Risk Readiness, Perceived Value and Consumer Involvement by 84%. Based on the hypothesis, this test proves that the assumption of consumer involvement can be the intervening variable between the risk readiness and consumer decisions, and consumer perceived value with consumer decisions cannot be proven (H1), while H2 states that there is a direct influence between risk readiness and the involvement of each consumer to consumer decisions is proven.

Discussion

Based on the data analysis, consumer decision for using motorcycle in Palembang is depending on the readiness of consumers in dealing with risks where the decision will come when the consumers have well understanding about the rules of traffic, have completed driving documents and equipment, understand how to use motorcycle and how to take care of them, and have a strategy in dealing with crime on the highway. Besides, the customer risk readiness, the consumer's decision to use motorcycle depends on the customer perceive value where decisions will be made when the consumer knows whether using their motorbike will save time, save fuel costs, or cheaper repair cost and more easily accessible.

Having complete vehicle equipment is proven to be one indicator of consumer risk readiness that affect consumers' decisions to use motorcycle, this is in line with research on public transport passengers (Joewono, 2006) which states that the complete equipment and facilities in driving during the trip are important thing.

Conclusion

Based on the results, it is known that consumer involvement is not an intervening variable between risk readiness and consumer decisions, and between consumer perceptions and consumer decisions. On the contrary, both exogenous variables directly influence consumer decisions directly. This indicates that the community of motorbike users are aware of the risks they might face when using motorbikes, the meaning is not a thought that requires deep consideration that motorcycle driving is at risk. Consumer perceptions also do not require deep thinking but directly have an impact on consumers to decide on using a motorcycle. Suggestions from this study that similar research can be continued by using other variables that will be able to prove that consumer involvement is an intervening variable. Therefore it is strongly recommended to use other exogenous variables.

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