

CONSUMER PURCHASE INTENTION OF SECOND-HAND SMARTPHONE: MODERATING ROLE OF SUBJECTIVE NORMS AND KNOWLEDGE

Edy Purwanto¹⁾ and Isyanto²⁾

^{1,2)}Wiraraja University

E-mail: edypurwanto@wiraraja.ac.id

ABSTRACT

This study aims to determine the effect of attitude toward behavior on purchase intention and to determine the role of subjective norm and consumer knowledge in moderating the effect of Attitude toward consumer purchase intentions. The object in this study is focused on the second hand smartphone.

The sample size used was 200 respondents. Determination of the sample using a purposive sampling technique. Data obtained through distributing questionnaires. Hypothesis testing is performed using simple linear regression analysis and moderated regression analysis (MRA).

The results of this study indicate that the attitude toward behavior has an effect on purchase intention. Subjective norm and knowledge variables moderate the effect of attitude toward behavior on purchase intention. It is hoped that this research can add insight into the theory of reasoned action (TRA) in predicting consumer purchase intentions on second hand smartphone. This research is also useful for smartphone business actor in understanding the factors that influence consumer purchase intentions. This study has limitations, namely: this research was only conducted in one district, namely Sumenep Regency. In the future research can be carried out in several cities in Indonesia. This study only uses one object, namely the second hand smartphone, so future research needs to use a different product category.

Keyword: theory of reasoned action, second-hand smartphone, knowledge

INTRODUCTION

Today's smartphone users have interesting habits to be learned. Lifestyle and the convenience of getting the smartphone makes it easier for consumers to replace old smartphones with the new release smartphones. The desire to look better in front of friends has an impact on the selling habit and buying smartphones. In addition, the emergence of new features on the latest smartphones such as 5G, camera, memory capacity and other features encourages consumers to have the latest smartphones. However, the price for the latest smartphone is relatively expensive

for some consumers, so the solution that can be done is to buy a second hand smartphone. Consumers can already enjoy fast internet features, sophisticated cameras and other features with a relatively low price.

Globally, second hand smartphone market has grown from year to year. A second hand smartphone is a smartphone that has been used and has been refurbished. Based on the survey conducted by IDC which states that the number of used smartphone sales in 2019 is estimated to reach 206.7 million units. This figure increased by 17.6 percent from sales of used

smartphones in 2018 with 175.8 units [16]. One of respondent statement is in line with this data that consumers are encouraged to buy used smartphones because new and branded smartphones are relatively expensive. The existence of a used smartphone allows them to get smartphone with sophisticated features at an affordable price.

The theory that is often used in understanding the reasons for each individual to act is Theory of reasoned action (TRA). This theory was an initial theory before it was developed into a theory of planned behavior (TPB). This theory consists of variable attitudes, subjective norms and intention. This study uses the concept of theory of reasoned action (TRA) in predicting the purchase intention of used smartphone consumers in Sumenep Regency with subjective norm and consumer knowledge as moderating variables. Social support can significantly moderate the effect of attitude toward behavior on purchase intention [1].

Based on the literature study, research using subjective norms as a moderating variable is still very limited. Many studies have only examined the direct effect of subjective norm on intention. Meanwhile, the use of knowledge as a moderating variable from the effect of attitude toward behavior on purchase intention is also very limited. In context of second hand smartphone there is no research model that uses two subjective norms and knowledge as moderating variables the effect of attitude toward behavior on purchase intention.

The research conducted by [9] on the women behavior in Iran about healthy behavior in the context of behavior in consuming healthy food. The results found that attitude toward behavior influence on purchase intention. Similar results were also founded in research [14] regarding the intention to buy organic food, about interest in entrepreneurship [2] and regarding consumer purchase intentions of luxury pro-

ducts [6]. Subjective norm moderates the relationship between attitude toward behavior in purchase intention organic food [1] and knowledge moderates the relationship between attitude toward behavior on one's intention to become entrepreneurial [7] organic food [14]. Research on second hand products has been conducted by [15] regarding the implementation of the policy to handle the smuggling of used clothes in Riau, Indonesia.

The formulation of problem in this research is Does attitude toward behavior affect purchase intention, does subjective norm moderates the effect of attitude toward behavior on purchase intention, does knowledge moderate the effect of attitude toward behavior on purchase intention. This study aims to determine the effect of attitude toward behavior on consumer purchase intentions and also to examine the moderating role of subjective norms and knowledge on the effect of attitudes toward purchase intentions. This research can provide a very useful picture for academics and researchers who will research and study the accuracy of TRA in predicting consumer purchase intentions on used smartphones and the moderating role of subjective norms and knowledge. Then, for business practitioners in second hand smartphones, the results of this study can provide insight into the factors that influence consumers to make purchases on used smartphones.

METHOD

This research is designed to use a quantitative approach. Data obtained from respondents through a questionnaire distributed to respondents. Furthermore, the data is processed and interpreted to confirm and obtain research results to be compared with previous studies.

Research variabel and indikator are described in the table 1 below:

Table 1. Variabel and indikator

VARIABLE	INDICATOR	SOURCE/ ITEM
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Attitude Toward Behavior	1. Kognitif 2. Afektif 3. Konatif	[11] - 4
Subjective Norm	1. Normative belief 2. Motivation to comply	[13] - 4
Knowledge	1. Knowledge 2. Experince based knowledge	[14] - 6
Purchase Intention	1. Pure Intention 2. Personal Attraction	[13] - 4

Source: Processed data (2020)

The sample size used was 200 respondents because it was considered to have exceeded the provisions of 10 times the number of instruments used, namely 18 (total items) x 10 = 180 respondents. The determinant of total sample using a purposive sampling technique. The respondent's criterion is respondents know second hand smartphone products. Data obtained by distributing questionnaires to the respondents. The indicator is measured using a Likert scale with a vulnerability of 1 to 5.

Validity test of the instruments used Confirmatory Factor Analysis (CFA). In CFA, the item is declared valid if the loading factor value is ≥ 0.5 . In addition, other requirements that need to be fulfilled are the Kaiser Meyer Olkin Measure of Sampling Adequacy and Bartlett's test values and there is no cross loading. The requirement for the MSA KMO value is > 0.5 whereas Bartlett's test of sphericity must be significant < 0.05 [5]. Reliability test in this study uses Cronbach alpha. The instruments can be declared reliable if the Cronbach alpha value is ≥ 0.70 . Validity & reliability test using SPSS 21 software.

The classical assumption test is carried out using the normality and multicollinearity test. The purpose of normality testing is to determine whether the research data is normally distributed or not. The test uses *kolmogorov-smirnov* test. Furthermore, multicollinearity testing was carried out to determine the relationship between the independent variables in the regression model. A tolerance value > 0.10 and a VIF value < 10 indicate that multicollinearity does not occur [5].

Simple regression analysis was performed to examine the effect of independent variable on the dependent variable. In this case, the attitude toward behavior affects consumer purchase intention on used smartphones. In submitting the hypothesis, the T test is used with a significance level of 5% to see the effect of partially independent variables on dependent variable.

In moderation testing is carried out by hierarchical moderated regression (HMR). This method is used to test the effect of subjective norms and knowledge as moderating variable. If moderating variable is significant, then moderation strengthens the effect of the independent variable on the dependent variable. Conversely, if the moderation variable is not significant, then the moderation weakens the influence of the independent variable on dependent variable.

This analysis aims to test hypotheses 2 and 3, namely examining the role of subjective norm and knowledge as a moderation in the influence of attitude toward behavior on purchase intention. There are 3 steps of moderation testing as follows:

1. Regres the independent variable against the dependent as a model 1.
2. Regres the independent and moderating variables on the dependent variable as a model 2.
3. The next step is regress the independent variables, moderating variables and the interaction of the independent and moderating variables on the dependent variable (intention) as a model 3.

RESULTS

Validity Test

Validity testing was carried out using Confirmatory Factor Analysis (CFA). The results showed that KMO-MSA value was 0.931 and that value was > 0.05 . The BTS value is 0,000, which means < 0.05 . The KMO-MSA and BTS values indicate that the instruments have met the requirements so that the test can be carried out properly. The results of testing KMO-MSA and

BTS can be described in table 2 and CFA can be seen in Table 3 below:

Table 2. KMO and Bartlett's test value

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,931
Bartlett's Test of Sphericity	Approx. Chi-Square	2392,796
	Df	91
	Sig.	,000

Source : Processed data (2020)

Table 3. Validity Test Results with CFA

Variabel	Item	Component			
		1	2	3	4
Attitude Toward Behavior	ATB1				,767
	ATB2				,713
Subjective Norm	SN1			,728	
	SN2			,765	
	SN3			,778	
	SN4			,646	
Knowledge	K1	,735			
	K2	,786			
	K3	,822			
	K4	,724			
Purchase Intention	PI1		,754		
	PI2		,782		
	PI3		,767		
	PI4		,708		

Source : Processed data (2020)

Based on table 3 above, it is known that all items have a factor loading value above 0.5 and there is no cross loading. During the testing process, there were 4 items that were excluded because they did not meet the assumptions in the validity test, both convergent and discriminant. These items include ATB3, ATB4, K5, and K6. From the table above, it is also known that each item has assembled with items measuring the same variables and is not correlated with items measuring other variables. Thus, the instrument used has met the assumptions of convergent and discriminant validity.

Realibility Test

The results of the test shows that the Cronbach alpha value of the attitude toward behavior variable is (0.788), subjec-

tive norm (0.903), knowledge (0.926), and purchase intention (0.904). Reliability test show that there is good Reliability because each variable has a value above 0.70.

Normality Test

In normality test carried out the Asymp value was obtained. Significance value is 0.200 indicates that the significance value is > 0.05. These results indicate that the data used in this research are normally distributed.

Multicollinearity Test

In multicollinearity test carried out the tolerance value of the Attitude toward behavior variable is 0.423 and the VIF value is 2.362. Subjective norms have a tolerance value of 0.398 and a VIF of 2.510 and knowledge has a tolerance value of 0.373 and a VIF value of 2.679. The multicollinearity test results show that the tolerance value > 0.10 and VIF value < 10, which indicates that the data used does not experience multicollinearity problems. The results multicollinearity test can be described in table 4 below:

Table 4. Multicollinearity Test Results

Variabel	Tolerance	VIF
Attitude T.B	0.423	2.362
Subjective N	0.398	2.510
Knowledge	0.373	2.679

Source: Processed data (2020)

DISCUSSION

Simple Regression

The simple regression analysis is performed to tes the hypotesis 1 namely the direct effect of attitude toward behavior on consumer purchase intention. The result of simple linear regression analysis can be described in the table 5 below:

Table 5. Simple linier regression test results

Independent Variable	Coefficient (B)	t Value	Sig.
Attitude Toward Behavior	,631	11,430	,000
Adjusted R ² = ,394		F	= 130,651

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R ²	= ,398	Sig.	= ,000 ^b
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Source : Processed data (2020)

Moderated Regression Analysis (MRA)

Moderation testing is carried out by means of Hierarchical Moderated Regression (HRM) Moderated regression analysis is performed to test the hypothesis 3 and hypothesis 4. The moderation regression results of the subjective norms and knowledge with Hierarchical Moderated Regression analysis can be seen in tables 6 and 7 below:

Table 6. Moderation regression analysis (subjective norm)

Model Summary

Model	R	R Square	Adj. R Square	R Square Change
1	,631 ^a	,398	,394	,398
2	,761 ^b	,579	,575	,182
3	,768 ^c	,590	,584	,010

a. Predictors: (Constant), Attitude Toward Behavior
 b. Predictors: (Constant), Attitude Toward Behavior, Subjective Norm
 c. Predictors: (Constant), Attitude Toward Behavior, Subjective Norm, ATB*SN

Source: Processed data (2020)

Coefficients^a

Model	Beta	T	Sig.
1	(Constant)	4,342	,000
	Attitude Toward Behavior	,631	11,430
2	(Constant)	3,597	,000
	Attitude Toward Behavior	,225	3,527
	Subjective Norm	,589	9,230
3	(Constant)	-,584	,560
	Attitude Toward Behavior	,478	3,677
	Subjective Norm	,902	5,844
	ATB*SN	-,531	-2,227

a. Dependent Variable: Purchase Intention

Source : Processed data (2020)

Table 7. Moderation regression analysis (Knowledge)

Model Summary

Model	R	R Square	Adj. R Square	R Square Change
1	,631 ^a	,398	,394	,398
2	,722 ^b	,522	,517	,124
3	,729 ^c	,532	,525	,010

a. Predictors: (Constant), Attitude Toward Behavior
 b. Predictors: (Constant), Attitude Toward Behavior, Knowledge
 c. Predictors: (Constant), Attitude Toward Behavior, Knowledge, ATB*K

Source: Processed data (2020)

Coefficients^a

Model	Beta	t	Sig.
1	(Constant)	4,342	,000
	Attitude Toward Behavior	,631	11,430
2	(Constant)	3,203	,002
	Attitude Toward Behavior	,271	3,841
	Knowledge	,504	7,148
3	(Constant)	-,636	,525
	Attitude Toward Behavior	,543	3,640
	Knowledge	,793	5,066
	ATB*K	-,529	-2,065

a. Dependent Variable: Purchase Intention

Source: Processed data (2020)

Hypothesis 1

From Table 5 above, it is known that the Adjusted R² value is 0.394, which means that 39.4 percent of the dependent variable, namely purchase intention, can be explained by the independent variable, namely attitude toward behavior, while 60.6% is explained by other variables. The partial effect test (T test) obtained t-count of 11.430 with a significance level of 0.000 (p < 0.05). The t-count value shows that the t-count > t-table value is 11.430 > 1.971. This value indicates that the Attitude Toward Behavior has a significant

positive effect on consumer purchase intentions on second hand smartphone. Therefore, hypothesis 1 is accepted. In this context, respondents consider that second hand smartphone products are of good quality and brand. This attitude will affect the consumer's intention to buy a second hand smartphone. Attitude is a predisposition that is learned to show a feeling of pleasure and displeasure with an object consistently [11]. Attitude can also be interpreted as a form of evaluation of a person regarding behavior that can be beneficial or not if done.

The results of this study add to the accuracy of the theory of reasoned action (TRA) which conveys the direct effect of attitude toward behavior consumer intentions. This research finds the results that are in line with that theory. In this study, the focus is on second hand smartphones.

The results of this study are in line with the statement that second hand products in Indonesia are imported from abroad so that consumers' assessment of used smartphone brands from abroad is quite good [15]. The results of this study are in line with research by [10] which conducted a systematic and meta-analytic review Theory of Planned Behavior (TPB). The results show that attitude toward behavior has a strong influence on one's intention. Research on the factors that influence a person's intention to buy a safe car shows that attitude toward behavior affects consumer purchase intention [8]. Research about the behavior of Iranian women in consuming healthy foods found that attitude toward behavior affects consumer intention [9]. Then, research on the factors that encourage consumers to accept green products also found that attitude toward behavior has a significant effect on consumer intention [4].

Hypothesis 2

Based on table 6 above, it is known that in the first regression step, the adjusted R2 value is 0.394 and an increase in

the second regression is 0.575. Then, in the third regression stage, the adjusted R2 value has increased to 0.584. The significance of the attitude toward behavior and subjective norm interaction variables shows a significant value, namely Sig. = 0.27). Based on the Adjusted R2 value of the three regression stages and the significance of the interaction variable, it can be concluded that subjective norm moderates the relationship between attitude toward behavior and consumer purchase intention. This means that hypothesis 2 is supported and subjective norm acts as a variable that moderates the relationship between the independent and dependent variable which are also independent variables (quasi moderator).

The study results expand the study of the elements in theory of reasoned action (TRA). In TRA, it is conveyed that subjective norm has a direct influence on consumer purchase intention but in this study subjective norm is used as a variable that moderates attitude toward behavior on consumer intention. The results of this study indicate that subjective norm moderates the effect of attitudes on consumer purchase intentions. This study focus on consumer purchase intention to second hand smartphone. These results indicate that the elements in theory of reasoned action (TRA) are still very interesting to be studied, both their direct and indirect effects.

Subjective norms are the driving factor in the decision-making process by individuals who are influenced by the opinions of others. Subjective norms are also a person's normative belief in making a decision influenced by others. Social influence such as family, friends, an expert is something that is very influential in the consumer actions. Therefore, the recommendations of these people will have an impact on consumer attitudes. The better recommendations received by consumers, the higher the attitude of consumers to

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buy a used smartphone. In the end, consumers will buy a used smartphone.

A person's intention to buy is a decision made by consumers in the process of a product purchasing [3]. The results of this study indicate that the effect of attitude toward behavior on consumer purchase intention to second hand smartphone moderated by subjective norm. Based on the literature study conducted [1] which states that the previous researchers had a lot of discussion about the role social influence in moderating elements in the theory of planned behavior. Therefore, that study [1] examined the role of subjective norm as a moderating variable on the effect of attitude toward behavior on purchase intention. The results found that subjective norm moderated the effect of attitude toward behavior on consumer purchase intention in the context of organic food consumption. The results of this study certainly prove this statement and at the same time this research support the results of research conducted by previous researchers.

Hypothesis 3

The third hypothesis in this study states that consumer knowledge moderates the effect of attitude toward behavior on consumer purchase intention. Based on table 7 above, it is known that the first regression stage, the adjusted R² value is 0.394. In the second regression stage it increases to 0.575. Then, in the third stage there is an increase again with an adjusted R² value of 0.584. The significance of the interaction variable between attitude toward behavior and consumer knowledge, the results show a significant value, namely Sig. = 0.40. Based on the Adjusted R² value for the three steps of regression analysis and the significance of the interaction attitude toward behavior and consumer knowledge variable, it can be concluded that hypothesis 3 is supported in this study. The significance of β_2 and β_3 is as shown in the above table, so the knowledge variable as a variable that moderates the relation-

ship between the independent (attitude toward behavior) and dependent variables (purchase intention) which also becomes an independent variable (quasi moderator).

The results of this research expand the study of variables that can interact with the elements in the Theory of Reasoned Action (TRA). In TRA, it is conveyed the direct effect of attitude toward behavior on consumer intentions, but in this study increasing consumer knowledge as a moderating variable. The results of this study indicate that knowledge moderates the effect of attitudes on consumer purchase intentions. This study focuses on purchase intentions of used smartphones. The results showed that the elements in the theory of reasoned action are still very interesting to study, both their direct and indirect effects and the addition of variables that interact with these elements.

Consumer knowledge is one of the factors that influence consumers to act. Therefore, providing understanding to consumers is something that is very important to do because it can affect to consumer attitudes which will eventually lead to an intention to purchase a second hand smartphone. A Second hand smartphone knowledge is knowledge based on experience, based on memory or knowledge possessed by consumers such as consumer knowledge about smartphone characteristics, knowledge about smartphone Features, quality, and good brand, knowledge about the benefits and risks when buying and using second hand smartphone and knowledge about the satisfaction that will be felt when consuming or using the second hand smartphone.

Someone who respects information will significantly influence to the product selection process in a rational way. A personal level of knowledge is relating to product selection. The better the level of knowledge, the more rational the decision-making process will be [12]. The results of this study reinforce research [14] on the

factors that influence a person's intention to buy organic food in developing countries. The study found that consumer knowledge moderated the effect of attitude toward behavior on consumer purchase intention. Then also, this study is in line with the results of a study found by [7] on entrepreneurial intention which showed that consumer knowledge moderates the attitude toward behavior relationship toward consumer purchase intention.

LIMITATIONS & NEXT RESEARCH

The limitations of this research are (1) this research was carried out in one district only, namely Sumenep Regency. In the future, research could be done for several cities in Indonesian (2) this study only uses the TRA theory. Future research needs to add the variable perceived behavioral control as the concept of theory of planned behavior. (3) This research only focuses on second hand smartphones. So, future research needs to use a different product.

CONCLUSION

The conclusions in this study are: 1) attitude toward behavior is a factor that influences consumer purchase intention on second hand smartphone; 2) meanwhile having a direct influence on intention, subjective norm can also be a moderating variable for the attitude toward behavior on purchase intention; 3) consumer knowledge moderates the relationship between attitudes toward behavior on consumer purchase intentions of second hand smartphone.

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