

## **FACTORS AFFECTING ONLINE PURCHASING INTENTION: THE ROLE OF ATTITUDE AS MEDIATOR**

**Enny Trisna**

Islamic University of North Sumatera, Indonesia

mutiaindahsari140600@yahoo.co.id

**Sefnedi** 

University of Bung Hatta, Indonesia

sefnediphd@yahoo.com; sefnedi@bunghatta.ac.id

### **Abstract**

*The rapid increase of internet usage has influenced the people's life style, in general, and the consumers' online purchasing intention. The model of this study was developed in the light of the Theory of Planned Behavior (TPB) and the data were collected from 147 Master's students of Islamic University of South Sumatera. Using the Partial Least Squares structural equation modeling as the approach to examine the model, the statistical results confirmed the positive and significant effect trust on attitude. Furthermore, the findings revealed that attitude, subjective norms, and perceived behavior control were found to have positive and significant effect online purchasing intention among the Master's students of Islamic University of South Sumatera. However, the attitude did not affect directly online purchasing intention. Additionally, the attitude played as mediator on the relationship between trust and online purchasing intention.*

*Keywords: Trust, Attitude, Subjective norm, Perceived behavior control, Purchasing intention*

### **INTRODUCTION**

The growth of internet technology plays important role to changed consumers' lifestyles work, live, and learn. Therefore, manufacturers have changed to online distribution due to its possibility to reach certain customers' segments. Online shopping can match with some requirements for online customers. The habit of consumers' shopping has changed as

consequence of increasing internet usage especially for young generation customers. The technology and communication advance has caused increasing rapidly internet usage and enhancing the level of knowledge of the young generation customers (Su & Huang, 2011).

There has been a proliferation of research published in the past on intention to online purchase (Amelia & Ruswanti, 2017; Lim *et al.*, 2016; Tulipa & Muljani, 2015). However, what stands out in the early purchase intention literatures are the multiplicity of views regarding the determinants of intention to online purchase and the relationships between these variables and intention to online purchase. Al-Swidi, Behjati and Shahzad (2012) suggested that there is a need for a parsimonious model of intention to online purchase and its determinants so it is able to be understood and implemented by practitioners. As such, these issues should be addressed in future research conceptually and empirically in order to weaken the confusion in the literature. Currently, there is minimal consensus on a model of intention to online purchase.

On the one hand, variables of trust has identified as an important variable in explaining attitude (Zandehdel *et al.*, 2015; Giovannini *et al.*, 2015; Terenggana, 2013) and intention to purchase (Besra *et al.*, 2015; Rafique *et al.*, 2014; Terenggana, 2013). Other studies explained how attitude, subjective norm and perceived behavior control (PBC) influence purchase intention are not so conclusive. For instance, some previous studies found insignificant effect of attitude on intention to purchase (Al-Jabari *et al.*, 2012; Al-Swidi *et al.*, 2012). As such, the evidence of attitude as mediator on the relationship between consumer trust and intention to purchase is still far from studied.

## **GRAND THEORY**

Ajzen (1991) introduced theory of planned behavior (TPB) and it has been employed by previous researchers who study marketing. The key element of TPB is intention, particularly the intention to take behavior on specific products or services (Fattahi, 2010).TPB explains that individual consumption behavior is affected by consumption intention and perceived behavioral control (PBC). Moreover, the consumption intention is explained by attitude, subjective norm and PBC (Fishbein & Ajzen, 1975). The theoretical framework of this study was supported by the TPB that can justify the intention to purchasing decisions as effects of attitude, subjective norm, and PBC (Fishbein & Ajzen, 1975).

## **LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT**

### ***Trust and Attitude***

Trust can be defined as the buyer's belief that the seller will behave benevolently, show competency and integrity towards buyers or customers (Pavlou & Fygenson, 2006). Ajzen

(2005) explains attitude as the disposition to respond in favorable or unfavorable options towards an object, person, institution, or event. Empirical studies have proven that trust plays important role in explaining attitude (Zandehdel *et al*, 2015; Giovannini *et al*, 2015; Terenggana, 2013). Then, hypothesis is proposed as below:

***Hypothesis 1 (H<sub>1</sub>): There is positive and significant effect of trust on attitude.***

### ***Attitude and Online Purchase Intention***

The online purchasing intention is defined as the perception of a person to shop online. As online purchase saves their time and works of hours in minutes that why people are mostly more intend to purchase or shop online. Attitude as the disposition respond in favorable or unfavorable options towards an object, person, institution, or event (Ajzen, 2005). Previous studies have found a positive and significant effect of attitude on online purchase intention (Widayat & Ni'matuzahroh, 2017; Amelia & Ruswanti, 2017; Habullah *et al*, 2016; Jaafaret *al*, 2015; Akroush & Al-Debei, 2015; Jin *et al*, 2015; Hsu & Bayarsaikhan, 2012). Thus, hypothesis is proposed as below:

***Hypothesis 2 (H<sub>2</sub>): There is positive and significant effect of attitude on online purchase intention.***

### ***Subjective Norm and Online Purchase Intention***

Ajzen (2005) describe subjective norm as the extent to which a person has the motivation to follow people's views toward behaviors that they do (normative belief). If they feel that it is a personal right to perform a behavior they would ignore the views of others on their behavior and use motivation to comply to explain this phenomenon, namely whether people consider to adhere to the views of others does affect them or not. On the one hand, online purchasing intention is defined as the perception of a person to shop online. As online purchase saves their time and works of hours in minutes that why people are mostly more intend to purchase or shop online. The relationship between subjective norm and online purchase intention has been identified and some studies have found a positive and significant effect of subjective norm on online purchase intention (Amelia & Ruswanti, 2017; Habullah *et al*, 2016; Lim *et al*, 2016; Jin *et al*, 2015; Al-Jabari *et al*, 2012). Thus, hypothesis is proposed as below:

***Hypothesis 3 (H<sub>3</sub>): There is positive and significant effect of subjective norm on online purchase intention.***

### ***Perceived Behavior Control and Online Purchase Intention***

Ajzen (2002) suggests that perceived behavioral control (PBC) is someone's perception of the barriers to a behavior. In PBC, there are two important aspects, the first aspect is related to how much the person has a behavioral control (controllability) while the second one is how confident the person feels able to perform a behavior (self-efficacy). On the one hand, online purchasing intention is defined as the perception of a person to shop online. As online purchase saves their time and works of hours in minutes that why people are mostly more intend to purchase or shop online. Jin *et al* (2015) showed that PBC have an impact on intention in the context of Malaysian online purchases. Al-Jabari *et al* (2012) found PBC has a significant and positive direct effect on online shopping intentions of among Jordanian customers. Other study such as Al-Swidi *et al* (2012) also found PBC as important variable in explaining online purchase intention among MBA Students of University Utara Malaysia. Thus, hypothesis is proposed as below:

***Hypothesis 4 (H<sub>4</sub>): There is positive and significant effect of perceived behavior on online purchase intention.***

### ***Trust and intention to Online Purchase***

Intention to online purchasing is defined as a willingness of a person to shop online. As online purchase saves their time and works of hours in minutes that why people are mostly more intend to purchase or shop online. Trust is conceptualized as the buyer's belief that the seller will behave benevolently, show competency and integrity towards buyers or customers (Pavlou & Fygenson, 2006). Some previous studies conducted by Besra *et al* (2015), Rafique *et al* (2014), and Terenggana (2013) found a significant effect of trust on intention to online purchase. Thus, hypothesis is proposed as below:

***Hypothesis5 (H<sub>5</sub>): There is a positive and significant effect of trust on online purchase intention.***

## **METHODOLOGY**

This study was based on an empirical investigation of Master's students of Islamic University of South Sumatera. In order to obtain valid and reliable measures of the variables, previously validated scales were used to measure all variables (Zaidi *et al*, 2014; Rizwan *et al*, 2014; Moon & Kim, 2001). All items were measured via 5-point bipolar scales with scale poles ranging from strongly disagree (1) to strongly agree (5).

The questionnaire was translated into Indonesian language and then back-translated into English. The use of only two languages reduced the potential for errors resulting from multiple translations of the questionnaire. Minimizing the diversity of languages also helped

ensure construct equivalence and data comparability (Johnson *et al*, 2001). The targeted population of the study included all Master's students of Islamic University of South Sumatera. Due to some restrictions such as time, cost and difficulty to reach all the population, the study had been limited with the sample. Data was collected via drop and pick survey in July-September 2017. Through purposive sampling method, 147 respondents' participated in the survey. The collected data was analyzed using partial least squares structural equation modeling (PLS-SEM)

## RESULTS AND DISCUSSION

Prior to analyzing the primary data, the issue of non-response bias was discussed. An extrapolation procedure technique was used to assess non-response bias. This assumed that the groupings of actual respondents by an identified criterion are similar to the theoretical non-respondents (Hair *et al*, 2014). Frequencies and independent *t*-tests were used to determine whether significant differences existed between early and latest responses. The result of *t*-test found no significant differences between the early and latest responses for this classification variable. Therefore, as the results suggested that there were no significant differences between early response and latest response, the sample can be considered sufficient to draw conclusions about private university's students located in Medan city, North Sumatera, Indonesia for the issues under study.

Table 1 Respondents' Profile

Variables	Demography	Frequency	Percentage (%)
Sex	Male	71	48.3
	Female	76	51.7
Age	≤ 30 years	84	57.1
	> 30 years	63	42.9
Duration of internet usage	≤ 1 year	5	3.4
	1 – 3 years	30	20.4
	> 3 years	112	76.2
Type of products	Books	19	12.9
	Music CD	4	2.7
	Software	2	1.4
	DVD and videotape	5	3.4
	Clothes	74	50.3
	Sports' equipments	9	6.1
	Others	34	23.1

As illustrated in Table 1, respondents were equally distributed based on their sex with 48.3 % were males and 51.7% were females. Of course, since the targeted population was focused on Master's students, more than half of the surveyed students, 51.1 %, were less than 30 years of age and 42.9% of them were more than 30 and these are mainly the part timer students who are already having jobs.

With respect to the internet usage and items purchased online, the results displayed that more than 96% of the sample they have been using the internet for more than 1 year. Furthermore, the most frequent purchased items were the clothes with 50.3% and followed by others 23.1%, and books only 12.9%. Table 1 detailed the findings related to the sample distribution according to some variables of interest.

Table 2 Outer Model

Variable	Items	Factor loading	Cronbach alpha	Composite reliability	AVE
Trust	TR1	0.913	0.947	0.962	0.863
	TR2	0.958			
	TR3	0.946			
	TR4	0.897			
Attitude	ATT1	0.883	0.923	0.951	0.867
	ATT2	0.952			
	ATT3	0.956			
Subjective norms	SN1	0.952	0.981	0.984	0.882
	SN2	0.964			
	SN3	0.912			
	SN4	0.907			
	SN5	0.891			
	SN6	0.973			
	SN7	0.959			
	SN8	0.953			
Perceived behavior control	PBC1	0.966	0.930	0.955	0.877
	PBC2	0.936			
	PBC3	0.906			
Online purchase intention	PI1	0.910	0.910	0.943	0.847
	PI2	0.901			
	PI3	0.950			

Table 2 displayed results of validity and reliability tests or outer model. An item identified valid if the value of measurement loading at least 0.7. The results of this study found that the overall value of measurement loading is above 0.700 so that it can be conclude that the construction of the variable is composed by a valid indicator. Furthermore, this study assessed the model's internal consistency using three approaches namely, cronbach's alpha, composite reliability and average variance extracted (AVE). For a scale to be considered reliable, cronbach's alpha and composite reliability must be equal to or greater than 0.7. All the scales used in this study exceed this threshold. AVE can also used to assess the reliability of a scale. Chin (1998) suggested that if a scale has an AVE equal to or greater than 0.5 then it can be considered to be reliable. The AVE of this study's scales ranged from 0.863 to 0.877 exceeding the minimum threshold.

The structural model or inner model was evaluated by using goodness of fit test to see the percentage of variances. It was to observe the *R*-square for latent exogenous construct and to observe the value of the path coefficient. The stability of this estimation was evaluated using *t*-statistic test, which was obtained through the bootstrapping procedure. The structural model was evaluated using exogenous variable *R*-square with similar interpretation of regression.

Table 3 R Square

<b>Exogenous Variables</b>	<b>R Square</b>
Attitude	0.709
Online Purchase Intention	0.684

The Table 3 displayed the values of *R*-square higher than zero (0) for the two exogenous variables. The *R* square value of the attitude was 0.709 indicating the 70.9% of the variance in the attitude variable was explained by the trust. Additionally, the *R* square value of online purchase intention was found 0.684 indicating 68.4% of the variance of online purchase intention was explained by trust and attitude.

Figure 1, Figure 2, and Table 3 summarized the results related to the hypotheses testing of the study. The results of analysis showed that trust was found to have a positive and significant effect on the attitude (path coefficient = 0.842, *t*-statistics = 17.604, and *p*-values = 0.000). This finding indicated that hypothesis 1 ( $H_1$ ) was accepted. Furthermore, the findings displayed that variables of attitude (path coefficient = 0.539, *t*-statistics = 4.417, and *p*-values = 0.000), subjective norm (path coefficient = 0.156, *t*-statistics = 2.382, and *p*-values = 0.018), and perceived behavior control (path coefficient = 0.176, *t*-statistics = 2.162, and *p*-values = 0.031) suggesting that the three variables namely, attitude, subjective norm, and perceived behavior

control were found to have a positive and significant effect on online purchase intention. Therefore, hypotheses of H<sub>2</sub>, H<sub>3</sub>, and H<sub>4</sub> were accepted. On the other hand, attitude was found to have insignificant effect directly on online purchase intention (path coefficient = 0.113, t-statistics = 0.962, and p-values = 0.336). Thus, hypothesis 5 (H<sub>5</sub>) was not statistically supported by the results of this study.

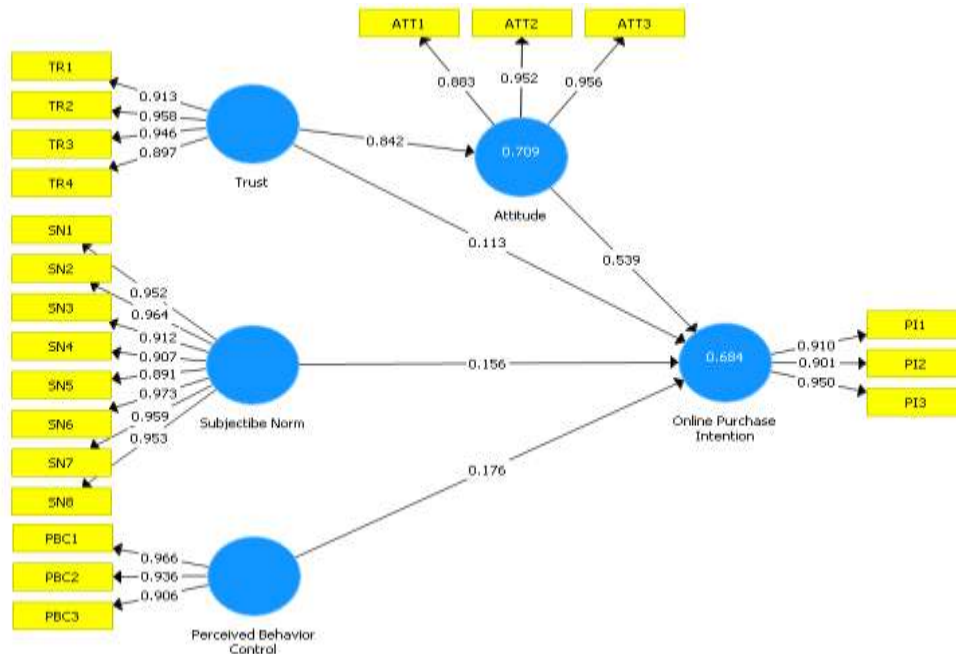


Figure 1 Path Analysis Results

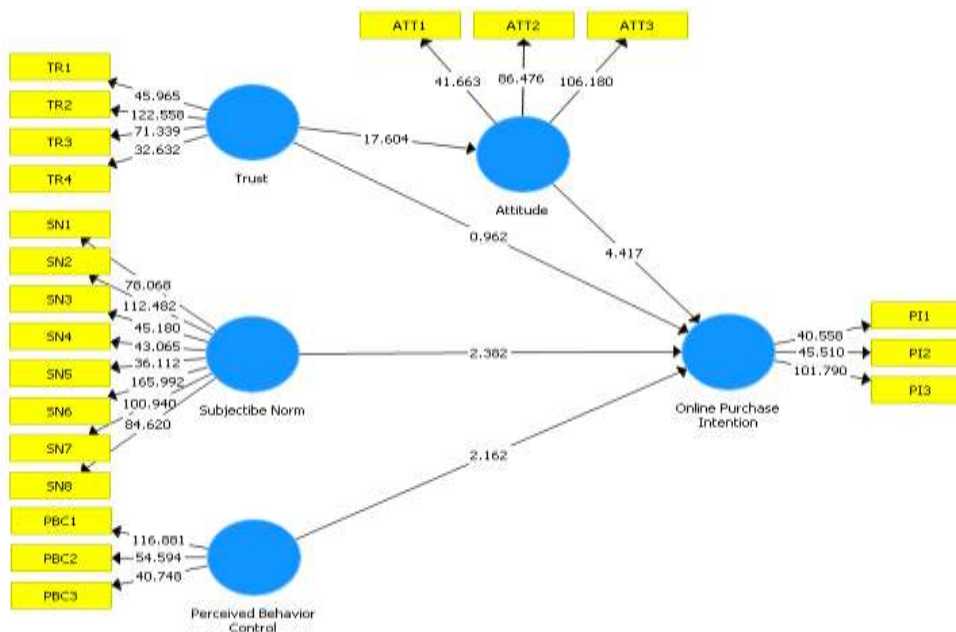


Figure 2 T-Values for the Path Analysis Results



Table 4 Hypotheses testing of the study

Direct effect	Path coefficient	t-statistics	p-values
Trust --> Attitude	0.842	17.604	0.000
Attitude --> Online Purchase Intention	0.539	4.417	0.000
Subjective Norm --> Online Purchase Intention	0.560	2.382	0.018
Perceived Behavior Control --> Online Purchase Intention	0.176	2.162	0.031
Trust --> Online Purchase Intention	0.113	0.962	0.336
Indirect effect			
Trust --> Attitude --> Online Purchase Intention	0.454	4.537	0.000

### LIMITATIONS AND DIRECTIONS FOR FUTURE RESEARCH

Prior to discussing the directions for future research, some of the study's limitations are noted. One of the limitations of this study is its cross-sectional design. The results from this investigation should be considered in this light. Taking this study as a point of departure, longitudinal research is encouraged to examine the effect of attitude as mediator over time. As such, future research should continue to monitor and evaluate the impact of attitude as mediator on the relationship between trust and online purchase intention, and the effect of subjective norm and perceived behavioral control on online purchase intention. Future research should also replicate this study in another developing country of Southeast Asia (e.g., Thailand) to see if the findings of this study can be validated using another developing country as a sampling frame.

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