

**An Empirical Study: Influencing Factors of Normative Susceptibility, Collectivism, Novelty, Value Consciousness on Consumer's Attitude towards Pirated Software in Bangkok, Thailand**

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**Abstract**

This study aimed to find a relationship between normative susceptibility, collectivism, novelty seeking, value consciousness, and consumers' attitude towards pirated software. The researcher collected the data from customers who has experienced to purchase pirated software from two locations in Bangkok metropolis. The final data were 369 respondents. Non-probability was used to find sampling unit by using quota and convenience sampling. All hypotheses were tested using Structural Equation Model (SEM). The adequate quality of model was measure by measurement model in order to use discriminant validity, convergence validity, and goodness-of-fit. The results of this study, the researcher found that normative susceptibility and collectivism were significant relationship with consumers' attitude towards pirated software. The results of novelty seeking and value consciousness were not statistical significant relationship with consumers' attitude towards pirated software.

**Keywords:** normative susceptibility, collectivism, novelty seeking, value consciousness, attitude towards pirated software

**Introduction**

Positive attitude towards pirated software has become a major problem at the global level as it becomes more difficult to change people's attitude. The major factor is value consciousness, which most customers concerned about low price, especially people in Asia . Swinyard et al. (1990) implied that Asian have more casual attitude towards software piracy more than Western countries. The researchers reported that the major problem came from people in Asia, which was supported by the data from BSA Global Software Survey in May 2016, Goff (2016) reported that the value of unlicensed software in use by region, the highest percentage from Asia-Pacific, is \$19.1 billion in cost . Asia has a high level of using pirated software. Four of the nine countries, Korea, Malaysia, Vietnam, and Thailand have the highest level of using pirated software (Prior, 2018). Based on many previous researches, normative susceptibility, collectivism, novelty seeking, and value consciousness are important factors that impact and create positive customers' attitude to buy more pirated software (Wang et al, 2005; Ang et al., 2001; Lichtenstein et al, 1990; Swinyard et al, 1990; Wee et al, 1995; Husted, 2000; Maron and Steel, 2000).

Objective of Study

The researcher aims to study the significant relationship between normative susceptibility, collectivism, novelty seeking, value consciousness and consumer attitude towards pirated software.

### Research Questions

1. Is there a statistical significant relationship between normative susceptibility and consumer attitude towards pirated software?
2. Is there any statistical significant relationship between collectivism and consumers' attitude towards pirated software?
3. Is there a statistical significant relationship between novelty seeking and customers' attitude towards pirated software?
4. Is there a statistical significant value consciousness related to consumers' attitude towards pirated software?

## Review of Literature

### Attitude towards pirated software

Attitude has been long acknowledged as the most important construct in social psychology (Allport, 1935). Arli et al. (2017) conceptualized attitude toward pirated software as customers evaluate piracy products in different degrees of illegal favorable or unfavorable feeling towards pirated software. Also, most positive consumers' attitude towards pirated software are willing to pay for the visual attributes and functions without paying for the quality of product (Grossman and Shapiro, 1988; Cordell *et al.*, 1996). Because of the lower prices, customers tend to have lower expectation of quality as long as the basic functional requirements are met or the visibility and symbolic value is achieved, consumers will be satisfied to purchase (Eisend and Schuchert-Güler, 2006). Wang et al. (2005) implied that customers tend to compare the price and quality between legal software and pirated software and may lead to be positive attitude to buy pirated software.

### Normative susceptibility

The concern of individuals is influenced by social pressure in order to make decisions to purchase product/service or based on the expert opinions. Also, customers based on the expectations of what would impress others (Penz and Stottinger, 2005). In addition, Burnkrant and Cousineau (1975) conceptualized normative susceptibility as customers try to form their character as the tendency to conform to the expectations of others, which lead to buy the product that would make good impression to others.

### Collectivism

Hui et al. (1991) emphasized that collectivism is a target specific. It could be that certain individuals are collectivistic to certain groups of people and individualistic towards others. Hofstede (2001) has also noted that countries that are more collectivistic tend to have slower economic development and the author also emphasized on Asia cultures such as

Korea, China, Thailand, Vietnam, and so on. People in Asia culture tend to score high on collectivism, while Western cultures such as USA are generally individualistic. As the cultural models have been applied to develop many researches to be theoretical foundation in explain consumer's behavior based on the individualism and collectivism construct. In collectivistic cultures, social identity is very important to people. They prefer having a tightly knit social framework, which they like to be members expect relatives, and they tend to subordinate personal goals to in-group goals, to participate in group activities.

#### Novelty seeking

Wee et al (1995) viewed novelty seeking as the desire of the individual to seek out novel stimuli and the latter represents the actual behavior induced by the individual to acquire novel stimuli. Furthermore, a person who needs the change, variety and intensity of stimulation may seek information pertaining to adopt products and consumption for improving his or her performance or satisfying his or her own desire. This rationale for novelty seeking could lead consumer to both seek information about and to the actual adoption of new or unfamiliar products (Wee et al., 1995). Also, novelty seeking is defined as a central component of motivation and acts differently in familiarity, and it is seen as a type of internal drive or motivating force the individual is activated to look for novel information (Shepherd, 2015). Hawkins et al (1980) conceptualized novelty seeking as the curiosity of individuals to seek variety and difference or novelty seeking is referred to an eagerness to experiment with new products, which is similar Wee et al.'s (1995) study who implied novelty seeking as the seeker try to search for something new, difference, and strange. Novelty seeking may arise out of consumers' satiation with product's attribute (McAlister and Pessemier, 1982). The author found the dimension of novelty seeking measured how innovative consumers were in purchasing and using new software products.

#### Value consciousness

Value consciousness refers to a concern for paying low prices, subjected to some quality constraints (Lichtenstein et al., 1990). For pirated software, price is a key element that determines the propensity to purchase these products. It was found that people tend to sacrifice ethics when the price is low enough (Albers-Miller, 1999). Value consciousness is related to the price of the product and is the extent to which the consumer perceives that the value of the product is equivalent to the cost to the consumer. Unlike other goods, pirated software has the distinctive characteristic of a public good (Gopal and Sanders, 2000). This means that most of the time, pirated software users can be able to obtain easily with at an extremely low cost.

### **Literature Review and Research Hypotheses**

Normative susceptibility and Attitude towards pirated software

Wang et al. (2005) studied about Chinese consumers in purchasing pirated software. The researchers found that there was a positive significant relationship between social image, consumers with higher susceptibility and attitude towards software piracy. However, Hsu and Shiue (2008) found positive attitude of consumers' willingness to pay for non-pirated computer software and also normative susceptibility was positively related to attitude consumers to pay for non-pirated software. In addition, there are many research evidences suggested that normative susceptibility was significant influence attitude towards pirated software (Chang, 1998; Shepherd and O'Keefe, 1984; Shimp and Kavas, 1984; Vallerand et al., 1992). Similarly, Bommer et al.'s (1987) study, the researchers stated that normative susceptibility are theorized to influence customers' attitude (Kreie and Cronan, 1999).

H<sub>1o</sub>: There is no statistical significant relationship between normative susceptibility and consumers' attitude towards pirated software.

H<sub>1a</sub>: There is a statistical significant relationship between normative susceptibility and consumers' attitude towards pirated software.

#### Collectivism and Attitude towards pirated software

Husted (2000) implied that collectivism has been discussed as one of the factors in Asian societies to positively influence consumer attitudes towards pirated products. Similarly, Shin et al. (2004) studied about sharing resources to each other, which is normal behavior regarded as a nature of collectivistic society. Software is considered to be one resource that is possible to be shared in group of a collectivistic society as someone may know that it is illegal but someone may not know that it is illegal product. Moreover, Lee and Green (1991) implied that societal norms, especially in collectivist societies, the researchers found a significant impact of collectivism on attitude towards sharing piracy products.

H<sub>2o</sub>: There is no statistical significant relationship between collectivism and consumers' attitude towards pirated software.

H<sub>2a</sub>: There is a statistical significant relationship between collectivism and consumers' attitude towards pirated software.

#### Novelty seeking and Attitude towards pirated software

Novelty seeking is curiosity of human to seek variety and difference (Hawkins et al., 1980). In an empirical study on consumer motivations to be positive attitude towards pirated software versus legal versions (Cheng et al., 1997), the researchers found that novelty seeking was significant impact positive attitude to try out the pirated software. The most important reason is cost consideration as the legal products (software) are too expensive when compare with the cost of illegal software, especially for the young age such as students, which was study by Wee et al. (1995). The researchers found a significant influence of novelty seeking on students' attitude to purchase pirated software.

H<sub>3o</sub>: There is no statistical significant relationship between novelty seeking and

consumers' attitude towards pirated software.

H<sub>3a</sub>: There is a statistical significant relationship between novelty seeking and consumers' attitude towards pirated software.

#### Value consciousness and Attitude towards pirated software

Garrestson et al. (2002) emphasized that value consciousness has a statistical significant influence consumers' attitude towards products. In consistency with this view, Tom et al. (1998) found that customers' value consciousness, they are expected a low price instead of quality, especially pirated products. Then, they tend to have positive attitude toward piracy and lead to purchase more as the products are less value or cheap price. Similarly, a study of Burton et al. (1998), the researchers reported that value consciousness is positively significant relationship with consumers' attitude towards the piracy product. In addition, Wang et al. (2005) concluded that value consciousness is the antecedence factor and positive impact consumer attitudes towards pirated software.

H<sub>4o</sub>: There is no statistical significant relationship between value consciousness and consumers' attitude towards pirated software.

H<sub>4a</sub>: There is a statistical significant relationship between value consciousness and consumers' attitude towards pirated software.

### The Conceptual Framework

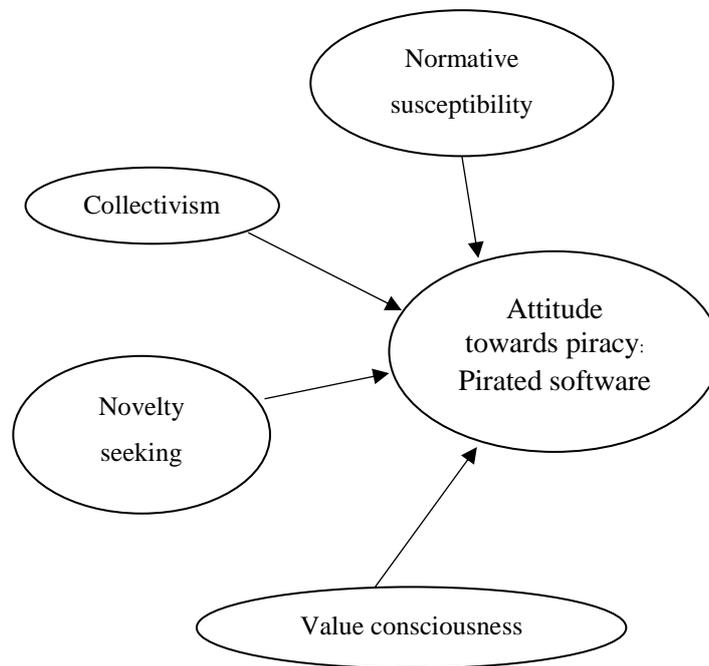


Figure 1 The Modified Conceptual Framework of An Antecedence Factors Influencing Consumer's Attitude towards Pirated Software in Bangkok, Thailand

### Research Methodology

In order to test the interrelationship among the constructs of this study, Cause-effect relationship was applied to be the research design as the ability of this technique, it can explore the connections among variables. However, Cause-effect relationship is one feature of Structural Equation Model (SEM), which is very important technique used in this study, and it is related to Confirmatory Factor Analysis (CFA) that used to test the construct of variable (Chaipoopirutana, 2018, p 107 to 108). Also, survey technique was used to collect the data in this study. The researcher collected the data in Bangkok Metropolitan from all Thai customers who had experienced to purchase pirated software. The questionnaire was translated from English to be Thai language. The data were collected from two popular locations that sell pirated software. Pantrip Plaza (Pratunam) and Fortune Town IT Mall (Rama IX) in Bangkok are both locations to distribute the questionnaire between October to November, 2017. Two techniques, quota and convenience sampling of non-probability were used to find sampling unit. The researcher collected 200 respondents of each location. Then, total sample size was 400. However, 369 respondents were appropriated data to analyze for this study. The target population of this study is consumers who have purchased illegal software in both locations.

The sample size of this study is based on many recommended by statisticians. Several researchers suggested that the sample size of 150 to 200 or larger would be more reliable (Anderson and Gerbing, 1988, Hair et al., 2006). Cooper and Schindler (2006) stated that larger sample size will provide better results. Then, the researcher used a sample size of 369 respondents. The questionnaire was designed to collect the primary data. The items in the research questionnaire of this study were adopted based on various previous studies and slightly modified to be relevant the context of pirated software. The questionnaire was designed in English, and Thai version. Also, the questionnaire was measured based on seven-points Likert scale (1=strongly disagree, 2=disagree, 3=slight disagree, 4=neutral, 5=slightly agree, 6=agree, and 7=strongly agree). The questionnaire divided to be six parts of normative susceptibility, collectivism, novelty seeking, value consciousness, attitude towards pirated software, and demographic factors. For hypothesis testing, the researcher designed to measure model by using structural model of structural equation model (SEM), which was supported by confirmatory factor analysis (CFA).

Table 1

*Goodness-of-Fit Criteria*

Goodness-of-Fit measure	Acceptable Level
1. Chi-Square to degree of freedom ratio ( $\chi^2/df$ ) or CMIN/DF	- Less than or equal 2 ( $2 \leq 2$ ) is good fit model (Ullman, 2001; and Byrne, 1998). - 2.5 is model fit (Marsh and Hocevar, 1985) - $\leq 5$ is resonable fit (Wheaton et al., 1977).
2. Root Mean Square Error of Approximation (RMSEA)	- The rang between .05 to .08 is acceptable fit, the rang 08 to .10 is moderate fit, and the values more than .10 are poor fit (Maccallum, Browne, and Sugawara, 1996, 2008). - Less than 0.07 is fitted model (Steiger, 2007). - $\leq 05$ is fitted model (Arbuckle, 2012; Awang, 2012).
3. Adjusted Goodness-of-Fit Index (AGFI)	- $\geq 0.80$ is model fit (Segars and Grover, 1993). - $> 0.8$ is acceptable, $> 0.9$ is good fit (Hair et al, 2006, Hu and Bentler, 1999, Bacon, 1997).
4 Goodness-of-Fit Index (GFI)	- $\geq 0.80$ is model fit (Segars and Grover, 1993). - At least .90 is the cutoff model and good fit at 0.95 (Schumacker and Lomax, 2004). - Close to 0.90 is fit model and good

	fit at 0.95 (Hu and Bentler, 1999).
5. Normal Fit Index (NFI)	-> .90 or close to 0.95 is model fit, and value close to 1 is perfect fit (Hair et al., 2010). -≥0.95 is good fit (Hu and Bentler, 1999).
6. Tucker-Lewis Index (TLI or NNFI)	- More than 0.90 is model fit (Schmacker and Lomax, 1996). -> .90 or close to 0.95 is model fit, and value close to 1 is perfect fit (Hair et al., 2010).
7. Comparative Fit Index (CFI)	-> 0.9 or close to 0.9 is acceptable and close to 0.95 is a good fit (Hair et al., 2006, Hu and Bentler, 1999). - Close to 1 is perfect fit (Hair et al., 1998; Anderson and Gerbing, 1988). -≥0.95 is good fit (Hu and Bentler, 1999).

Fornell and Larcker (1981) recommended that the researcher should measure discriminant validity and convergent validity before test the structural model. The convergent validity can be measured by factor loadings, composite reliability (CR), Cronbach's Alpha test (CA), and average variance extracted (AVE). All results of measurement model were presented in Table 2, 3, and 4.

### Results

To measure the quality and adequacy of the measurement model based on the recommendation by Fornell and Larcker (1981), the researcher tested the discriminant validity or divergent validity in order to measure conceptually distinct of the constructs in conceptual model as showed in Table 3 which the result based on average variance extracted (AVE) and inter-construct correlations to determine the discriminant validity of variable constructs in conceptual framework of this study. In addition, the measurement model fit indices for convergent validity were presented in Table 2, which presented four major measurements of factor loadings, composite reliability (CR), Cronbach's Alpha test (CA), and average variance extracted (AVE). As all measurement results were acceptable, the researcher continued to test the structural model, which showed the results in Table 5 and 6. For all detail are as follow:

#### Convergent Validity

The results from Table 2 were presented the convergent validity. To test the convergent validity, two reliabilities are used to measure the construct variable of the research model. Both of composite coefficient omega ( $\Omega$ ) and Cronbach coefficient alpha ( $\alpha$ ) are known as construct reliability. Composite reliability (CR) focuses on the construct, the latent variable, the factor loading, and the correlation of each indicator but Cronbach coefficient alpha test focuses on individual item to test the reliability. Nunnally and Berstein

(1994) stated that the acceptable composite reliability and Cronbach's alpha test are .70 to .80. The AVE and indicator loading or factor loading should be greater than .05 (Dillon, Goldstein, and Bagozzi, 1991).

Table 2

*Measurement model fit indices for Convergent validity*

Constructs	Indicator Loading >0.5	Cronbach Alpha (CA) >0.7	Composite Reliability (CR) >0.7	Average Variance Extracted (AVE) >0.50
Attitude on Pirated Software (PIR)		0.87	0.89	0.73
PIR1	0.96			
PIR2	0.92			
PIR3	0.66			
Normative Susceptibility (NOR)		0.8	0.80	0.56
NOR2	0.69			
NOR3	0.81			
NOR4	0.75			
Collectivism (COL)		0.80	0.82	0.6
COL2	0.67			
COL3	0.92			
COL4	0.71			
Novelty Seeking (NOV)		0.88	0.86	0.86
NOV1	0.60			
NOV2	0.68			
NOV3	0.90			
NOV4	0.90			
Value Consciousness (VAL)		0.95	0.83	0.95
VAL1	0.85			
VAL2	0.89			
VAL3	0.97			
VAL4	0.94			

The results from Table 2 indicated that all values of factor loadings, composite reliability (CR), average variance extracted (AVE), and Cronbach's Alpha test (CA) were above the minimum requirement criterion. Based on the table of measurement model fit indices for convergent validity, all indicator loadings or factor loadings of all indicators were greater than 0.50 (Yoo and Alavi, 2001), the Cronbach's Alpha of all constructs in the model are above the recommended value of 0.7 (Nunnally, 1978) as well as the composite reliability. In addition, the average extracted variance (AVE) of each construct exceeded the

recommended value of 0.50 (Fornell and Larcker, 1981). Also, Pavlou (2003) implied that if the average variance extracted (AVE) is greater than 0.7, it is supported the discriminant validity of the construct. Then, the measurement has sufficient convergent validity. In the conclusion, the result indicated that the measurement model achieved the adequate reliability, convergent validity and discriminant validity.

Table 3

*Discriminant Validity (Inter-construct correlations) of Variable Construct*

Construct	PIR	NOR	COL	NOV	VAL
PIR	0.73				
NOR	0.22	0.56			
COL	0.32	0.24	0.60		
NOV	0.13	0.57	0.225	0.61	
VAL	0.07	0.01	0.07	0.01	0.83

Based on the results from Table 3, the square root of all the AVE estimates of each variables (0.73, 0.56, 0.60, 0.61, 0.83) were greater than the inter-construct correlations. Then, the measurement has sufficient discriminant validity as the criteria recommended by Dillon, Goldstein, and Bagozzi (1991), which was supported by Pavlou (2003).

Table 4

*Fit Indices for Measurement Model*

Fit Indices	Recommended Value	Measurement Model
x <sup>2</sup> /df	< 5.00 (Hair et al., 1998)	1.224
RMSEA	< 0.08 (Hair et al., 1998)	0.027
GFI	>0.90 (Hu and Bentler, 1999)	0.957
AGFI	>0.80 (Segars and Grover, 1993)	0.993
NFI	>0.90 (Hair et al., 1998)	0.968
TLI	>0.90 (Hair et al., 1998)	0.991
CFI	>0.90 (Hair et al., 1998)	0.994
Chi-square = 118.704, df = 97, and probability level = .067		

The results from fit indices of measurement model, the Chi-square was equal to 118.704, degree of freedom 97, and the probability level at .067, which means that it was insignificant. The model was fit well as it was failed to reject null hypothesis. Other outputs of measurement model analysis, the model's goodness-of-fit is measured based on seven common model-fit measurements. The results were good fit for all fit indices as showed in Table 4 as all model-fit measure surpassed the recommended value. The result form Table 4,

$X^2/df$  or CMIN/df. was less than 2.0, which was good fitted model (Byrne, 1998). The RMSEA value at .02 was less than .08. It means good fit model (Hair et al, 1998). GFI and AGFI value were .957 and .993, respectively as recommended by Schumacker & Lomax, (2004) and Garson (2009). The authors implied that if the GFI and AGFI values are closed to 0.95, they are good fit. For the values of NFI, TLI, and CFI were .968, .991, and 0.994, respectively which mean perfect fit (Hair et al., 1998).

### Structural model

After the researcher tested all structures of measurement model, structural model was tested as showed the results in Table 5, In order to test the structural model, the results are shown in Table 5, and 6. Table 5 presented the fit indices for structural model, and Table 6 presented path analysis of Structural Equation Modeling (SEM).

Table 5

#### *Fit Indices for Structural Model*

Fit Indices	Recommended value	Structural Equation Model
CMIN/df	< 5.00 (Hair et al., 1998)	1.231
RMSEA	< 0.08 (Hair et al., 1998)	0.028
GFI	>0.90 (Hu and Bentler, 1999)	0.956
AGFI	>0.80 (Segars and Grover, 1993)	0.936
NFI	>0.90 (Hair et al., 1998)	0.967
TLI	>0.90 (Hair et al., 1998)	0.991
CFI	>0.90 (Hair et al., 1998)	0.993
Chi-square = 123.135, df = 100, probability = .058		

From Table 5, all structural outputs of fit indices were reached all recommended values such as CMIN/df (1.231 < 5), RMSEA (0.028 < 0.08), GFI (0.956 > 0.90), AGFI (0.936 > 0.80), NFI (0.967 > 0.90), TLI (0.991 > 0.90), and CFI (0.993 > 0.90). Also, the Chi-square was equal to 123.135, df = 100, and probability = .058, which was insignificant. Then, the model is fit. In order to get the fit model, the researcher applied the Mahalanobis distance technique to remove or investigate the outliers of observations that are farthest from the centroid (Mahalanobis, 1936).

As the path analysis of structural mode structural model was employed to test all hypotheses, The results are shown in Table 7.

Table 6

#### *Path analysis by Structural Equation Modeling (SEM)*

Hypothesis	Regression Weight	t-value	p-value	Result
H <sub>1a</sub> : Normative susceptibility → consumers' attitude towards pirated software.	0.264	2.319	*	Supported
H <sub>2a</sub> : Collectivism → consumers' attitude towards pirated software.	0.281	4.649	***	Supported
H <sub>3a</sub> : Novelty seeking → consumers' attitude towards pirated software.	-0.086	-0.883	0.377	Not supported
H <sub>4a</sub> : Value consciousness → consumers' attitude towards pirated software.	0.133	1.834	0.067	Not supported
<b>Notes:</b> Standardized estimates are shown; *p<0.05; ***p<0.001				

Based on the path analysis by Structural Equation Model (SEM), the researcher found that hypothesis one and two were statistical significant relationship with dependent variable as can conclude that normative susceptibility and collectivism were significant relationship with consumers' attitude towards pirated software at beta ( $\beta$ ) 0.264, and 0.281, t-value at 2.319 and 4.649, probability level at .05 and .001, respectively. However, novelty seeking and value consciousness were not statistical significant relationship with consumers' attitude towards pirated software at probability .0377 and 0.067 level, respectively.

### Conclusion

This research, the researcher aimed to find a relationship between normative susceptibility, collectivism, novelty seeking, value consciousness, and consumers' attitude towards pirated software. The data were collected in Bangkok, Thailand. Non-probability was planned to find sampling unit using convenience sampling. The researcher collected the data from customers who has experienced to purchase pirated software from two locations (Panrip, Pratunam; and Fortune Town IT Mall, Rama IX) in Bangkok metropolis. The final data were 369 respondents after used the Mahalanobis distance technique to remove the outliers of observations. All hypotheses were tested using Structural Equation Model (SEM), which was tested the adequate quality of model by measurement model in order to use discriminant validity, convergence validity, and goodness-of-fit. The majority customers were female (196, 53.1%), and male was almost similar amount of respondents (173, 46.9%), and age between 21 to 30 (143, 38.8%). Most of customers were single (244, 66.1%), and they were employees (129, 35%). Most customers' income were between 23,000 to 49,999 baht (108, 29.3%), and between 15,000 to 22,999 baht (101, 27.4%). The results from hypothesis testing, the researcher found that normative susceptibility and collectivism were significant relationship with consumers' attitude towards pirated software at the beta ( $\beta$ ) equal to 0.264, and 0.281, and probability level at .05 and .001, respectively. The results of novelty seeking and value consciousness were not statistical significant relationship with consumers' attitude towards pirated software at the probability of .0377 and 0.067 level, respectively.

### Discussion and Recommendation

Based on the results of demographic factors using descriptive analysis, the majority customers were teenager at age between 21 to 30 (143, 38.8%). At this age level of Thai culture, they are still young and mostly still stay with their family or their income still depend on their family. Then, their opinion tends to follow their parents, friends, and others. This result was supported by the result from research hypothesis testing. The researcher found that normative susceptibility and collectivism were significant relationship with consumers' attitude towards pirated software at the beta coefficient ( $\beta$ ) 0.264, and 0.281, respectively. Based on the result, collectivism is the major factor that influenced customer to have positive attitude towards pirated software. As Thailand is one of Asian country and tend to score high on collectivism, which the culture model is a major factor in explain consumer's buyer behavior based on the collectivism construct. People like to be in group and also the opinions from others are important, which was supported by Hofsted's (2001) study. Hofsted (2001) implied that collectivistic culture, social identity is very important as they prefer having a tightly knit their social and expect others in group to look after them. They tend to participate more in group activities to be more concerned with in-group interests. Based on the nature of collectivistic culture, it was supported the results of hypothesis one and two. This study is not set the culture to be the direct factor in the conceptual framework, but the researcher set collectivism to be direct relationship with attitude towards piracy. Then, future research, the researcher should consider this variable to be the direct variable in the research model. In this study, culture is a major part of collectivism. As the culture is a powerful towards people and it affects individual consumer attitudes and their decisions making to buy pirated product. However, it is not easy to change the culture. The best thing to change their attitude is knowledge.

Then, the government has to support school, college, and university to set the educational program. As people's attitude may have different degrees of acceptance towards pirated software. To understand the customer's social and their personality, the researcher should conduct and see the result that may lead to set a good strategy to educate people based on the particular segmentations of different groups. Also, the government has to set the punishment policy for the pirated software buyer and seller. Moreover, the software company should design the software protection strategy or set the anti-piracy strategy in the product and also set some strategies to protect the activators known as "cracker" as they can use the software without paying. Then, the software manufacturer(s) should set the rules or regulations of their software's license. In addition, the software company may evaluate the customer demand and may provide the strong motivation such the promotion's strategy (Bloch et al., 1993, McDonald and Roberts, 1994) or may set other marketing strategies to convince customers to buy legal software such as set a cheap price promotion on special occasions and also the software company should allow customers to deploy some new software version for free for 30 or 60 days after customers try the free legal software, they will learn the quality of full options, which may lead to change their attitude to use legal software.

As the researcher found that it is not only collectivism but also normative susceptibility, which mean that the good people do not serious to think that the pirated

software is “bad” or “illegal” or “evil” product. Also, it may mean that the outside motivation such as easy to find the place to sell, and easy to get a new version from pirate software, which cause to be more difficulty to reduce piracy. Then, the government has to set some strategies to reduce the channels to sell pirated software in the gray markets.

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