

PERCEPTION AND ATTITUDE TOWARDS ON CUSTOMER DECISION MAKING ON CANNABIS PRODUCTS IN UPPER NORTHEAST OF THAILAND.

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ABSTRACT

The purposes of this research were to; 1) study about Perception related to cannabis products, the attitude towards cannabis products, and customer decision making towards using cannabis products, 2) study about the relationship between Perception regarding cannabis products and customer decision making towards using cannabis products, 3) study about the relationship between attitude towards cannabis products and customer decision making to using cannabis products. The samples used in this study were those interested in using cannabis products whose region is in Upper Northeast of Thailand. The mean, percentage, and standard deviation were used for data analysis. The statistics was analyzed using Pearson's correlation coefficient, multiple regression analysis, and the reliability of the questionnaires, which shows that all the Cronbach Coefficient Alpha coefficient values are above 0.7.

The majority of the samples were females and they are from the support operation team. Their age is in between 20-30 and is unmarried. They are government officials and workers in state-owned enterprises. The average income is in between 1,000-20,000 Baht per month. The finding shows the mean of perception towards cannabis products, attitude towards cannabis products, and customer decision making towards using cannabis products which is equal to 2.12, 3.49, and 3.55. The hypothesis testing result shows that perception regarding cannabis products has no effect towards customer decision making to using cannabis products. However, the attitude have a positive result towards customer decision making to using cannabis products with a statistical significance, the statistical significance of beta is 0.662, ($\beta = 0.662$). This shows that those answered the questionnaires will decide to use cannabis products when they have a good attitude towards the cannabis products.

Keywords : Perception, Attitude, Decision Making, Cannabis

INTRODUCTION

The current most well-known economic botany is cannabis. It has been predicted that the medical cannabis market all over the world might possess the value of up to 5 billion USD (approx. 1.9 trillion baht) in 2025. The cannabis market in 2018 in USA possessed the value of 9.6 billion USD and will increase 3.5 ten billion USD in 2022. When comparing with the market in Canada, it will possess the value of 5.1 billion USD in 2020 (Duberstein) [2]. Nowadays, there are 40 countries worldwide that legally permit the use of medical cannabis, which is also permitted in 30 states of USA. Cannabis extract is used as a drug in a number of countries; with increasing studies supporting pros and cons of cannabis. There are some research works on cannabis strains for proper use in each particular group of symptoms,

along with animal testing. Cannabis is patented overseas, with its medical products in the forms of dried flower, oil, capsule, powder, lozenge, and inhalation; depending on symptoms of diseases or patient need (Department of Medical Service) [3].

So far there has been no research conduct on the use of medical cannabis. That is because it was previously listed in Caterogy 5 of drugs. Later on, Narcrotic Act (Vol. 7) [5] was announced and has been effective since 19 February 2019. Cannabis and Mitragnya speciose are permitted to be used for medical purposes or R&D (Narcrotic Act) [5]. The use of medical cannabis in the form of herb is to promote the use of herb for health care by users themselves; and to reduce drug import from overseas. However, defects of communication about medical cannabis are found after the permission, along with lack of presenting correct information of methods and prodecure of the use of cannabis. As a result, users get confused with its use and feel unsafe to use cannabis. Communication channels also do not cover those interested. Therefore, low perception and misperception of cannabis cause negative attitudes toward it as this group of people view that cannabis might be fatal. Now it is still illegal for to produce cannabis, except for only experiments and research conduct in some certain universities. But soon there will be the first cannabis product produced by GPO and legally distributed for patients in need. The product is in the form of sublingual drop and might be extended to other forms in the future.

For these reasons, the researcher was determined to study perception and attitudes toward cannabis products that affected decision making on the use of cannabis products for those interested. The findings will be useful to consumers for there will be cannabis products in the forms that can be used in real as needed in order to relieve symptoms and heal diseases. Besides, government and private agencies can also apply the findings from this study to design and develop cannabis products for better efficiency.

LITERATURE REVIEW

Perception

Perception is an information management process by interpretation in order to create understanding and utilization. It is up to behavior of an individual. According to literature review, the researcher suggested the concept and theory of perception by Hawkins, Best and Coney [4], describing that perception basically consists of 4 steps, i.e., exposure, attention, interpretation, and memory. The first 2 steps are perception process, which can lead to consumer decision making and consumption. To apply this concept for questionnaire design, the researcher set the 4 steps of perception as follows.

1. Exposure: It is the first step for choosing communication channels. An individual expose to media and information from various sources for problem solving or satisfying his/her needs.

2. Attention: An individual tends to pay attention to perceive information from a certain source, frequently based on opinions or interest to support his/her attitudes and beliefs; and avoids information not in line with his/her attitudes and beliefs

3. Interpretation: When an individual exposes to information from a certain source, the receiver might choose to perceive and interpret messages based on his/her experiences, understanding, attitudes, and needs.

4. Memory: This step occurs after perception, attention, and interpretation in line with understanding and attitudes of an individual. Important or necessary contents are memorized as ones of experiences of that individual.

Attitudes

An attitude is a feeling and belief occurred from understanding of that certain thing. The feeling is expressed in both positive and negative ways, which might or might not have effects on actions. According to literature review, the researcher applied the concept and theory of attitudes by Solomon [6] (cited in Bhattaraporn Senkraigul) [1], describing that attitudes consist of 3 components, i.e., cognition, affect, and behavior. He defined attitudes and created ABC model of attitudes. The model relies on the relationships among feeling, understanding, and behavior without putting in order but up to the levels of motivation and other factors. This brought the emergence of the hierarchy of effects in the 3 different forms for questionnaire design. The researcher set the 3 components of attitudes as follows.

1. Cognition: It consists of consumer beliefs to toward objects. Most attitudes of common people usually contain amounts of beliefs.
2. Affect: It is emotional responses, a positive and negative feeling toward a certain thing. Consumers will estimate by showing like or dislike.
3. Behavior: It is a likelihood of behavior or response to that certain object or activity.

Decision Making

Decision making is to choose the best things to ourselves through thinking process and the most careful consideration of pros and cons. According to literature review, the researcher applied the concept and theory of decision making by Till & Busler [7], describing the hypothesis of matching that physical attractiveness, expertise, and product suitability have effects on product reliability, attitudes toward products, and purchase intention. They classified purchase decision into 3 levels as follows.

1. Purchase likelihood: Post-perception towards different aspects of a product through decision making process until need for purchase occurs but no purchase yet. However, purchase may occur or not in the future.
2. Purchase possibility: Decision making process of purchase or no purchase. If there is additional information of interested products, purchase might occur in the future.
3. Purchase decision: The step of purchase decision based on information relevant to decision making process in different aspects at a certain time, finally resulting in purchase.

CONCEPTUAL MODEL AND HYPOTHESES

Objectives

1. To study perception toward cannabis products, attitudes toward cannabis products, and decision making on the use of cannabis products for those interested.
2. To study the relationship between perception toward cannabis products and decision making on the use of cannabis products for those interested.
3. To study the relationship between attitudes toward cannabis products and decision making on the use of cannabis products for those interested.

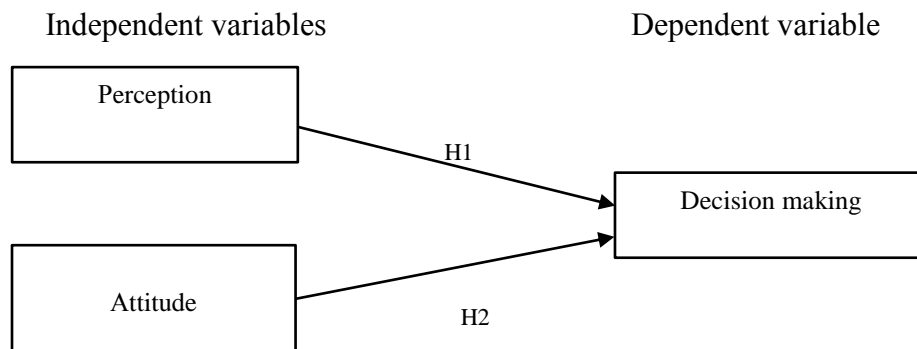
Hypotheses

H1: Perception toward cannabis products related to decision making on the use of cannabis products for those interested.

H2: Attitudes toward cannabis products related to decision making on the use of cannabis products for those interested.

Regarding the variables, the independent variables and the dependent variable were set as follows. The independent variables were need for cannabis products, perception, and attitudes. The dependent variable was decision making on the use of cannabis products.

Figure 1
Research Conceptual Model



RESULT

This is a survey research. The population included those interested in cannabis products in the Upper Northeast of Thailand, totally 12 provinces, i.e., Udon Thani, Nong Bua Lam Phu, Nong Khao, Loei, Bueng Kan, Sakon Nakhon, Nakhon Phanom, Kalasin, Mukdahan, Khon Kaen, Maha Sarakham, and Roi Et. The samples were obtained by quota sampling due to large sample size and the exact number was unknown. The sample size was calculated by the formula of W.G.Cochran for unknown sample size, with 95% reliability and 5% error.

The calculation formula in this research:

$$n = \frac{P(1-P)Z^2}{E^2}$$

when n = Sample size

P = Population proportion by quota sampling (.50)

Z = Reliability level; $Z=1.96$ at 95% reliability (Level .05)

E = Maximum error (.05)

The sample size used included at least 384 samples so that percentage could be calculated. The acceptable error must not be over 5% at 95% reliability. So, for the convenience in evaluation and data analysis, 400 samples were used.

To test the instruments, validity and reliability was brought for the test. The instrument quality was tested by statistical calculation of Cronbach's alpha coefficient (α) for testing questionnaire quality to find out whether or not each item is related to one another. The reliability was expected over 0.7 (Hair et al, 2006), displayed in Table 1.

Table 1
Reliability analysis

Variables	Cronbach's alpha
1. Perception	0.87
2. Attitudes	0.85
3. decision making	0.89

Data analysis of the respondents by the descriptive statistics included frequency, percentage, mean, and S.D.

Multiple regression analysis was an inferential statistic used in data analysis to find perception and attitudes toward cannabis products that affected decision making on the use of cannabis products. The findings could significantly analyze the data, with 95% reliability.

Part 1: This part was about personal data of the respondents. It was found that most of the respondents were female (72.0%), age between 20 – 30 years (37.5%), single (62.5%), with bachelor’s degrees (50.0%), government officers/state enterprise officers (60.0%), and received income between 10,000-20,000 baht (32.5%).

Part 2: The findings of perception revealed that most of the respondents perceived information of cannabis products through social media, e.g., Facebook (37.5%). They perceived information of treatment (82.5%). They mostly perceived the products as a drug (72.5%). And time of their perception was between 18.01-22.00 p.m. (50.0%).

Part 3: This part included the findings of customer opinions toward perception in Part 2, attitudes, and decision making (Mean = 3.58, 3.50, and 3.55, respectively).

With respect to the statistical analysis for hypothesis testing in order to study the effects of the factors in the research by Pearson’s correlation coefficient for the relationships among the independent variables, structural equation analysis, and correlation testing, it was found that they significantly related to one another; by finding validity through factor analysis. Factor loading of the variables was tested by varimax. It was found that all variables were loaded as 1 component. This meant all of them possessed construct validity. Hypothesis testing was concluded as follows.

Table 2
Correlation coefficient among perception, attitudes, and decision making

(N=400)

Variable	Perception	Attitudes	Decision Making
MEAN	2.21	3.49	3.55
S.D.	0.25	0.58	0.56
Perception	1		
Attitudes	0.540**	1	
Decision making	0.487**	0.662**	1

** P value < 0.01 (Statistical significance of 0.01)

Table 2 demonstrated that the relationships among all relevant variables, specifically between the independent variables, must not be over 0.80 (Hair et al. 2010). According to the table, it was found that perception and attitudes were below 0.80; and thus no multicollinearity occurred. As a result, no problem was found in the relationship between the independent variables. The relationships among perception, attitudes, and decision making revealed that perception and attitudes significantly related to decision making ($p < 0.01$). Perception moderately related to decision making ($r=0.487$, $p < 0.01$). Attitudes highly related to decision making ($r=0.662$, $p < 0.01$). Therefore, structural equation analysis based on the hypotheses could be done by linear regression.

Table 3
The results of hypothesis testing by simple linear regression

Model	Unstandardized Coefficients		Standardized Coefficients	Adjusted R ²	S.E.E	F	t	Sig.
	Beta	Std. Error	Beta (β)					
H1: Perception → Decision Making	1.067	0.311	0.487	0.217	0.501	11.79	3.434	0.001
H2: Attitude → Decision Making	0.643	0.118	0.662	0.424	0.429	29.70	5.45	0.000

** P value < 0.0 (Statistical significance of 0.01)

Table 3 displayed the results of hypothesis testing by simple linear regression. It was found that perception positively related to decision making at the significance level of .01 ($p < 0.01$); with coefficient (β) of 0.487. Therefore, H1 was accepted. This implied that perception and decision making related to each other in the same way. To clarify, decision making altered in line with the amount of perception of the samples. The findings of this research explained that higher perception affected higher decision making. And attitudes positively related to decision making at the significance level of .01 ($p < 0.01$); with coefficient (β) of 0.662. Therefore, H2 was accepted. This implied attitudes and decision making related to each other in the same way. To clarify, decision making altered in line with attitudes of the samples. The findings of this research explained that positive attitudes affected higher decision making. This could be concluded that perception and attitudes affected decision making; and significantly had positive influences.

Table 4
The results of hypothesis testing by multiple linear regression

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	Beta	Std. Error	Beta (β)		
: Perception	0.376	0.321	0.171	1.171	0.249
: Attitude	0.537	0.142	0.553	3.773	0.001
Adjusted R² = 42 %			S.E.E = 0.43084		F = 10.466
Dependent: Decision Making					

** P value < 0.05 (Statistical significance of 0.05)

Table 4 displayed the results of hypothesis testing by multiple linear regression. It was found that only one variable had the relationship, i.e., attitudes positively related to decision making at the significance level of .01 ($p < 0.01$); with coefficient (β) of 0.553. Therefore, H2 was accepted. This implied that attitudes and decision making related to each other in the same way. To clarify, good attitudes affected decision making more

CONCLUSIONS

This research was aimed to study perception and attitudes that affected decision making on the use of cannabis products in the Upper Northeast. The findings revealed that the variables related to one another when they were tested based on the hypotheses; with significantly positive influences. However, when they were tested in pairs or in group, only one variable was found having the relationship, i.e., attitudes and decision making related to each other in the same way; implying that good attitudes affected decision making more. Attitudes with positive effects included cognition (acknowledgement of pros and cons of

cannabis, treatment by cannabis, how to use, and limitations), affect (better living of patients and safety of cannabis use), and behavior (decision making when acknowledging product properties, searching for information, and recommendations from people around).

Hence, the recommendation from the findings for manufacturers, importers, and distributors is that they should present positive information, benefits, and facts of cannabis; including treatment outcomes from cannabis products. Moreover, manufacturers, importers, and distributors should improve the products to meet international standards. Also, the available products should be extended to be more various, with attractive forms and reasonable prices so that those interested will have good attitudes towards the products and finally decide to purchase.

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