## APPLICATION OF THEORY OF PLANNED BEHAVIOR IN CONSUM-ERS' PURCHASE DECISION OF CATS AND DOGS FOOD PRODUCTS

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#### **ABSTRACT**

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**Research Aims:** This research was conducted to analyze the influence of Theory of Planned Behaviour in determining the consumers' purchase behaviour of cats and dogs food products.

**Design/methodology/approach:** The constructs used in the research model are attitude, subjective norms, Perceived Behavioural Control (PBC), intention, and behaviour. The research model was added with self-identity and social norms constructs. Respondents of this research were 300 cats and dogs owners. Data was collected through online questionnaires. Data analysis was conducted using Structural Equation Modeling (SEM) with LISREL version 8.8 as the software analysis tool.

**Research Findings:** The results showed that attitude, subjective norms, Perceived Behavioural Control (PBC), self-identity and social norms influenced the purchase intention of cats and dogs food products. In addition, the intention to buy cats and dogs food products also influenced consumers' purchasing behaviour.

**Theoretical Contribution/Originality:** This study supports the alignment of the theory of planned behaviour (TPB) to the marketing of dog and cat food products.

**Practitioner/Policy Implication:** From the results obtained, there were some practical suggestions such as improving the attitude of the dog or cat owner by providing promotions.

**Research limitation/Implications:** Some improvements in next research can be done by using other theories in consumer behaviour and develop a more extensive research model by adding variables or factors that can influence consumer behavioural intention in product purchases.

**Keywords**: Theory of planned behaviour; Self-identity; Social norms; Purchasing behaviour, Cat food, Dog food

### INTRODUCTION

People's desire to keep a pet, especially dogs and cats, is increasing at this time. Pets market share in Indonesia reached 15.6% in Southeast Asia. According to that number, Indonesia can be said to be one of the countries with quite a high number of pets and has a great opportunity to bring the pet food industry to the country. This fact is supported by data showing that the market share of pet foods based on its type, namely dog food has a percentage of 51.8%, cat food has a percentage of 20.2%, related pet products has a percentage of 16.9 % and other products has a percentage of 11.1%. From the data, only 5% are local products, while the remaining 95% is an international product (Syarif, 2016). The data show that only a few domestic products competing in the pet sector. Currently, there are already many brands of dog and cat food products in Indonesia, so in marketing practices, marketers must be able to identify the factors that determine consumer behavior in purchasing dog and cat food products.

The primary objective of this study was to use the theory developed by Ajzen (1985) called the Theory of Planned Behavior. through the theory explained that for an individual to create a behavior, then individual intention influences behavior. Several factors affect the individual intention to create a behavior; these are attitude, subjective norm, and perceived behavioral control. In the buying decision process, a consumer will also consider the personal statement that they want to show through the products they use and consumers will notice the fit between social norms with the intention of buying it. Therefore, self-identity and social norm is also a factor that must be considered to be influential in determining the intention of consumer behavior.

## LITERATURE REVIEW

The theory of planned behaviour was developed by Ajzen (1985) to complement the theory of reasoned action which was first introduced by Fishbein and Ajzen (1975). The theory of planned behaviour focuses on one's intention to perform certain behaviours. To see the factors that motivate someone to behave, intention is considered to be used as an indication to measure how much effort someone has and how much someone's willingness to try to do a behaviour.

According to (Ajzen, 1991) the first variable that influences a person's intention to behave is the attitude variable, an individual will have the intention to perform a certain behaviour when that individual gives a positive attitude to the behaviour. Someone will tend to give positive or negative responses to an object, person, institution or event. This shows their attitude towards a behaviour. In supporting the intention to perform a behaviour, a person needs a recognition factor of social pressure which is a subjective norm variable (Luthans, Kinicki, & Kreitner, 2001). Subjective norms are a benefit that has a basis for one's belief in a particular object called the normative belief (Ajzen, 2005). The influence of normative belief which is a belief in the understanding and disagreement of family, friends, work relations and other social influences will affect one's intention to perform a behaviour (Ajzen, 2006).

Someone needs trust to be able to have the intention to do a behaviour. To find out how simple or complex it is to implement a behaviour, the perceived behavioural control variable is used (Hogg & Vaughan, 2005). Perceived behavioural control will provide an understanding of the simple or complex way of doing a behaviour based on previous experience and obstacles that can be sought for a solution in performing a behaviour (Feldman, 1985). Perceived behavioural control will strongly support someone who has attitudes and subjective norms in carrying out a particular behaviour.

The variable of one's self-identity is something that is worth considering in influencing one's intention to perform a certain behaviour. The inclusion of self-identity variables in the Theory of planned behaviour model comes from the assumption that each community has its own choices regarding the identity it wants to show in buying a product, including people's choices for food obtained for their pets (Sparks & Shepherd, 1992). Social norms that apply in the group where a person comes from will be able to become variables that support one's intention to perform a behavior. A person can change their attitudes and behavior to conform the prevailing social norms (Baron, Byrne, & Branscombe, 2006).

The intention to perform a certain behavior is the main factor in the creation of a behavior in the theory of planned behavior, intention is a factor that motivates someone in performing a behavior. The size of one's efforts in carrying out a behavior can be seen through one's intentions. The higher one's intention to perform a behavior, the higher the person's tendency to perform the behavior. If the behavior carried out is under the control of the person then the intention to behave can be the actual behavior (Ajzen, 1991).

## RESEARCH METHOD

The theoretical model for this research (Fig. 1) amplifies the original TPB, including the self-identity and social norms as another antecedent of the intention. Hence, we considered the constructs of the original model by Ajzen (1991): the behaviour, the intention and its three determinants, attitude, subjective norms and PBC. As a contribution to the explanatory power of TPB, we added self-identity and social norms as antecedent of intention on the behaviour of consumers in the purchasing of dog and cat food products.

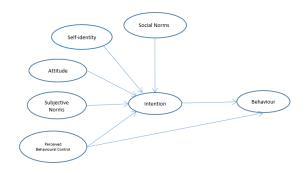


Figure 1 - Research Model

The influence of attitude on behavioural intention refers to the extent to which a person has a favourable or unfavourable attitude from the behaviour being analyzed (Ajzen 1991, 2001). Several studies have shown that the attitudes and behaviour of parents in their environment by purchasing food for their children will affect their children's health (Soares, JR. Et.al., 2019). The majority of the attitudes of dog and cat owners have in common with the attitudes of parents towards their children, in the sense that the positive attitude of dog and cat owners to buy dog or cat food can affect the health of their dogs or cats. Thus, the research hypothesis formulated is:

H<sub>1</sub>: Owners positive attitude toward purchasing dog and cat food products for their pets positively influences their intention to buy them.

Theory of planned behaviour argues that there is a relationship between subjective norms (perceived social pressure) and one's intention to behave. In other words, the opinion of the community and those close to the person who will carry out the behaviour is a determining factor for the occurrence or failure of a behaviour (Ajzen, 2001). Based on this theory, it shows that the physical and social environment tends to influence consumers' intentions to buy dogs or cats food products. Thus the hypothesis that is formed is:

H<sub>2</sub>: The subjective norms of the owners positively influence the intention to purchase dog and cat food products for their pets.

Perceived Behavioural Control (PBC) refers to a person's perception of the ease or difficulty of carrying out a behaviour (Ajzen, 1991). According to Ajzen (2001) Perceived Behavioural Control can be divided into two, namely the perception of self-efficacy (ease or barriers to doing behaviour) and perception of control, which refers to the extent to which performance depends on the individual. Thus it can be said that the perception of how easy or difficult a behaviour is will be influenced by the perception of a person's ability to achieve that behaviour. Perceived Behavioural Control can affect consumer intentions and behaviour in purchasing finished food products for dogs or cats. Thus, the research hypothesis is as follows:

 $H_{3a}$ : The perceived behavioural control of owners positively influences the intention to purchase dog and cat food products for their pets.

H<sub>3b</sub>: The perceived behavioural control of owners positively influences the behaviour of purchasing dog and cat food products for their pets

The intention to do a certain behaviour is a major factor in creating a behaviour in the Theory Of Planned Behaviour. Intention is a factor that motivates a person to perform a behaviour. The measure of a person's effort in carrying out a behaviour can be seen through one's intention (Ajzen, 1991). So it can be

said that the greater the consumer's intention to buy finished food products for dogs or cats, the greater the tendency for these consumers to make purchases. Thus, the research hypothesis that is formed is:

H<sub>4</sub>: The behavioural intention of the owners positively influences the behaviour of purchasing dog and cat food products for their pets

Through self-identity, individuals seek to be included in the group they want most, namely, where members of this group make choices that reinforce perceptions (Whitmarsh and O'Neill, 2010). A UK study involving organic food consumers showed that self-identity has a direct impact on intentions and behaviour (Sparks and Shepherd 1992). In view of this argument, it is possible to assume that the identity of dog and cat owners as an animal owner who will provide nutritionally guaranteed food through dogs or cats food products will influence their intention to purchase finished food products for dogs or cats. Thus, the proposed research hypothesis is:

H<sub>5</sub>: Owners self-identity positively influences their behavioural intent to buy dog and cat food products for their pets

According to Yue and Zhou (2008) a person's intention to buy a product will be influenced by the social norms prevailing in the group around him. The direct or indirect effect of the group from which a person comes will affect the buying behaviour of a consumer (Kotler and Keller, 2008). So it can be assumed that the consumer's intention to buy dogs or cats food products can be influenced by the social norms of the other pet owners in the vicinity who provide food products for their dogs or cats. Thus, the research hypothesis is as follows:

H<sub>6</sub>: Owners social norms positively influences their behavioural intent to buy dog and cat food products for their pets

In order to identify the factors that determine the consumer behavior of buying dog and cat food products, we developed a descriptive, quantitative research using a non-probability sampling method. The type of non-probability sampling method in this study is snowball sampling and convenience sampling. This study used a sample of 300 people in Indonesia. The population in this study were respondents who raised dogs and cats for a minimum of 3 months and purchased dog and cat food products marketed in Indonesia. We performed the data collection through a questionnaire using an online platform. The questionnaire was developed based on the modification of previous instruments developed by several authors such as Armitge and Conner (1999), Junior, Zucolonto, Andre, and Mainardes (2019) and Fang, Ng, Wang and Hsu (2017). The measurement of items in the survey questionnaire was based on six-point Likert scales with 1 demonstrating "strongly disagree" up to 6 demonstrating "strongly agree". List of indicators is available in Appendix 1.

To verify the validity and reliability of the content of the questionnaire, we performed a pre-test with 30 respondents using SPSS 11.5 software. The validity of each set of constructs has a factor loadings ranged between .52 and .97 and the reliability of each set of constructs has a Cronbach value ranged between .84 and .93. There were no problems in the pre-test, revealing the respondents' understanding of what was being questioned.

Data from 300 dog and cat owners were analyzed using structural equation model using LISREL 8.8 Full Version software to test the hypotheses. This analysis is carried out to study the relationship between complex variables both recursive and non-recursive to obtain an overall picture of a model and to analyze the relationship simultaneously between one or several independent variables with one or several dependent variables.

## RESULT AND DISCUSSION

Based on the results of the questionnaire obtained from 300 respondents, the results were quite balanced between 135 men (45%) and 165 female respondents (55%). Respondents were dominated by the age range of 25-34 years with a total of 159 people (53%), 105 people aged 35-49 years (35%), the rest aged 17-24 years amounting to 36 people (12%) and no respondent was 50 years and over on this study. Most respondents are students with a total of 114 people (38%), then private / self-employed employees amounting to 96 people (32%), other jobs a total of 36 people (12%), BUMN employees a total of 24 people

(8%), 18 civil servants (6%), and the rest 12 are housewives (4%). The majority of respondents have domiciles in the JABODETABEK area a total of 216 people (72%) while the rest live outside JABODETABEK as many as 84 people (28%). There are 138 owners of dogs (46%), 120 owners of cats (40%) and 42 owners of dogs and cats (14%). From 300 respondents who own dogs or cats, only 12 (4%) who known local brands of dog or cat food products and 288 people (96%) admit that they do not know dog or cat food products that are local brands. Other results obtained that 294 respondents (98%) was interested in buying dog or cat food products which are local brands and 6 other people (2%) were not interested.

The measurement model needs to be tested for its validity using questionnaire data from 300 respondents. The results shows all indicators in this research study are declared valid because they have a standardized loading factor  $\geq 0.50$  and all variables have a construct reliability of more than 0.70 with variance extracted more than 0.50. So it can be concluded that the indicators in in this research study are valid and reliable.

The fit test of the whole model can be seen using several indicators in the Goodness of Fit (GOF), where the model data results are matched with standard values to meet the minimum requirements that are good. Based on the results of the analysis, it was found that most of the suitability levels of the research model were good, where out of a total of 9 indicators of Goodness of Fit (GOF), only one indicator had unsuitable results, namely Std RMR and 8 other indicators had good compatibility results. So that the research model can be used to measure the relationship between latent variables and observed variables because the research model is included in the Good Fit category.

The next analysis is to test the research hypothesis in its structural model using LISREL 8.8 Full Version. Model testing is done to find out how the relationship between variables. With this test it will be known whether the research model hypothesis is accepted or rejected. The conclusion table of the hypothesis test is available in appendix 2.

From seven hypotheses, there are six accepted hypotheses, namely H1, H2, H3a, H4, H5 and H6. Meanwhile, one hypothesis rejected is

H3b. It can be concluded that the intention to purchase dogs or cats food products is influenced by Attitude (t-value = 2.20), Subjective Norms (t-value = 2.36), Perceived Behavioral Control (t-value = 2.79), Self-Identity (t-value = 3.75), and Social Norms (t-value = 5.91). All variables that increase intention have a t-value greater than t table (1,645) at a significance level of 5%.

Consumer perceived behavioral control does not have a direct significant influence on the behavior of buying food products for their dogs or cats with a t-value of -0.26 (less than 1.96 at a significance level of 5%) which indicates that the hypothesis is rejected. Meanwhile the behavior of purchasing food products for dogs or cats is influenced by Intention (t-value = 39.81) with t-value greater than t table (1,645) at a significance level of 5%.

Through the results obtained it can be said that increasing the attitude, subjective norms, perceived behavioral control, self-identity and social norms of dog and cat owners can increase the intention of dog and cat owners to buy dog and cat food products. Here are some things that dog and cat food product marketers can do in Indonesia based on the results of this study include:

Improving the attitude of the dog or cat owner by providing promotions that raise the awareness of the dog or cat owner about the importance of providing the right nutrition that is available in ready-made food products for their dog or cat.

Improving the subjective norms of dog or cat owners by offering attractive offers for sales of dog and cat food products such as attractive discounts or gifts, so that consumers can influence those closest to them who are also dog or cat owners to buy dog and cat food products.

Improving the perceived behavioral control of dog or cat owner by providing ease of getting dog and cat food products, affordable prices and good product quality.

Improving the intention of dog or cat owners by holding events, providing education, counseling, and promoting attractive advertisements about the importance of buying dog and cat food products.

Improving the self-identity of the dog or cat owner by creating advertisements that illustrate the risks that their dogs or cats can experience if food is not guaranteed to be nutritional and quality, so that the dog or cat owner can increase their sense of concern and have an self-identity as an owner who will always provide quality finished food products for dog and cat.

Improving the social norms of dog or cat owners by endorsing public figures who maintain dogs or cats and collaborating with veterinarians to be able to provide education about the importance of providing proper nutrition contained in processed food products for dog and cat

#### **CONCLUSION**

The objective of this study is to identify the factors that determine the behavior of purchasing dog or cat food products. The results suggest that the Theory of Planned Behavior appears to be a theoretical approach that can contribute explaining the behavior of dog or cat owners in purchasing dog or cat food prod-

ucts. However, such a theory requires adjustments. First, we found no direct relationship between perceived behavioral control with behavior. Another point was that we observed that self-identity and social norms seems to fit well in Theory of Planned Behavior. Therefore, we can conclude that creating attitudes, subjective norms, perceived behavioral control, self-identity and social norms can create the intention of dog or cat owners to provide food products for their dog or cat.

The results of this study may not be able to predict the actual consumer behavior of dog and cat food products in the next few years because there is a time-lapsed in Theory of Planned Behavior. In connection with the limitations of research, then some improvements that can be done by further research is to use other theories that can be a source of research on consumer behavior and develop a research model by adding any variables or factors that can influence attitudes, subjective norms, perceived behavioral control, self-identity and social norms in related to consumer behavioral intention in product purchases.

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# **APPENDIX**

Table 1. Research constructs and indicators

Construct	Code	Indicators/Statements	
Construct	AT 1	Buying dog/cat food products for my dog/cat next month will be very good	
Attitude	AT 2	Buying dog/cat food products for my dog/cat next month will be beneficial	
	AT 3	Buying dog/cat food products for my dog/cat next month will be enjoyable	
	AT 4		
		Buying dog/cat food products for my dog/cat next month will be fun	
	AT 5	Buying dog/cat food products for my dog/cat next month will be helpful	
	AT 6	Buying dog/cat food products for my dog/cat next month will be necessary	
Subjective Norms	SN 1	In relation to buying dog/cat food products for my dog/cat, people who are important to me think I should buy it	
	SN 2	In relation to buying dog/cat food products for my dog/cat, people who are important to me approve of my purchase	
	SN 3	People who are important to me want me to buy dog/cat food products for my dog/cat	
	SN 4	I feel under social pressure to buy dog/cat food products for my dog/cat	
	PBC 1	It is up to me to buy dog/cat food products for my dog/cat	
	PBC 2	I have a full sense of control over buying dog/cat food products for my dog/cat	
	PBC 3	I feel it is beyond my control to buy dog/cat food products for my dog/cat ®	
Perceived Behavioral	PBC 4	I believe I have the ability to buy dog/cat food products for my dog/cat	
Control	PBC 5	I feel able to buy dog/cat food products for my dog/cat	
Control	PBC 6	I am confident that I will be able to buy dog/cat food products for my dog/cat	
	PBC 7	If it is up to me alone. I am confident that I am able to buy dog/cat food products for my dog/cat	
	SI 1	I think of myself as a person who buys dog/cat food products for my dog/cat	
Self-Identity	SI 2	I think of myself as someone who is concerned about the healthy eating of my dog/cat	
	SI 3	I think of myself as someone who is concerned about the health consequences of feeding my dog/cat	
	SI 4	I think of myself as someone who buys tasty food for my dog/cat	
	SCN 1	pet owners around me buy dog/cat food products for their dog/cat	
Social Norms	SCN 2	I am willing to follow the suggestion of animal health experts to buy dog/cat food products for my dog/cat	
	SCN 3	My family and friends buy dog/cat food products for their dog/cat	
	IN 1	I think about buying dog/cat food products for my dog/cat next month	
Intention	IN 2	I plan to buy dog/cat food products for my dog/cat next month	
	IN 3	I want to buy dog/cat food products for my dog/cat next month	
Behavior	BE 1	I have continually purchased dog/cat food products for my dog/cat	
	BE 2	I bought dog/cat food products for my dog/cat last	
	BE 3	My behavior regarding the purchase of dog/cat food products for my dog/cat is: I am buying and I have been doing this for a long time	

Table 2. Research Hypothesis Test Results

Hypothesis	Path	T-Value	Results
H1	Attitude → Intention	2.20	Accepted
H2	Subjective Norms → Intention	2.36	Accepted
НЗа	Perceived Behavioral Control → Intention	2,79	Accepted
НЗЬ	Perceived Behavioral Control → Behavior	-0,32	Rejected
H4	Intention → Behavior	39,81	Accepted
Н5	Self-Identity → Intention	3,75	Accepted
Н6	Social Norms → Intention	5,91	Accepted