

TO BUY OR NOT TO BUY? THE CORRELATION BETWEEN THE INTENTION AND BEHAVIOR OF CONSUMERS IN PURCHASING ORGANIC PRODUCTS AND THE IMPLICATION ON POLICY

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Abstract: The purpose of this paper aims to probe into the background variables and attitude, subjective norm, perceived behavior control, purchase intention and green consumption behavior, and to apply the theory of planned behavior to dive into the correlations among attitude, subjective norm, perceived behavior control, purchase intention and green consumption behavior. The research result shows: (1) attitude, subjective norm and perceived behavior control can predict the purchase intention individually or as a whole; (2) purchase intention can significantly predict the green consumption behavior. The conclusion of this study not only applies the theory of planned behavior in the discussion of organic product consumers' purchase intention, but also offers an explanation for the fact that the consumers of organic products perform more of actual actions of green consumption.

Keyword: Theory of Planned Behavior, Green Consumption Behavior, Organic Product

I. INTRODUCTION

The market of organic products nowadays has become the most thriving agricultural economy and one of the economies that grow rapidly in the world. According to the Annual Report on the global organic agriculture released in 2017 by the Research Institute of Organic Agriculture (FiBL), the organic agriculture worldwide continues to develop positively over the past years, including increased consumer demand (by 14.7% of growth rate). Also, the number of countries engaging in organic farming rose to 179. The organic farming worldwide had covered an area of 50.9 million hectares by the end of 2015 with 7.5 billion euros worth of the organic products' market value (Research Institute of Organic Agriculture, FiBL, 2017). Thus, people's demand for "organic products" is increasing. In terms of

healthcare and prevention, choosing organic products seems to be a rational decision. (Grankvist and Biel, 2001; Magnusson *et al.*, 2001; Torjusen, 1999) The main motivation of this study, with the theory of planned behavior, is to investigate if there is any correlation among variables, the impact of such and organic product consumers' purchase intention. Hence, the paper will base itself on organic products and explore the correlation between consumer's purchase intention and consumption behavior. The purposes of this research are as followed:

1. Explores the influences of different backgrounds on organic product consumer's purchase intention and green consumption behavior;
2. Applies the theory of planned behavior to see the attitude, subjective norm, locus of control and the effect to the purchase intention;

3. Investigates the correlation between organic product consumer's purchase intention and green consumption behavior.

(Boldero, 1995; Taylor and Todd, 1995) and to green consumption (Sparks and Shepherd, 1992; Sparks, Shepherd, and Frewer, 1995).

II. LITERATURE REVIEW

Among the literature related to individual's behavioral patterns, the most widely employed theory is the Theory of Planned Behavior (TPB). Ajzen (1985) argued that individual's intention to carry out certain behavior is mostly subjected to attitude, subjective norm and perceived behavior control. If an individual carry out a behavior with a more positive attitude and subjective norm, along with better perceived behavior control, the individual will demonstrate stronger behavioral intention. The core of the theory of planned behavior lies in the willingness of individual to carry out behavior. The level of willingness will influence whether an individual should carry certain behavior. The stronger the willingness is, the more likely the behavior will be demonstrated (Ajzen, 1991). Based on the theory of planned behavior, there are three deciding factors to behavioral intention. Kassarijan (1971) found that the more a consumer cares about environmental pollution, the more amount the consumer is willing to spend on green products. The recent studies also suggest that the ones that are more concerned themselves with environmental protection information, the higher their willingness to afford more expensive consumption will be (Manaktola and Jauhari, 2007; Vieregge *et al.*, 2007). Ajzen (1985) argued that the personal behavioral attitude affects the intention. The more positive the attitude is, the higher the behavioral intention will be. In contrast, the more negative the attitude of individual's behavior is, the lower the behavioral intention will be. Next, the higher the subjective norm is, the higher the perceived social pressure will be, and so the inclination to such behavior will be as well. That is to say, the behavioral intention will be higher as well. Third, in terms of perceived behavior control, if an individual considers certain factors as force to push him/her to carry out that action, and that the individual can manipulate these factors, the perceived behavior control will be stronger, encouraging him/her to be keen to perform such behavior. Many studies have applied such theory onto the issues of environmental behaviors, such as applying the theory of planned behavior to recycling

III. METHODOLOGY

The main purpose of this study is to apply the theory of planned behavior to the investigation of the influences of attitude, subjective norm and perceived behavior control to consumer's intention to purchase organic products as well as the correlation between purchase intention and green consumption behavior. The framework of the study is developed based on the theory of planned behavior (Ajzen, 1991; Han, 2010). The questionnaire used is developed and adapted from the table of Fishbein and Ajzen (1975), totally 9 items. The scale of purchase intention is adapted from the tables of Dodds *et al.* (1991), Parasuraman *et al.* (1996) and Magnusson *et al.* (2001). The questionnaire for pilot study takes the consumers of Hopemarket as subjects using "random sampling method." Hopemarket is a market established by organic farmers on their own. They not only sell organic produce, but also take the functions of the promotion and education of environmental protection, which make them quite a renowned organic market in the central Taiwan region. The number of questionnaire distributed for the pilot study is 150 with 150 collected, and the number of valid questionnaire is 150. The formal questionnaire takes the consumers of the "Taichung Hopemarket" as subjects using purposive sampling method. The time of questionnaire survey spanned from Jun 10 to Jun 17, 2017. The questionnaires distributed are 302 with 302 collected, and the number of valid questionnaire is 290. The collection rate is 96%.

IV. RESULT AND DISCUSSION

(A) The Correlation among Green Consumption Behavior, Purchase Intention, Attitude, Subjective Norm and Perceived Behavior Control

Green consumption behavior, purchase intention, attitude, subjective norm and perceived behavior control are analyzed with Pearson product-moment correlation. The result is as Table 1.

Table 1
Correlation Matrix of Scales

	<i>Attitude</i>	<i>Subjective Norm</i>	<i>Perceived Behavior Control</i>	<i>Purchase Intention</i>	<i>Green Consumption Behavior</i>
Attitude	1.00				
Subjective Norm	0.56*	1.00			
Perceived Behavior Control	0.75*	0.60*	1.00		
Purchase Intention	0.81*	0.62*	0.86*	1.00	
Green Consumption Behavior	0.81*	0.66*	0.79*	0.82*	1.00

Based on Table 1, we can see all the variables demonstrate significant positive correlations. Yet, the correlations with the subjective norm are relatively lower than the rest. In addition, relevant research results indicate that the correlation between perceived behavior control and purchase intention is higher than that between attitude and subjective norm, which is aligned with the argument of Ajzen (1985) on the influence of non-individual-willingness factor. “Perceived behavior control” factor is added to the original theory, and a more rational theory of behavior as well as a more complete theory of planned behavior is thus born.

(B) Influences of Attitude, Subjective Norm and Perceived Behavior Control on Purchase Intention

The higher the level of the subjective norm of a consumer is, the higher level of prediction for the purchase intention will be. Perceived behavior control, taken as the predictor

variable, can effectively predict the purchase intention variable ($F=832.922^*$). The coefficient of determination of perceived behavior control and purchase intention is .737, suggesting that the predictive power of perceived behavior control to purchase intention in regression model is 73.7%. Based on the standardized regression coefficient, we can see the value of $\hat{\alpha}$ is .858, which is a positive. That suggests a positive influence on purchase intention. We can see the higher consumer’s perceived behavior control is, the higher level of prediction for the purchase intention will be. The result is as Table 2.

The coefficient of determination of the three predictor variables combined is .805, which means consumer’s willingness to purchase organic products has 80.5% chance to be influenced by the three predictor variables. Besides, now that the regression coefficients of the three variables are all positive, the higher motivation in consumer’s attitude, subjective norm and perceived behavior control is, the higher the individual’s willingness to purchase will be.

Table 2
Result of Simple Linear Regression Analysis of Predicting Purchase Intention with Attitude, Subjective Norm and Perceived Behavior Control

	R^2	F	<i>Raw β</i>	<i>Standardized β</i>	t
Attitude	0.65	558.65*	0.81	0.81	23.64
Subjective Norm	0.39	187.57*	0.75	0.62	13.70
Perceived Behavior Control	0.74	832.92*	0.87	0.86	28.86

Table 3
Summary of the Stepwise Regression Analysis with Purchase Intention as the Variable

	R^2	ΔR^2	F	<i>Raw β</i>	<i>Standardized β</i>	t
Perceived Behavior Control	0.74	0.74	814.33*	0.54	0.53	12.94
Attitude	0.80	0.06	93.94*	0.56	0.36	8.97
Subjective Norm	0.81	0.01	8.16*	0.12	0.10	2.86

The result of this research shows that we can apply the theory of planned behavior to the prediction of the purchase intention for organic products, suggesting that the three deciding factors, attitude, subjective norm and perceived behavior control can significantly predict the purchase intention.

(C) The Prediction of Purchase Intention and Consumption Behavior

Simple linear regression model is employed to analyze the predictive power of purchase intention on consumption behavior. The result suggests that the purchase intention of an organic consumer can significantly predict the consumption behavior ($F=579.52^*$). The coefficient of determination (R^2) is .66.

Thus, the predictive power of purchase intention on consumption behavior is 66%. We can learn from the standardized regression coefficients that the value of $\hat{\alpha}$ is a positive .82, indicating its positive influence on purchase intention. We can see that the higher a consumer's purchase intention is, the higher level of the prediction for the consumption behavior will be. The result of this study validates that the level of consumer's intention to purchase organic product has influence on the green consumption behavior. In other words, they will take environmental sustainability into consideration when purchasing products, and bring their own eco-friendly shopping bag, reducing the frequency of using plastic bags, purchase energy-saving products or support earth-friendly farming approaches. The analysis result is as Table 4:

Table 4
Result of Simple Linear Regression Analysis of Purchase Intention Predicting Green Consumption Behavior

	R^2	F	Raw β	Standardized β	t
Purchase Intention	0.66	579.52*	0.82	0.82	234.07

V. CONCLUSION AND RECOMMENDATION

(A) Conclusion

This study takes the data retrieved from all samples and arrives conclusions as followed:

1. The higher the income and education levels of the consumer are, the more willing he/she is to purchase organic products.
2. Attitude, subjective norm, perceived behavior control, purchase intention and green consumption are significantly correlated. We analyzed the correlations of the scales with Pearson product-moment correlation, and found that attitude, subjective norm, perceived behavior control, purchase intention and green consumption behavior are significantly correlated. Nonetheless, subjective norm's correlations with the rest are lower than the others'.
3. The attitude, subjective norm and perceived behavior control of organic product

consumers can significantly predict their purchase intention.

4. Purchase intention can positively predict green consumption behavior significantly.

(B) Recommendation

If an individual has a more positive attitude and subjective norm, the individual will have a stronger behavioral intention. Based on the Conclusion, we would like to offer recommendation on policy marketing and business management respectively.

1. Regarding policy marketing, the marketing of environmental protection policy may target certain groups with specific backgrounds, especially those with higher education and income level. Also, based on the relevant literature, the ones that engage themselves in social welfare or social innovation with wealth and expertise (Wagner, 2002) may be invited to help with the promotion of environmental protection works.

2. Regarding business management, price issue is still one the key factors of consideration for green consumption. The environmental protection and organic product promotion experience of Hopemarket may be valuable for green organic firms' reference. If we can strengthen the education on environmental protection or health awareness, it may be beneficial to the improvement of consumer's positive attitude, and change his/her consumption behavior accordingly. Therefore, marketing strategy may no longer be the mere consideration of market demand, but, more precisely, the establishment of relationship marketing, exploring what kind of experience we would like to offer for consumers from the perspective of supply.

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