AN EMPIRICAL STUDY ON ORGANIC PRODUCT PURCHASING BEHAVIOR: A CASE STUDY OF THAILAND

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Abstract

The striking awareness of organic product purchase behavior has noticeably increased throughout the world. However, little is known about consumers’ purchase behavior of organic products in developing countries such as Thailand. Few studies had been empirically investigated the relative importance of purchase behavior. The main purpose of the research is to examine the phenomena and to provide the empirical evidence of organic products purchase behavior in a developing country, namely Thailand. Fishbein and Ajzen’s Theory of Planned Behavior (TPB) is employed as the theoretical background. A self-administered questionnaire was developed and distributed to Thai consumers who purchased organic products in the last three months in Bangkok metropolitan areas. Six hundred thirty seven completed questionnaires were analyzed by using factor analysis in SPSS and Structure Equation Modeling (SEM). The empirical results confirmed that attitudes and perceived behavioral control components had impacts on organic products purchase behavior mediated by purchase intention. Specifically, four of the determinants: environment consciousness, appearance consciousness, perceived affordability, and perceived availability were significant factors of organic product purchase behavior in Thailand mediated by purchase intention.

Keywords: Purchase Behavior, Up-buying, Cross-buying, Word-of-Mouth, Resistance to Competition, Organic Products
INTRODUCTION

Today, the striking awareness of organic food purchase behavior has noticeably increased throughout the world (Magistris & Gracia, 2008; Roitner-Schobesberger, Darnhofer, Somsook, & Vogl, 2008). According to past studies, purchase behavior is a complex phenomenon; thus, the determinants vary from context to context and from time to time (Rimal, Moon, & Balasubramanian, 2005; Saba & Messina, 2003; Tuu & Olsen, 2009). Although there is a wealth of research on organic product purchase behavior, little is known about consumers’ purchase behavior of organic products in a developing country such as Thailand (Arttachariya, 2009; Chen, 2009; Roitner-Schobesberger et al., 2008). For Thai people, there are no common agreements among organic scholars or organic consumers due to inconsistent terminologies, definitions, and operationalizations of organic products (Arttachariya, 2009; Roitner-Schobesberger et al., 2008).

Moreover, a theoretical background on organic product purchase behavior is needed. Earlier discussions have described the Theory of Planned Behavior (TPB) in predicting consumer behavior as a reliable predictive model of purchase intention (Aertsens et al., 2009; Kalafatis et al., 1999; Shepherd et al., 2005; 1988) in various domains. The new variables such as (i) health consciousness, environmental consciousness, and appearance consciousness is formed in the attitude components; (ii) personal norms, family norms, and social norms are formed in the subjective norms components; (iii) perceived affordability, perceived availability, and perceived risks are in the perceived behavioral control component; and (iv) up-buying, cross-buying, word-of-mouth, and resistance to competition are the purchase behavior components in the extended TPB Model are discussed in the literature section.

The research questions for this research are: What are the determinants of organic product purchasing behavior in Thailand? What are the relative importances of purchase intention, attitude components, subjective norms, and perceived behavioral control in determining organic product purchase behavior? The first purpose of this research is to extend the understanding of purchasing behavior regarding organic products in a developing country, namely Thailand. It also provides empirical evidence of the purchasing behavior regarding organic products in Thailand. The second purpose of this research paper is to broaden the understanding of the organic product purchasing behavior by proposing the Theory of Planned Behavior (TPB). Another major purpose is to explore the application of marketing strategies in Thailand’s organic product industry. This paper is organized as follows. The first section reviews the literature on organic product purchase behavior and the second section discusses the research methodology, the hypothesis testing and their findings. The last section includes the discussion and implications.

LITERATURE REVIEW AND RESEARCH HYPOTHESES

Attitude

Many authors (Bonne et al., 2007; Schiffman & Kanuk, 2007) define attitude in similar ways as “the psychological tendency expressed by evaluating a particular entity with some degree of favor or disfavor”. In this study, there are three components of attitude that form the attitude construct: health consciousness, environmentally consciousness, and appearance consciousness.

The relationship between purchase intention and attitude was confirmed thoroughly in the literature (Ajzen, 1991; Ajzen & Fishbein, 1972, 1973; Arttachariya, 2009; Fishbein & Ajzen, 1975; 2010; Magistris & Gracia, 2008; Michaelidou & Hassan, 2008). According to the TPB, the TPB model explains that behaviors are predicted by intentions, which in turn are also predicted by attitudes, perceived social pressure, and how much control a person feels he or she has over behaviors (Ajzen, 1991; Ajzen & Fishbein, 1972, 1973; Fishbein & Ajzen, 1975; 2010).
Michaelidou and Hassan (2008) defined health consciousness as the readiness to undertake health action. The relationship between health consciousness and purchase intention of organic products was supported by previous studies. O’Donovan and McCarthy (2002) found Irish purchasers of organic meat were more concerned about health than non-purchasers. Tarkkainen and Sundqvist (2005) revealed the path from health consciousness to attitudes toward buying organic food.

Lee (2008) explained environmental consciousness as the degree of involvement in environmental issues. The relationship between environmental consciousness and purchase intention was supported by past researches. Chan and Lau (2000) found Chinese people expressed positive ecological affect and green purchase intention. Grunert and Juhl (1995) argued that environmental concerns were related to self-report buying frequencies of organic foods in Denmark.

Bruner and Hensel (1996) defined appearance consciousness as cited in Bearden and Rose (1990) by “the degree to which a person expresses an awareness of self as a social object with an effect on others.” In this study, being appearance consciousness is the awareness of the person as a social object with an effect on others from purchasing organic products. The relationship between appearance consciousness and behavioral intention toward organic products was studied by previous researchers. Kim and Chung (2011) suggested that appearance consciousness positively influenced attitude toward buying organic personal care products. Miller et al. (1993) clarified that appearance consciousness was a way of social behavior for the time and situation, for example when buying new products, trendy products, or fashionable items. However, appearance consciousness was not as strong as health consciousness. Therefore, the first hypothesis was formulated as follows:

**H1(a-c):** Attitude toward Health consciousness (a), Environmental consciousness (b), and Appearance consciousness (c) positively affects purchase intention.

**Subjective Norms**

According to Fishbein-Ajzen’s theory of reasoned action, subjective norms were defined as an individual’s perception of people’s thinking about what behavior should be performed based on the opinion of the referents and motivation to comply (Aertsens et al., 2009; Ajzen, 1991; Ajzen & Fishbein, 1972, 1973; Bonne, et al., 2007; Fishbein & Ajzen, 1975; 2010; Magnusson, et al., 2001). In this study, there are three components that form the subjective norms construct: personal norms, family norms, and social norms.

The relationship between purchase intention and subjective norms as family norms, personal norms, social norms was confirmed in the literature (Aertsens et al., 2009; Johri & Sahasakmontri, 1998; Kalafatis et al., 1999; Wiriyapinit, 2007). The TPB model explains how normative influence impacts purchase behavior. Thus, intentions are a function of attitude behavior and subjective norms (Ajzen, 1991; Ajzen & Fishbein, 1972, 1973; Fishbein & Ajzen, 1975; 2010).

Aertsens et al. (2009, p. 1148) defined personal norms as “an individual’s conviction that acting in a certain way is right or wrong and when people do not yet have clearly formulated personal norms toward specific action, when called on to act, they can crystallize norms based on their general values (Schwarz, 1977)”. The relationship between personal norms and purchase intention was supported by past researches. Bonfield (1974) found that influences of social influence, personal norm, attitude, and intention were strongly supported by the study of one brand and one product class. Aertsens et al. (2009) found that an individual’s conviction or personal norms had an influence on consumption of organic foods.

Bonfield (1974, p. 382) defined subjective norms as “what other people whose opinions are important to her expect her to do with respect to purchase and use of each brand of the product”. In this study, family norm refers to the family’s influence with respect to purchase and use of each brand of the product. The relationship between family norms and purchase intention of organic products was supported by previous studies. Wiriyapinit (2007) found that lessons taught by parents were strongly dominant in Thailand. Thus, family norm and purchase intention was supported.

Bonne et al. (2007, p. 369) defined subjective norms as “the social pressure on individuals to per-
form or not to perform certain behavior i.e. the motivation to comply with significant others' views. Thus other people can be implied as a social influence with respect to purchase and use of each brand of the product. The relationship between social norms and purchase intention of organic products was proved by previous researchers. Vermeir and Verbeke (2006) found that experiencing social pressure from peers (social norm) explained purchase intention from a survey of a sample of 456 young consumers drawn from the Belgium population. Bonne et al. (2007) found that positive personal attitude toward the consumption of halal meat; influence of peers predicted the intention to eat halal meat in France. Therefore, the second hypothesis was formulated as follows.

\[ H2(a-c): \text{Personal norms (a), Family norms (b), and Social norms (c) positively affects purchase intention.} \]

Perceived Behavioral Control

Perceived Behavioral Control (PBC) was determined by the beliefs about the presence of determinants that facilitated or impeded performance of behavior (Ajzen, 1991; Ajzen & Fishbein, 1972, 1973; Fishbein & Ajzen, 1975; 2010; Magnusson, et al., 2001; Vermeir & Verbeke, 2006). Kim and Chung (2011, p. 42) explained perceived behavioral control as the degree of control that an individual perceives over performing the behavior. There are three components that form the perceived behavioral construct: perceived affordability, perceived availability, and perceived risk.

The relationship between PBC and purchase intention was moderately strong in the past researches (Bonne, et al., 2007; Kalafatis, et al., 1999; Kihlberg & Risvik, 2006; Kim & Chung, 2011; Tarkianen & Sundqvist, 2005). The TPB model explains how normative influence impacted purchase behavior. Thus, intentions were a function of attitude behavior and subjective norms (Ajzen, 1991; Ajzen & Fishbein, 1972, 1973; Fishbein & Ajzen, 1975; 2010).

Aertsen et al. (2009, p. 1150) defined perceived control or affordability as the ability to buy the product in terms of financial income. Perceived affordability appeared to be a determinant of purchase intention or behavior. Aertsen et al. (2009) found indirect relationship from ability to buy and purchase intention mediated by perceived behavioral control from personal determinants of organic food consumption. Li et al. (2002) supported that perceived affordances were perceptual cues a consumer possessed and used in assessing a product prior to purchase.

Magnusson et al. (2001) defined perceived availability as products that are readily available. The role of perceived availability of PBC explained purchase behavior ( Fotopoulou & Krystallis, 2002a; 2002b; Krystallis & Chryssoschidis, 2005). Vermeir and Verbeke (2006) concluded that low perceived availability of sustainable products explained why intention to buy remained low. Fotopoulou and Krystallis (2002a; 2002b) found hinders of organic products are availability and high price in a Greek sample.

Bruner and Hensel (1996), as cited in Murray and Schlacter (1990), defined perceived risk as the overall perceived risks i.e., financial loss, performance loss, physical loss, psychological, social loss, loss of convenience in the purchase of goods and services. The relationship between perceived risk and behavioral intention of organic foods was supported. Rimal et al. (2005)'s findings summarized that perceived risks of agro-biotechnology played a dominant role in organic food purchase decisions. Saba and Messina (2005) found a significant relationship among perceived benefits and risks associated with pesticides towards organic fruits and vegetables in Italian consumers. Therefore, the third hypothesis was formulated as follows:

\[ H3(a-c): \text{Perceived affordability (a), Perceived availability (b), and Perceived risk (c) positively affects purchase intention.} \]

Purchase Intention

The study of the relationship between purchase behavior and purchase intention is a popular topic among researchers (Ajzen, 1991; Ajzen & Fishbein, 1972, 1973; Bonfield, 1974; Fishbein & Ajzen, 1975; 2010). Behavioral prediction is the key concept for marketing researchers who commonly use purchase intention to predict actual behavior. Moreover, Ajzen and associates suggest accuracy of behavioral prediction by not only assessing intentions but also estimating or exercising control over the behavior in ques-

**Purchase Behaviors**

A common objective of applied social science and consumer behavior is the understanding of purchase behavior of the consumer and its rationale (Bemmaro, 1995; Schiffman & Kanuk, 2007). According to organic product purchase behavior, the possible influence on organic purchase behavior in Thailand (i.e., up-buying, cross-buying, word-of-mouth, and resistance to competition) has been investigated.

The relationship between purchase intention of organic foods and purchase decision was confirmed in numerous studies (Ajzen, 1991; Ajzen & Fishbein, 1972, 1973; Batte et al., 2006; Bemmaro, 1995). TPB suggests that the more favorable the attitude and subjective norms, and the greater the perceived control, the stronger should be the person’s intention to perform the behavior in question (Ajzen, 1991; Ajzen & Fishbein, 1972, 1973; Fishbein & Ajzen, 1975; 2010).

Up-buying is related to sales technique. The relationship between up-buying and purchase intention was supported. Fassnacht and Kose (2007) supported cross-buying of customer’s intention to purchase other products or services from the current products or service providers in addition to the one he/she already used.

According to Fassnacht and Kose (2007), cross-buying is defined as the customer’s intention to purchase other products or services from the current products or service providers in addition to the one he/she already uses. The relationship between cross-buying and purchase intention was supported. Nung (2004) found cross-buying is customer’s intention to buy the total number of different product categories that existing customers purchased in addition to the ones that they currently had.

WOM means an informal passing of information or noncommercial information by verbal means from one person to others rather than by media or advertising, especially recommendations (Graham & Havlena, 2007). The relationship between word-of-mouth and purchase intention was supported. Allsop et al. (2007) argued that intention influenced the behaviors of buyer (WOM) to others. Li and Green (2010) supported the purchase intention based on the recommendation of products and services to others (word-of-mouth).

In this study, resistance to competition between conventional products and organic products refers to the resistance to switching to competitors’ products, conventional products, or others. The relationship between resistance to competition and purchase intention was supported. Chadha and Kapoor (2009) stated that intention to buy influenced the resistance to switching to competitor’s product, conventional products, or others (resistance to competition). Li and Green (2010) supported consumer purchase intention on resistance to competition by purchasing more frequently (price insensitivity) or trying new products and services.

Therefore, the fourth hypothesis was formulated as follows:

\[ H4(a-d): \text{Up-buying (a), Cross-buying (b), Word-of-mouth (c), and Resistance to Competition (d) positively affects purchase behavior.} \]

**RESEARCH METHODOLOGY**

In this initial phase, in-depth interviews were conducted with respondents who were purchasing organic products. This data was used in developing the questionnaire for the quantitative design used in the second phase. A total of 637 respondents participated in the study. These respondent were Thai consumers who had purchased organic products in the past three months.

**DATA ANALYSIS AND FINDINGS**

The measurement variables were formed into seven constructs (attitude, subjective norms, purchase behavioral control, purchase intention, purchase behavior, taste, and price). The data analysis results identified that the measurement items of all constructs were reliable and that the entire test was internally consistent. The reliability of Cronbach’s alpha of the key construct exceeded the threshold value of 0.7 (Hair et al., 2006; Nunnally, 1978) and ranged from 0.764 to 0.948. The assessment of the CFA of all constructs reported a marginal fit with the data, and all fit indices
were close to 0.9. The construct reliability was satisfactory. As a result, the SEM showed an acceptable confidence within the path analysis. The results of the structural model for the four main hypotheses showed an acceptable fit of the hypothesized model, as all fit indices were close to the cut-off point of 0.9. Among the 4 hypotheses (13 sub-hypotheses), 9 sub-hypotheses were statistically significant and positive and four were not statistically significant.

According to the findings, it was found that four determinants i.e., environmental consciousness, appearance consciousness, perceived affordability, and perceived availability, were significant factors in the organic product purchase behavior in Thailand, mediated by purchase intention. Accordingly, purchase intention was found to be very important in determining organic product purchase behavior. In addition, two components of attitude, environmental consciousness and appearance consciousness were shown to have an indirect influence on organic product purchase behavior via purchase intention. Moreover, environmental consciousness was found to have a greater impact than appearance consciousness. For the subjective norms components, three of the components were found not to influence organic product purchase behavior. For perceived behavioral control, two of the components, perceived affordability and perceived availability, indirectly influenced organic product purchase behavior via purchase intention. In addition, perceived affordability was found to have a greater impact than perceived availability. However, perceived risk was found to be a negatively significant determinant of organic product purchase behavior.

Thai consumers used attitudes and perceived behavioral control to form their organic product purchase behavior via purchase intention. The results showed that perceived behavioral control of perceived availability and perceived affordability were the main underlying factors driving Thai consumers’ purchase of these organic products. According to the data set, subjective norms did not have an effect on purchase intention.

**IMPLICATIONS AND RECOMMENDATION**

This study provides solid evidence and supports the previous literature that extends the TPB model in organic product purchase behavior in a developing
country. Also, this research reveals the significant factors affecting purchase behavior by exploring the major determinants of organic product purchase intention. Thus, this paper strengthens the findings of purchase intention and purchase behavior and the control variables of price and taste by empirically investigating relationship between antecedents and purchase intention and purchase behavior simultaneously for organic products.

Most of the organic consumers perceived organic products as without chemicals/pesticides and healthy products in the marketplace. As a result, they purchased organic fresh vegetables/fruit and will do so in the future. Organic practitioners should be concerned about the core benefits that organic products offer and their comparative advantages compared with conventional products. The product strategy employed should be comparative advantage strategy. For example, product campaigns should inform organic consumers that organic agriculture preserves the environment because the agricultural system or organic production method has less of a negative impact on the environment compared with conventional products. Therefore, organic consumers could increase the awareness of organic product attributes such as being free of chemical products than products produced by conventional methods. In terms of price strategy, most of the respondents acknowledged that organic products were reasonably priced. They typically spent 100 to 500 baht per time, more than once a week. Thus, a value-based pricing strategy should be employed by the organic sellers in the marketplace. Regarding distribution, organic products should be made easily available via various channels. Most of the organic consumers identified that the places where they often purchased organic product were hypermarkets and department stores. Finally, regarding promotion strategy, organic sellers should launch price deal programs or special events to stimulate organic product purchasing behavior.

LIMITATIONS AND SUGGESTIONS FOR FUTURE STUDY

Several limitations must be addressed. First, the study focuses on organic consumers that purchase organic products in Thailand; thus the results cannot be generalized to non-buyers, other consumer groups, or those organic consumers in other countries. Future research should include the different groups of samples such as non-buyers. Second, the study was based on actual organic products purchase behavior, thus the relationship between the organic products purchase intention and purchase behavior may have some variations. Longitudinal studies can provide deeper insights into organic product purchase behavior study. For moderator variables, demographic variables are suggested for future research as major group differences might be found. Furthermore, additional variables such as perceived value (Gracia & Magistris, 2008), organic knowledge (Chan & Lau, 2000), culture (Bonne et al. 2007), customer loyalty (Li & Green, 2010) are also recommended for future study.

References


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