

Consumer Attitude and Intention to Buy Organic Food as a Result of Brand Extension: An Experimental Approach

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This paper reports experimental study of consumers' attitude and intention to buy organic food. It particularly focuses on a situation where companies extend one of their brands to this category, which creates two situations: fit situation, where an organic brand is used for the new organic food and unfit situation, where an anorganic brand is used for the new organic food. Research hypotheses states that positive attitude and intention to buy was more expected in the fit situation than in the unfit one. This hypotheses are tested in a two-rounds pre and post-test experiments. It involves 33 and 43 subjects in the first and second experiments. The subjects were asked about their attitude and intention to buy an organic milk in fit and unfit situations. A fictitious brand was used for the organic milk and subjects are given different stimuli. The first group are told that the brand is organic and the second one was told that it is anorganic. It turns out that fit or unfit association did not significantly affect respondents' attitude and intention to buy the organic milk. Further exploration study reported that taste of milk, price, benefit of the product and corporate reputation are more important than brand association.

Field of Research: brand, brand extension, consumer attitude, intention to buy, organic food.

1. Introduction

Consumers' interest toward organic food has been increased (Magnusson et al. 2001). In the United States, organic sales have increased by nearly 20% annually since 1990, with consumer sales reaching \$13.8 billion in 2005, whereas European market reached \$11 to \$12 billion in 2004 (Winter and Davis 2006). Consumer interest is also expanding in other parts of the world. In Asia, China has the highest domestic market growth and organic boom seems to be taking place in Indonesia (Willer and Yussefi 2006).

The amount of companies participated in producing organic food has been accruing. There are two situations worth consideration. The first is a fit situation, where a company with organic brands is using one of its brands for another organic product in different categories. Cascadian Farm which produced organic food since 1972 such as cereals (in varying flavors), frozen fruits, frozen vegetables, and frozen

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potatoes is an example. In Indonesia, there is CV Heliconia that produced organic goat milk and organic goat yoghurt. The second situation is an unfit situation, where a company which is used to produce anorganic food is using one of its brands for a new organic food. For example is Kraft that has been known as a producer of non-organic cheese and introduced Kraft Organic in 2006.

The above strategy is known as brand extension, whereby a current brand name is leveraged to enter a different product category through new product development or just different in their market segment (Aaker and Keller 1990). There are some benefits of using brand extension strategy. First, it could have the equity built up from the core brand (Aaker and Keller 1990). Besides, extensions promote immediate consumer awareness, providing a relatively quick and cheap way to enter a new market (Grime, Diamantopoulos & Smith 2002). Additionally, d'Astous, Colbert and Fournier (2007) has estimated that the market shares of new products using a brand extension strategy are on average of 5 percent higher than those of new products marketed under a new brand.

Besides those advantages, companies should be aware of consumers' evaluation of the extension. Brand extension in fit situation is considered more successful than in unfit situation (Aaker and Keller 1990, Sheinin 1998). However, there is no study about this in organic food context. This paper is aimed at fulfilling this gap and addresses the following questions:

- 1) What is the influence of consumers' perception of brand extension strategy on their attitude toward an organic product?
- 2) What is the influence of the attitude toward their intention to buy the organic product?

The paper is structured in seven parts. The first is introduction. Literature review is at the second. It contains theory of brand, brand extension and consumer evaluation in a brand extension situation. The methodology is the third. It describes experiment design used in this research. Data analysis is the fourth. It present quantitative and qualitative analysis of consumers' attitude and intention to buy organic products in fit and unfit situation. Discussion about those findings follows afterward. The discussion is followed by conclusion and recommendation for future study in the sixth and seventh place respectively.

2. Literature Review

Brand extension is a brand building strategy whereby a current brand name is leveraged through a new product, whether it is completely different product category or market segmentation (Aaker and Keller 1990). The important thing that could be the reasons for marketer to adopt brand extension is the high cost of new product launches, such as: marketing and distribution efficiencies (Grime, Diamantopoulos & Smith 2002), and more efficient advertising (Sheinin 1998).

There are number of benefits of using brand extension strategy, they are: promote immediate consumer awareness, providing a relatively quick and cheap way to enter a new market (Grime, Diamantopoulos & Smith 2002). Besides, extension could have the equity built up from the core brand (Aaker and Keller 1990). Additionally,

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d'Astous, Colbert and Fournier (2007) has estimated that the market shares of new products using a brand extension strategy are on average of 5 percent higher than those of new products marketed under a new brand and have a greater probability of long-term survival.

On the other side, there is also risk that should be concerned by marketer in developing brand extension. Aaker and Keller (1990) noted that an extension may potentially dilute the equity built up by the brand. Brand extension may blur parent brand associations in consumers' minds and this dilution of the parent brand's associations may result in less favorable attitude toward the parent brand (Zimmer and Bath 2004).

Brand extension has been applied in organic food market. There are companies that initially produce non-organic food, but nowadays they have also known as organic food producer through brand extension strategy. Kraft, Hershey Foods, Kellogg, Dove and Heinz are some examples. On the other side, there are also organic food companies that have extended their brand into organic food product too, but serve different segment of consumer, such as Cascadian Farm that produced cereals in varying flavors, frozen fruits, and frozen vegetables. There are some companies in Indonesia within this category. Leafvita that produced organic aloe vera juice in varying flavors; Green Agro Trade that produced aromatic rice and non-aromatic rice; and Mitra Bumi Indonesia that produced red rice and white rice.

Consumer evaluation of a brand extension is often described as a process by which the core brand associations of the parent brand is transferred to the extension (Glynn and Brodie 1998). There are important factors to be examined in brand extension situation, such as the effect of the parent brand, the similarity between the original and the extension categories (Glynn and Brodie 1998), and the level of perceived fit between the parent brand and brand extension (Aaker and Keller 1990, Sheinin 1998). Previous research suggested that perceived fit is more accurate in measuring consumers' evaluation and acceptance of brand extension (Aaker and Keller 1990, Sheinin 1998). Therefore, this measure is applied in this research.

Thorbjornsen (2005) suggests that fit is usually conceptualized as being a function of salient shared associations between the parent brand and the extension product. In this case, associations mean whatever linked to consumers' memory (Aaker and Keller 1990), such as product attributes or non-product attributes. In this study, the authors intended to investigated how the perceived of fit of organic association between the brand extension and its parent brand influence consumers' attitude to buy its brand extension.

Consumers' evaluation toward brand extension would be influenced by the perceived fit between the extension and parent brand. Thus, the poor fit between extension and its parent brand would be result in unfavorable attitude of consumers. Also, the good fit would be result in favorable attitude. So the authors proposed some hypothesis as follows:

H1. Consumers' attitude toward brand extension in organic food is influenced by perceived fit of its parent brand

H2. Consumers' attitude toward organic food influences their intention to buy the product

3. Methodology

The authors consider that the appropriate instrument for the present study would be experimental approach. The advantages of using experimental study is the ability in examining causal effect of independent variable to predict dependent variable besides controlling extraneous variable (Rios et al. 2006, Taskiridou et al. 2008). As Christensen (1988) stated that the first and foremost advantage of the experimental approach is the control that can be exercised.

The subjects participating in the experiment were the organic conscious consumer so that the consciousness of the consumer would not influence their attitude and intention toward organic food. According to Tsakiridou et al. (2008), profile of consumers that have favorable attitude toward organic food and intent to buy organic food are: female, 18-32 years old, and those with a college education or higher. Thus, the subjects participated in the experiment were those who comply with the character. But then, a screening process was also conducted to assure that they could be included as organic conscious consumer. The screening process was conducted through asking them some questions, as follows: "Have you ever heard about organic food?", "Do you ever get information about organic food?", "What do you know about definition of organic food?", and "What do you know about the benefit of organic food?"

Considering the association process that could be exist in consumers' mind, this study adopted a fictitious milk brand. In other words, if we use a real brand to be used in the experiment, then we could not discover how large the association of that brand has established in consumers' mind. It means that the subjects have not found that product in market before. Thus, we designed a mock product which becomes a base of subjects' consideration in forming their attitude and intention toward organic milk. To provide the mock product, we conducted an exploration study, so that the mock product design would be comply with the important criteria of milk that consumers usually considered.

In this exploration study, 10 respondents were randomly recruited for interview. Respondents recruited are due to the experiment subjects criteria, that is comprise of woman, 18 – 32 years old, and have level of education at least college education. The interview questions covered the milk brand they had bought, things they considered and information they need when buying a milk product, things they concern when seeing the ad of milk product, and the reason why they prefer to buy that milk brand rather than the other brand.

Based on the consumers' response in the exploration study, we designed the organic milk mock-up product that presenting some attributes as depicted in Table 1 below. The information of Milcow Organic was not only delivered through mock product but also an advertising brochure.

Table 1. Organic Milk Characteristic (Mock Product)

Brand	Milcow Organic
Variation of taste	Plain and chocolate
Benefit	Increase immunity and decrease cholesterol
Nutrition facts	Contains higher omega 3, vitamin A, vitamin D, and vitamin E than non-organic milk
Price	Affordable
Package shape	Box
Package size	240 ml
Target consumer	Family
Producer	PT 'M' Indonesia
Types of milk	Liquid

Type of experiment applied in the study is “before and after” experimental design, that is assessing consumers’ attitude and intention to buy organic food before the treatment would be given to the treatment group, and then compared the results with the results of consumers’ attitude and intention to buy organic food after the treatment given. The experiment was conducted two times which is held in the different day and involved different subjects.

First experiment was attended by 33 respondents out of 70 respondents invited. It was used for checking the validity and reliability of questionnaires which is used to measure subjects’ attitude and intention to buy Milcow Organic. There are 43 respondents in the second experiment. The second experiment provided data for the analysis of consumer attitude and intention to buy Milcow Organic. Subjects are randomly assigned to two different groups, so it consisted of almost equal number of subjects (around 22 persons). The first group received an unfit stimuli and the second one received a fit stimuli (see Table 2). In this regard, we developed the hypotheses into the following ones:

H1a: The unfit perception of a parent brand reduces consumers’ attitude toward Milcow Organic

H1b: The fit perception of a parent brand increases consumers’ attitude toward Milcow Organic

H2a: Consumers’ likeliness to buy Milcow Organic increases in fit situation

H2b: Consumers’ likeliness to buy Milcow Organic reduced in unfit situation

There are two well-trained experimenters in each group. The first is someone who presented the product and gave the treatment, later will be called as first experimenter, and the other, later will be called as second experimenter, who is allotted the mock up product and its brochure to every subject once it had been explained by the first experimenter.

Table 2. Brand Extension Scenarios in Organic Products

Scenario	Description	Stimuli
Group 1 : unfit association Non-organic parent brand Organic brand extension	A company that produce non-organic food with a certain brand (as parent brand), then produce new organic food product (as an extension) with the same product category.	“Milcow Organic is produced by PT Milcow Indonesia that is, a company who is produced non organic cow milk. The non organic cow milk brand that they have produced previously is ‘Milcow’.
Group 2 : fit association Organic parent brand Organic brand extension	A company that produce organic product with a certain brand (as parent brand), then produce new organic food product (as an extension) with the same product category, but in different market segment.	“Milcow Organic is produced by PT Milcow Indonesia, that is a company who also produces organic cow milk used the same brand (Milcow Organic) to be consumed by consumers whose age is above 50 years”.

4. Data Analysis

Data collected from the forty three questionnaires from the second experiment were analyzed. To determine if there were any statistically differences between consumers’ attitude before and after receiving treatment, *t*-test was performed.

Consumers’ attitude toward organic milk if its parent brand is non-organic brand (unfit condition)

Table 3 shows that subjects’ attitude in “unfit condition” group, before (M = 23.38) and after (M = 23.14) treatment session is similar. A paired t-test (two tailed) for equality of the means revealed no significant statistical difference (p = 0.366). Thus, *H1a* is not supported. It means that association of non-organic parent brand did not influence consumers’ attitude toward Milcow Organic.

Table 3. Mean of Attitude in Treatment Group 1 (Unfit)

	Mean	Difference	t-value	p-value
Before	23.3810	0.23810	0.925	0.366
After	23.1429			

Consumers’ attitude toward organic milk if its parent brand is an organic brand (fit condition)

Table 4 shows that there is also no significant change occurred of subjects’ attitude in “fit condition” group. The mean score before treatment was 21.86 and after treatment was 21.59. Thus, *H1b* is not supported.

Table 4. Mean of Attitude in Treatment Group 2 (Fit)

	Mean	Difference	t-value	p-value
Before	21.8636	0.27273	0.638	0.530
After	21.5909			

Bivariate analysis (Pearson correlation) was undertaken to examine the correlation between consumers' attitude and intention to buy.

Correlation between consumers' attitude and intention to buy (before treatment)

Table 5 indicated that relationship between consumers' attitude and intention to buy was positive and significant ($r = 0.712$) at $p = 0.000$ level.

Table 5. Correlation between Attitude and Intention in Before Treatment Condition

Variable	Attitude	Intention
Attitude	1	0.712**
Intention	0.712**	1

Correlation between consumers' attitude and intention to buy (after treatment)

Table 6 shows that the relationship between consumers' attitude and intention to buy "after treatment" was positive and significant ($r = 0.712$) at $p = 0.000$ level.

Table 6. Correlation between Attitude and Intention in After Treatment Condition

Variable	Attitude	Intention
Attitude	1	0.712**
Intention	0.712**	1

In order to provide additional explanation for the quantitative result, we conducted an exploratory study. We considered that this step is important to check if the subjects were really aware about the treatment then we could find if the questionnaire result was influenced by their lack of attention toward the treatment or not. Although the subjects really paid attention to the treatment, conducting the exploratory study could help us to explore any potential factors that causing the unsupported hypotheses.

Based on the exploratory study, the subjects in "unfit condition" group said that there are factors about which they are concerned, such as: taste of milk, price, benefit of the product and corporate reputation. They confessed that they were aware about the treatment but indeed they did not give any significant changing response in the second questionnaires, which means that they were not influenced by the treatment. Most of them argued that they even did not care about the non-organic parent brand as long as the product has a good taste, good quality (nutrition facts), the benefit of the product is good, and has affordable price. Additionally, they said, "it does not matter if the parent brand is non-organic, we did not afraid if the producer would mix the non-organic milk with organic milk or the producer just sell the brand "organic" without really produce pure organic milk. We just believe the producer and we like the product (Milcow Organic)".

But there are some subjects who confessed that they change the response in the second questionnaires to be more favorable toward Milcow Organic. From the information in the treatment, they thought that Milcow Organic was produced by experienced milk company because the company has produced another non-organic milk previously, although it is non-organic milk. The information increased their trust toward the product (Milcow Organic).

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There are also some subjects who reported that information given is not influenced them adequately, since information about PT M Indonesia who produce non-organic parent brand of Milcow Organic is not the most important information which could change their attitude toward Milcow Organic. According to them, they will be more influenced if they have heard about PT M Indonesia, they know about the image of this company (PT M Indonesia), and have experience with the company's product.

Whereas, subjects in the "fit condition" confessed that their attitude after the treatment were change but not significant. The change was caused by the information which stated that the product was produced by a company who has produced an organic milk product previously. They thought that Milcow Organic is a good product because it is produced by an experienced company. Besides, some of the subjects stated that their attitude were change after the treatment to be more favorable toward Milcow Organic because they prefer liquid milk rather than the skim milk as the parent product.

5. Discussion

Though the findings do not support the research hypotheses, it does not fully indicate insignificant influence of brand association toward consumers' attitude and intention to buy organic food. There is one subject in the treatment group 1 who stated in open ended questionnaire that she put Milcow Organic in doubt because of its anorganic association.

The authors considered that the unsupported hypotheses was because of attention blocking occurred when Milcow Organic attributes was introduced to the subjects in the before treatment session. Subjects' attention is focused on the attributes or benefits of the product, thus blocking their attention to association of the parent brand. Hence the treatment did not significantly influence consumers' attitude and intention to buy Milcow Organic.

As Oxoby and Finnigan (2004) noted that once an individual learns to associate a cue with an outcome, this association tends to block subsequent attempts to pair new with that same outcome. They stated that attention blocking was occurred as a consequence of heuristic based learning and heuristic type of decision making may be particularly relevant in contexts where consumers are initially inexperienced or have little information about a product's attributes and their relation to quality, or even individuals often rely on heuristics when coping with moderately complex learning tasks (Oxoby and Finnigan 2004).

In this study, we considered that the lack of consumers' relation with Milcow Organic quality such as milk taste experience and observable price has delivered them to heuristic type of decision making. So as the complex learning task they had at the experiment, where they must predict the outcomes (Milcow Organic quality) at short notice based on many observable cues, such as the benefit of product, brand, packaging, advertisement through brochure, nutrition facts of milk. Thus, subjects' initial association of the product attribute which was developed in the before treatment session had subsequently blocked their attention to the information of treatment (parent brand). This is in line with Van Osselaer and Alba (2000), they demonstrated that if a consumer learns to associate a particular brand with a quality

level, subsequent information combining more reliable physical attributes with a quality level are often ignored.

Additionally, Oxoby and Finnigan, 2004 explained that if initially encountered attribute / quality relationship are strong and consumers are making decisions in the face of familiar stimuli, initially learned relationships may be paramount in decision making, serving as heuristics that reduce cognitive and information processing costs. This is in line with subjects' answers of the open ended question in the questionnaire. It is about factors that made them intent to buy Milcow Organic product. Almost all of the subjects wrote that attributes of Milcow Organic especially benefit of the milk drove their intention to buy. The subjects also gave the same response in the second questionnaire (after treatment session). It means that their association toward the product attribute was strong so that become the paramount in their attitude and intention to buy the product.

6. Conclusion

There are previous studies in organic food that investigated consumers' attitude and intention to buy which also described consumers' profile that has positive attitude and intention to buy organic food. However, the authors found a gap in literature that is brand extension concept has not been applied in the studies of consumers' attitude and intention to buy organic food. This research initiates an endeavor toward that situation and presents interesting findings.

This study contributes to the proliferation of knowledge in brand extension, specifically about consumers' evaluation toward brand extension. The research finding shows how organic as one of association of the parent brand could influence consumers' attitude and intention to buy the brand extension. Some conclusions are figured out as follows:

- a) Based on the data analysis, it is found that consumers' attitude toward brand extension were not significantly influenced by consumers' association of either organic or non-organic parent brand.
- b) According to consumers' response in the exploratory study and open ended questions, we have identified that there are some factors causing consumers' attitude and intention to buy were not influenced by their perceived of fit of organic associations, as follows:
 - There are some factors that more important for the consumers than the perceived of fit of organic association, such as taste of milk, price, benefit of the product, and brand image.
 - Consumers did not perceived the non-organic parent brand which has organic brand extension as an unfit condition that could influenced their attitude since both of them are in the same product category, milk product.
- c) Result from the data analysis has shown that consumers' attitude correlate with their intention to buy, both before and after the subjects informed about the non-organic parent brand. This is in line with Theory of Reasoned Action (TRA) and Theory of Planned Behavior that attitude is one factor that correlates with consumers' intention to buy (Fishbein and Ajzen 1975, Ajzen and Fishbein 1980).

7. Recommendation for Future Study

We realized that there are limitations of this study. The most important is the use of fictitious brand and attention blocking. According to some subjects feedback in the exploratory study, it will be better to use a real product in the experiment since they also consider about the image of the producer when evaluate the product. In order to overcome the existence of attention blocking, it would be better if future researcher in this area introduce or inform about the brand extension at first. We also realized that there may be influence of consumer demographics and consciousness toward organic product. Future effort may improve the measurement of consumers' consciousness by using means end chain analysis in order to identify consumer experiences, values and attitude toward organic food so that individual differences and influences toward attitude and intention to buy organic foods can be studied more properly. We also suggest to broaden the scope of this study by replicating the study in other product categories, such as rice and vegetables. We also suggest to replicate the study in different country to understand the influence of culture in this situation.

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