Factors Affecting Customer Purchase Intention towards Organic Food Consumption: A Case Study based on the Community in University of Peradeniya, Sri Lanka

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Abstract

Food consumption patterns are changing rapidly, due to health issues, concerns about the food nutritional values and environmental issues. So, at present there exists an emerging market for organic food products globally as well as in Sri Lankan context, since organic food is considered to be in high quality in terms of many aspects. Moreover, the organic food industry in Sri Lanka is considered to be a niche market and level of consumption is still very low although it is growing rapidly. However, there is a dearth of studies conducted in the field of consumer behavior in the organic food industry in the Sri Lankan context. So, the main objective of this study was to identify the factors affecting the customers' purchase intention towards the organic food consumption in Sri Lanka; A case based on the community in University of Peradeniya (UOP). A sample of 90 individuals including students, academic and non academic staff from faculty of agriculture, UOP was selected using disproportionate stratified random sampling. Data were collected by administrating a structured questionnaire, based on theory of planned behavior. Data were analyzed using descriptive statistics and inferential statistics. Descriptive statistics revealed that the sample respondents tend to show a moderate level of purchase intention towards the organic food consumption. Further results of regression analysis revealed that there is a significant impact of Knowledge ($p<0.05$) and Attitudes ($p<0.05$) of individuals on purchase intention towards organic food consumption. Therefore, it is recommended the relevant parties, for example such as the organic food companies and governmental authorities etc. to consider and emphasize more on consumer's attitudes and knowledge in order to uplift the level of consumer purchase intention towards organic food. Further research direction is recommended by the researcher to conduct a comparative study on factors influencing the purchase intention towards the organic food

consumption of other University communities in Sri Lanka by using a more representative sample.

1. Introduction

1.1. Background of the study

The lifestyle of Sri Lankans has changed in past few decades because of the industrial revolution. As the result of that more and more people are caught up in an endless cycle of buying and throwing away; seeing consumption as a means of self-fulfillment. Consumption is the reason why anything is produced. Demand towards products is driven by convenience and habit which in returned is hard to change. Over the years, majority of consumers have realized that their purchasing behavior has a direct impact on many ecological problems (Laroche,1996; Kumarasinghe and Pathmini, 2017).

Majority of previous research studies have proved that many consumers have a preference and an interest in organically produced food (Tsakiridou et al.,2008). At present, there is a growing demand for organic food in Sri Lankan food industry due to it being free of pesticides and chemical residues. Organic food is considered to be high in quality, since it prevents excessive use of harmful ingredients and ensures the health of consumers when compared with other non organic products. Hence, organic products are obtained as a result of environment friendly production methods or cultivation techniques (Chinnici et al., 2002). So, there is an emerging market for organic food products in Sri Lanka (Kumarasinghe and Pathmini, 2017).

The emerging marketing trends show that consumers demand to know what benefits a food could deliver before making a purchasing decision, and that consumers tend to seek for "Natural aspect" of the food products. As a result of that, there is a high demand for the organic products in the market. The health factor is becoming one of the major concerns of consumers, when purchasing products, especially when it comes to food. This factor has become the main driving force for consumers to purchase organic food (Yin et al., 2010). Therefore, organic products are appearing in most places, especially in farm out-lets, Super markets, Grocery stores and Village boutiques etc. Although, there is an increasing demand for organic food in the Sri Lankan food industry, the proportion of consumers who purchase organic food on a regular basis is somewhat low. Therefore, this study was conducted with the aim of identifying the factors that affect the consumers' purchase intention towards organic food consumption with special reference to Staff of Peradeniya University.

Nowadays marketing has broadened its concept and having information on consumers' buying behavior, their preferences, attitudes, needs and their level of demand for organic products are considered to be key determinant factors, which affect the efficiency of marketing efforts in organic food industry. However, the Sri Lankan organic food industry is lacking in information on consumers' buying behavior and demand patterns. Thus, among other significant problems that the organic food sector is facing, lack of information is an additional disadvantage for the sales opportunities and for the effective marketing efforts in the organic food industry. In fact, it is more important to identify the consumers' purchasing behavior on organic food products in order to compete with high value non-organic branded products which already exist in the market.

Based on these identified gaps in existing theories and practices, the aim of this study is to identify the factors affecting the customers' purchasing intention towards organic food consumption in Sri Lanka, based on the university community of Peradeniya (UOP). Hence, the following problem statement is addressed.

1.2. Problem Statement

What are the factors influencing the consumer purchase intention towards organic food consumption among the university community of Peradeniya?

2. Literature Review

Consumer purchase intention plays a major role in decision making regarding marketing strategies. Purchase intention is an individual's motivation to perform a particular activity (Langdridge, Paschal, & Connolly, 2007), Thus, market researchers have identified purchase intention as a key point for consumers to access and evaluate the specific product, while making a purchase decision. Hence intention represents a person's motivation or behavioral plans that can directly lead to actual behavior with appropriate opportunities and resources. Consumer decision making process consists of five stages; problem recognition, information research, evaluation of alternatives, purchase and post purchase evaluation (Kotler & Keller, 2017). These five steps can be affected by attitudes, subjective norms and perceived behavioral control. This leads to better information and the decision, depending on what is perceived as very important.

The Theory of Planned Behavior (TPB) is one of the most well-studied and important theory which explain and predict the behaviors (Zoellner et al., 2012). This theory has been applied to a wide variety of studies in human behavior, including many studies that deal with sustainable food consumption in different countries and with different types of products

(Barcellos et al., 2011). In addition to that, it has been applied in food industry such as purchasing fair trade grocery products, organic foods, milk products and domestic foods in past researches (Hassan et al., 2015; Pomsanam et al., 2014).

The TPB suggests three independent determinants of behavior intention including; attitudes, subjective norms and perceived behavioral control. As a general rule, the more favorable the attitude and subjective norms with respect to a behavior and knowledge, and the greater the perceived behavioral control, the stronger should be an individual's intention to perform the behavior under consideration (Ajzen, 2015).

Attitude refers to the overall favorable or unfavorable evaluations of the behavior in question by the individual and it is considered as a key concept on consumer behavior also (Ajzen, 2005). In fact, attitude is defined as a set of beliefs, experience and feelings forming a predisposition to act in a given direction (Chandon, 2011). Several studies (Weerasiri & Cooray,2016; Karunatilleke & Weerasiri, 2016).) have shown that attitudes as a pre purchase related factor is having a positive impact on purchase intention. Basha et.al., (2015) also emphasized the relationship that exits between customer attitudes and purchase intention. Thus, the following hypothesis is formed;

H₁: There is a significant impact of attitudes on consumer purchase intention towards organic food consumption.

Subjective norm (SN) is a social factor referring to the perceived social pressure to perform or not to perform a given behavior (Ajzen 1991) and it is one of the important factors which influence the consumer purchase decision. Several studies have shown that subjective norms are having a positive predictive effect on purchase intention (Vermeir & Verbeke, 2008). Especially, in a country where there is high social interaction; people tend to follow the reference group leader who is in turn influence the group towards the certain behavior and action (Thorgosen et al., 2015). In fact, subjective norms include a person's belief about the extent to which significant others think the person should engage in the behavior or not (Kim et al., 2013). Accordingly, the following hypothesis is formed;

H₂: There is a significant impact of subjective norms on consumer purchase intention towards the organic food consumption.

The TPB focuses on perceived behavioral control, because identifying and measuring the actual resources and opportunities when performing a particular behavior is difficult. The generally accepted view is that the total set of control beliefs determined perceived behavioral control. These beliefs refer to a person's perception of the existence of resources and

opportunities required to perform a specific behavior, and evaluation of the level of importance of such resources and opportunities for the accomplishment of outcomes. By definition in TPB, perceived behavioral control predict behavior directly, as well as predicting purchase intentions.

H3: There is a significant impact of perceived behavioral control on consumer purchase intention towards the organic food consumption.

Organic food (Padel & Foster, 2005; Schifferstein & Oude Ophuis, 1998) and its' relationship with attitudes and intention towards organic foods is yet to be formally modeled. The overall awareness on organic food products among the public is increasing and their attitude towards purchase intention is positive (Bilal et al., 2015). The results of the study further show that the reasons advocated by the consumers for buying organic food products are varied and primarily the motivations behind their decision to purchase include concerns for attitudes, perceived behavior control, knowledge and their subjective norms. In fact; this phenomenon has occurred because people are beginning to be aware of the importance of consuming healthy food in their daily lives. Through health consciousness, consumers will be more prudent in choosing the right food. Therefore, price is not a big issue than the need to get the health benefits that are offered by organic food. All of these take place with the knowledge of consumers regarding the value of consuming organic food (Rizaimy et al., 2010).

H_4: There is a significant impact of knowledge on consumer purchase intention towards the organic food consumption.

3. Research Methodology

3.1. Research Design

This research is an exploratory type research with a deductive approach supported by theory of planned behavior. Population was the community of UOP. A sample of 90 individuals including academics (30), non-academics (30) and undergraduate students (30) staff from Faculty of Agriculture, UOP was selected using disproportionate stratified random sampling. A self-administered structured questionnaire survey was conducted to collect the primary data. The questionnaire consisted of two sections; section one included queries about gender, age, religion, highest education level, monthly income, marital status and occupation etc. Second section consisted of five-point likert type questions with statements indicating the attitudes, subjective norms, perceived behavioral control, knowledge and purchase intention. Respondents were asked to rate the items with five point likert scale that are ranged from 1 to 5 (1= Strongly disagree, 2= Disagree, 3= Average, 4= Agree, 5= Strongly agree).
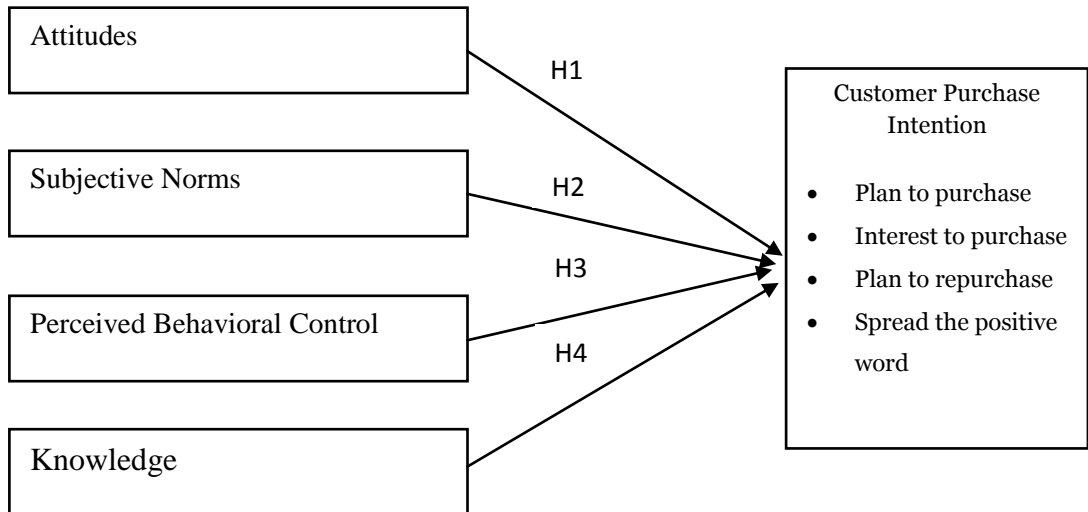
3.2. Conceptual Model

Figure 1: Conceptual Model

3.3. Data Analysis Method

For the purpose of this study, the Statistical Software Package of STATA Version 11 was used to compute all the data gathered from the questionnaire. The techniques of analysis used in this study were descriptive (mean, standard deviation) and inferential analysis (regression analysis) to sum up the data collected. To determine the level of each variable in the sample the decision continuum was constructed using mean value such as; 1.00- 2.33: poor, 2.34-3.67: moderate and 3.68-5.00: high. Regression analysis was conducted to determine the factors affecting the purchase intention towards organic food consumption of the sample respondents. The purchase intention towards organic food was considered as a dependent variable and attitude; subjective norms, perceived behavioral control and knowledge, were used as independent variables as per the theory of planned behaviour. The regression model used for the study is given below**.**

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + U$$

Y- Purchase Intention (PI)

X1-Attitudes (A)   U- Random error

X2-Subjective Norms (SN) $\beta_1, \beta_2, \beta_3, \beta_4$ -Coefficients of estimation

X3- Perceived Behavioral Control (PBC) β_0- Constant/ Intercept

X4-Knowledge (K)

4. Results and Discussion

4.1. Demographic Profile

Majority of the sample comprised of female respondents (Female- 62.26%, Male −37.74). Also 73.58% of respondents were married and 26.42% were unmarried. Further 13.2% of respondents were below the age of 30 years, 39.62% of respondents were within the age category of 30 to 40 years and rest (47.16%) of the sample respondents are above 40 years. When considering the dispersion of sample based on monthly income level 41.38% of respondents were within the monthly income level below Rs 25000. This is the higher range of income level compared to other monthly income levels within the sample of analyzed data. Second and third highest income levels were shown as more than Rs 150000 and between Rs 25000-50000, which were 26.44% and 17.24% respectively. Lowest percentages (3.45%) of respondents were within the monthly income level between Rs 75000-100000. Also the response rate was 96.66% out of total of the considered sample.

4.2 Reliability Analysis

The Cronbach's Alpha reliability coefficient can be used to explain how well the items in a scale are positively correlated to one another and if the values are closer to 1, it is considered as high internal consistency (Sekaran, 2008). Further, if Cronbach's alpha values are less than 0.60 are considered to be poor, those in the range of 0.70 is acceptable and those over 0.8 are considered to be good (Sekaran, 2008). Accordingly, from the reliability analysis, all factors including independent and dependent variables were found to be with a good reliability with all the Cronbach's Alpha result are of above 0.6 as mentioned in the below table 01.

Table 1: Statistics of Reliability Test

Variable	Items	Cronbach's Alpha
Attitudes	10	0.7792
Subjective Norms	14	0.8586
Perceived Behavioral Control	9	0.7495
Knowledge	6	0.7000
Purchase Intention	7	0.8888

Source: Survey (2018)

4.3 Normality Test

Further Pallant (2013) stated that before any statistical test is conducted, the assumptions for each statistical test should be checked, in order for results to be valid. Hence, normality test was performed before statistical analysis. According to Pallant, (2013) Shapiro Wilk test (If N<50) and Kolmogorov-Sminrov test (If N>50) can be used to test the normality of a data set. Accordingly, Kolmogorov-Smirnov test was conducted to check whether the sample is normally distributed. According to the results of table 02, it is evident that the results are normally distributed.

Table 2: Results of Kolmogorov- Sminrov Test

Construct	Statistic	df	Sig
Purchase intention	0.084	88	0.167*

Source: Survey (2018)

4.4. Descriptive Statistics

To identify the basic nature of the variables, descriptive statistics were calculated as shown in table 03. Thus, respondents' attitude about purchase intention of organic food has 3.5095 mean values (representing moderate position) and 0.59575 standard deviation (Mean A± S.D; range between 2.914-4.105 which lies the level of attitudes from moderate to high). The respondents subjective norms has 2.302 mean value (representing poor position) and 0.45407 standard deviation (Mean SN± S.D; range between 1.848-2.756 which lies the level of subjective norms from low level to moderate), perceived behavioral control has 2.6092 mean value (representing moderate position) and 0.59188 standard deviation (Mean PBC ± S.D; range between 2.0174 -3.201 which lies the level of perceived behavioral control from poor to moderate level), and finally, knowledge has 3.5977 mean value (representing moderate position) and 0.43354 (Mean K ± S.D; range between 3.1642-4.0312 which represent the level of knowledge from moderate to high level). According to the descriptive analysis results respondents purchase intention has 2.9980 (representing moderate position) mean value and 0.74752 standard deviation (Mean PI ± S.D; range between 2.2515 -3.7455 which deviate the level of purchase intention from poor to moderate level).

Table 3: Results of Descriptive Statistics

Variable	N	Mean	Std. Deviation
Attitudes (A)	87	3.5095	0.59575
Subjective norms (SN)	87	2.3020	0.45407
Perceived behavioral control (PBC)	87	2.6092	0.59188
Knowledge (K)	87	3.5977	0.43354
Purchase intention (PI)	87	2.9980	0.74752

Source: Survey (2018)

4.5. Regression Analysis

The table 04 shows the probability value, R-Square and adjusted R-square of the regression analysis. Since R squared is 0.5649, which shows that the independent variables included in the model explain 56.49% of the variation in the dependent variable.

Further, according to the table 05, the results show that out of 4 factors, only attitude (p<0.05) and knowledge (p<0.05) are having significant positive influence towards purchase intention with comparatively high beta values of 0.547 and 0.325 respectively.

Table 4: Model Summary

Model	R^2	Adjusted R^2	Prob>F
1	0.5649	0.3658	0.0004

Source: Survey (2018)

However, subjective norms and perceived behavioral control are having less significant impact (p>0.1) on purchase intention with less beta values of 0.024 and 0.003 respectively. By examining the statistic for all the independent variables; it has apparently confirmed that knowledge and attitudes are having significant relationship due to strong significant level (p<0.05) with purchase intention, indicating that the hypotheses H1 and H4 can be accepted while H2 and H3 which represents subjective norms and perceived behavioral control are rejected**.**

Table 5: Results of the Regression Analysis

Variable	Standard coefficient Beta value	Std. Error	t -value	P- value
Constant	-4.57			
Attitude	0.547	0.100	6.29	0.000**
Subjective Norms	0.024	0.079	0.43	0.667
Perceived Behavioral Control	0.003	0.131	0.04	0.971
Knowledge	0.325	0.166	2.22	0.030**

Dependent variable: purchase intention [* ($p<0.1$), ** ($p<0.05$)]

Source: Survey (2018)

5. Conclusion

When considering the descriptive statistics of the study, sample respondents tend to show moderate level of purchase intention towards the organic food. Further, results of descriptive statistics suggested that all the independent variables are shown in the moderate level, except subjective norms. That means, there is a poor level of social pressure in this community, while other causal variables including attitudes, perceived behavioral control and knowledge are shown as a moderate level. Further, results of regression analysis showed that individuals of the considered sample, place relatively high level of importance on knowledge and attitude; whereas low level of importance on perceived behavioral control and subjective norms on their intention to purchase the organic food products (The table 06 shows the summary of the tested hypotheses).

Therefore it is recommended the relevant parties, for example like organic food companies and governmental authorities etc. to consider and emphasize more on consumer's attitudes and knowledge on organic foods in order to uplift the level of purchase intention, especially in the process of marketing and promoting of organic food products .

Table 6: Summary of the Hypotheses Testing

	Hypotheses	Survey Findings
H1	There is a significant impact of attitudes on consumer purchase intention towards organic food consumption.	Supported

H2	There is a significant impact of perceived behavioral control on consumer purchase intention towards the organic food consumption.	Not supported
H3	There is a significant impact of attitudes on consumer purchase intention towards organic food consumption.	Not supported
H4	There is a significant impact of knowledge on consumer purchase intention towards on the organic food consumption.	Supported

6. Limitations of the present study

Sample size was 90 due to limited time period, especially since the research was guided by an interviewed questionnaire survey which consumed time. Also the researcher had to face limitations when developing the conceptual model due to lack of research in the context of consumer behavior in organic food industry.

7. Directions for Future Researches

It is recommended to conduct a comparative study on factors affecting the purchase intention towards the organic food consumption of the University community in Sri Lanka by expanding the sample into more universities that can represent the whole country. Also, it is recommended to conduct the research emphasizing the influence of demographic variables on the association between independent variables and dependent variable of this research model.

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