Effect of consumer’s personal value on their buying behaviour of organic food products

Heerah Jose and Vijay Kuriakose

Abstract
As value is considered as a stable construct, it is the best predictor of an individual’s behaviour. Consumer’s perception of products have great influence not only on the values which consumer have towards products but also on the values which an individual holds for himself, therefore this study classifies consumers as ‘regular’, ‘irregular’ and ‘potential buyers’ based on the values (egoistic, altruistic & biospheric) they holds. A purposive sample of 100 respondents, aged 20 – 80 were taken from Ernakulam district. Out of the total respondents 70% have brought, and are aware about the organic food products, however only 30% are regular buyers. Even though there is a significant relation between personal values and buying, a significant difference exists between regular/irregular and potential buyers.

Keywords: Personal value, organic food, Kerala

1. Introduction
India has a long history of organic farming; however, the introduction of the technology in the agriculture field has led to an unsustainable production practices. This advancement in technology not only effected the environment but also deteriorated the health condition of humans. India is an agrarian country where 51% of its workforces are employed in the agricultural sector. This same employment pattern can be seen in majority of the states; however, Kerala is an exception. In Kerala, a shift in the workforce can be seen from the primary sector to tertiary sector over a decade (George, 2011)\(^{18}\). This shift is very evident from the Gross State Domestic Product (GSDP), of Kerala in the year 2012-13, as the contribution of primary sector is only 9.3% while comparing it with secondary and tertiary sector which constitute to 23.9% and 66.7% respectively (Kerala State Council for Science, 2014)\(^{23}\).

During the early period, Kerala’s major portion of cultivation was rice and cassava however due to the technological advancement in 1970s, across the country, a dramatic increase in the production of rice and labour force shortage was wide spread. This lead to a shift in land use pattern of Keralite forcing a large number of farmers to cultivate tree crops such as rubber and coconut and cash crop such as pepper, coffee, ginger and cashew (Kumar, 2005)\(^{26}\). This unsustainable development path has made us dependent on the neighbouring states. Nearly 80% of our food items come from Andhra Pradesh and Tamil Nadu making us a consumer state.

The pesticide consumption of Andhra Pradesh and Tamil Nadu’s is at 1015 M.T and 2335 M.T respectively whereas that of Kerala is only to 631 M.T (State Department of Agriculture, 2010)\(^{41}\). Thus being a consumer state made our platter filled with pesticides. Recent ban on Maggi noodles, concern over banned pesticides found in vegetables have made the consumers think of an alternative way to feed their families (Martin, 2013; Varma, 2015)\(^{29,49}\).

Eventhough many families converted a portion of their land or their roof into a vegetable garden, there is a limit to include pesticide free food items in their consumption as all types of fruits and vegetables, pulses, cereals and spices cannot be grown at home. Therefore consumers have to depend on organic shops, but only a few are ready to buy it. In this study, the researcher tries to analyse the effect of personal values on the buying of organic food products.
2. Literature Review

2.1. Personal Value

From the time of ancient Greek philosophers like Plato, Aristotle, Kant etc, the concept of value was very prevalent, however no theory of value was developed at that time. From 1800, researchers started to acknowledge the importance of axiology (Study of Value), and a large amount of study had been conducted to understand the concept of human value across the stream (Clawson & Vinson, 1978) [7]. In the beginning, value was considered as a philosophical concept where it was inexplicable debated between whether values are subjective or objective concept (Debats & Bartelds, 1996) [10]. Later behavioural scientist comprehend the importance of value in understanding the human behaviour and an indepth study of it began.

Spranger (1928) [40], proposed that in order to understand the personality of a human being, it is very important to analyse his basic values. Taking this concept into consideration, Allport and Vernon in the early 1930’s started to conduct an empirical investigation and in 1960, Allport-Vernon-Lindzey Study of Values scale was developed (Allport, Vernon, & Litizdey, 1960; Puente, Awkard, Tesh, & Southard, 1986) [5, 33]. Later value orientation theory of Kluckhohn & Strodtbeck (1961) [24]. Rokeach’s Value Survey scale (1973) [35] and Schwartz (1992) [38] value structure made a huge contribution in this area. Various definitions of value are evolved over a period (Ref. Table: 1).

<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Definitions</th>
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<tbody>
<tr>
<td>Allport (1961) [4]</td>
<td>“A value is a belief upon which a man acts by preference.”</td>
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<td>Williams (1968) [54]</td>
<td>“values as criterion is the more important usage for purposes of social scientific analysis”</td>
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<tr>
<td>Rokeach (1973) [35]</td>
<td>“A value is an enduring belief that a specific mode of conduct or end-state of existence is personally or socially preferable to an opposite or converse mode of conduct or end-state of existence”.</td>
</tr>
<tr>
<td>Super (1980) [46]</td>
<td>“Value is an objective, either a psychological state, a relationship, or material condition, that one seeks to attain.”</td>
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<tr>
<td>Hofstede (1984) [20]</td>
<td>“Values are a broad tendency to prefer certain states of affairs over others.”</td>
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<tr>
<td>Schwartz (1992) [38]</td>
<td>“Values are concepts or beliefs, pertain to desirable end states or behaviours, transcendent specific situations, guide selection or evaluation of behaviour and events, and are ordered by relative importance”.</td>
</tr>
<tr>
<td>Feather (1995) [15]</td>
<td>“Values can be conceived as abstract structures that involve the beliefs that people hold about desirable ways of behaving or about desirable end states”.</td>
</tr>
<tr>
<td>Verplanken &amp; Holland (2002) [52]</td>
<td>“Values are motivational constructs (cognitions) that may define a situation, elicit goals and guide action”.</td>
</tr>
</tbody>
</table>

Source: Compiled by the author

As the Schwartz theory was concentrating more on altruistic values of a person, Stern and his colleagues, broadened this concept by introduced the egoistic (self-enhancement value) and biospheric (self-transcendent value)motive factor. Egoistic values specify the concern for oneself, altruistic values indicates the concern for others due to environmental issue and the biospheric values points out the concern for all the living beings (Schultz, 2000) [37]. Some researchers have claimed that there is no difference between altruuristic value and biospheric value, however study conducted by Schultz (2000, 2001) [37, 36] have found strong evidence to distinguish these three values. Stern, Dietz, & Karlof, in 1993 have stated that egoistic motive is the strongest motive followed by altruistic and biospheric.

As the human value is an abstract concept and is less vulnerable to change, they can be considered as a better predictors of behaviour (Fotopoulos, Krystalis, & Anastasios, 2011) [16]. This concept is widely applicable across culture, without any distinction of rich and poor. The study conducted by Diekmann & Franzen (1999) [12], shows that only difference between the rich and less affluent countries on their pro-environmental approach are due to insufficient economic resources and not due to lack of concern for the environment (Kollmuss & Agyeman, 2002) [22]. However values can differ from person to person, what one person think as an important guiding principle in his life may not be considered as important in another person. For instance, concern for pesticide residue in food, people can react to this concern on the basis that pesticide residue is dangerous to my health, it is dangerous to the health of my children or it damages the environment. Therefore, it is very essential to understand which category of people are prone to buy an organic food products.

3. Theoretical Background and Hypotheses Development

3.1. Personal value ——> Attitude

Attitude is “a psychological tendency that is expressed by evaluating a particular entity with some degree of favour or disfavour” (Eagly & Chaiken, 1998) [13]. Values and beliefs are the main factors which mould an attitude (Eagly & Chaiken, 1995; Verplanken & Holland, 2002) [14, 52]. An individual may formulate certain values toward an object, and evaluate upon it. The outcome of this evaluation is the development of an attitude towards it. Previous studies have shown that there exists a theoretical flow from values through attitudes to behaviour, forming a hierarchical relationship of value-attitude-behaviour (Homer & Kahle, 1988; Maio and Olson, 1994; Stienstra, Ruelle, & Bartels, 2002) [21, 28, 45]. This means that values have an impact on attitudes, which in turn influence a person’s behaviour.

Various researchers have stated that personal values are central while choosing organic products. Studies have found that, consumers purchase organic food due to their egotic motive (health concern) rather than altruistic motive (environmental concern) (Mannussona, Arvolaa, Hurstia, Abergb, & Sjoden, 2003) [27]. In addition, studies claim that occasional buyers give more importance to egoistic motive while heavy users buy organic due to altruistic motive (Shepherd, Mannusson, & Sjoden, 2005) [19]. However, there are studies which state that egoistic values have a negative correlation with pro-environmental behaviour.

A large amount of studies conducted in Europe have found that animal welfare (Biospheric value) is the most important attribute while making purchase decision of organic food products (Verbeke & Viaene, 2000; Torjusen, Lieblein, Wandel, & Francis, 2001) [50, 49]. However, eventhough people may have a positive attitude towards environmental or animal welfare improvements, they are largely passive in their role as consumer due to their available budget (Grunert & Juhl, 1995) [19]. This shows that consumers will consider...
environmental or animal welfare improvements activities if it is beneficial to the individual (egoistic motive).

In line with these studies, the following four hypotheses are proposed:

H1. When a consumer’s egoistic value is high, his/her attitudes towards organic food products will be positive.

H2. When a consumer’s altruistic value is high, his/her attitudes towards organic food products will be positive.

H3. When a consumer’s biospheric value is high, his/her attitudes towards organic food products will be positive.

H4. There is significant difference between personal value of consumers between groups.

![Research framework](image)

3.2. Value —> Attitude —> Behaviour

Various studies have found that, there is always an interlinking variable like beliefs, personal norms or attitude etc to link between value and behaviour, as no direct relation exist between them. (Nordlund & Garvill, 2003; Poortinga, Steg, & Vlek, 2004) [38, 39]. However, there are other studies which states that there exist a direct relation between value and behaviour but their strength is low (Brunso, Scholderer, & Grunert, 2004) [6].

Main focus while purchasing a product is to evaluate its cost and benefit. This positive and negative evaluation of a product will determine behaviour (Han et al., 2010). According to Ajzen (1985), an individual’s positive attitude towards undertaking behaviour will have a positive outcome. However, authors such as Padel & Foster (2005) [31] and Vermeir & Verbeke (2006) [31] stated that positive attitude doesn’t leads to positive buying. As there exist a contradicting view with regard to the relation between attitude and behaviour, hypothesis 5 is proposed as follows:

H5. Consumer’s positive attitude towards organic foods products will lead to positive buying behaviour.

4. Methods

4.1. Data Collection

Survey data were collected through self — administered questionnaire in Ernakulam district, Kerala. Primary food buyers in the household who are above 20 years were included in the target population. Sample is taken from both groups. A purposive sampling method is used in this study to get a representative sample from both groups. Data of organic buyers were taken from the shops in and around Ernakulam and they were contacted for a face to face interview. A total of 100 valid responses were used for this study. The study was conducted during the period, May 2015- November 2015.

4.2. Measures

Apart from the socio-demographic questions (age, gender, education, income, marital status, and children in the household) the questionnaire covered value orientation measures, attitude and purchase behaviour.

Measures of value orientations were based on an instrument developed by De Groot and Steg in 2008 which is a short version adapted from Stern, Dietz & Guagnano (1998) [42]. In total 13 values were selected, of which five measures egoistic values (authority, wealth, social power and influential), four items for altruistic values (social justice, equality, a world at peace, and helpful) and four items for biospheric values (preventing pollution, protecting the environment, respecting the earth and unity with nature). Ajzen’s attitude scale was used for this study. Attitude was measured using 11-item semantic differential scale containing a variety of evaluative (e.g., beneficial- harmful) and affective (e.g., pleasant- unpleasant) adjective pairs (Ajzen, 1988; Ajzen & Fishbein, 1980) [1, 3]. A five point bipolar scale were used ranging from “very beneficial to very harmful”, “very pleasant to very unpleasant”, “very bad to very good” etc.

To measure purchase behaviour, scale is taken from Dickieson et al. (2009) [11], where they grouped two variables such as effort and intent in to one singular dependent variable called behaviour as it was convincingly loading as single variable when conducted a factor analysis. A total of 8 item were used to measure behaviour, of which 4 item measured intent and another 4 item for effort. A seven-point Likert agreement scale, where “1” corresponded to “strongly disagree, “2” to “Disagree”, “3” to “Disagree Somewhat”, “4” corresponded to “neither agree nor disagree”, “5” to “Agree Somewhat”, “6” to “Agree” and “7” corresponded to “strongly agree” were used to indicate the respondents opinion.

5. Data Analysis

For analysis, SPSS 20 statistical program package for windows is used. A linear multiple regression analysis was performed to test the hypotheses and also an ANOVA is administered to analysis any significant difference exist between ‘regular’, ‘irregular’ and ‘potential’ consumers. Before testing the hypotheses, reliability of the measurement scale is tested. The reliability of the construct should be greater than 0.7 (Cronbach, 1951) [8] in order to meet with the general requirement. Cronbach’s α values for the scales shows that all the values have met the requirement.

6. Results and Discussion

Eleven demographic variables were measured, including gender, age, marital status, education, number of children in the household and income. Out of the total sample 76% have brought organic products out of which 44% have masters education, shows that higher educated people are more prone to buy organic products (Wier & Calverley, 2002; Radman, 2005; Zanolli, Baehr, Botschen, Laberenz, Naspetti, & Thelen, 2004) [53, 34, 55]. 57% who brought
organic have children at home. This finding is in line with the other studies which states that presence of children at home has an influence on the buying behaviour (Thompson & Kidwell, 1998; Davies et al., 1995; Fricke & Alvensleben, 1997) [47, 9, 17].

The result of the regression analysis reveals that personal value accounts for 18 percent of the explained variances for the consumer’s attitude toward organic food products. However, H1 is rejected as there exist no significant relation between egoistic value orientation of consumer and attitude (Ref. Table 2), H2 and H3 is accepted.

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lower Bound</td>
<td>Upper Bound</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>39.857</td>
<td>1.807</td>
<td>22.055</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>.241</td>
<td>.133</td>
<td>.180</td>
</tr>
</tbody>
</table>

Table 2

H2 & H3 predicts that ‘when a consumer’s altruistic/biospheric value is high, his/her attitudes towards organic food products will be positive’. The corresponding standardized regression coefficients of the independent variables in the regression model are both significantly greater than zero (b = 0.48, p<.0001; b = 0.54, p<.0001) in the expected direction. Therefore, H2 and H3 are supported. The results are consistent with earlier studies, which show that pro-environmental value are more important while buying organic products than egoistic value (Verbeke & Vianen, 2000; Torjussen, Lieblen, Wandel, & Francis, 2001; Shepherd, Magnusson, & Sjoden, 2005) [50, 48, 39].

Analysis of variance (ANOVA) was carried out to compare the effect of personal value on the buying behaviour of “regular”, “irregular” and “potential” consumers. Results confirmed that personal value has a significant effect on the buying behaviour at the p<.05 level for three groups [F (2, 97)=8.31, p= 0.000] (Ref. Table:3). Therefore, H4 is accepted which states that ‘there is significant difference exist between personal value of consumers between groups’.

Regression analysis was performed to analyse the relation between attitude of consumers and their purchase behaviour. The analysis reveals that consumer’s attitude accounts for 23 percent of the explained variances for purchase behaviour of organic foods. The standardized regression coefficients of the independent variables in the regression model are significantly greater than zero (b = 0.486, p<0.0001) in the expected direction. Therefore H5 is accepted.

<table>
<thead>
<tr>
<th>(I) Type</th>
<th>(J) Type</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>Sig.</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>.02766</td>
<td>1.79647</td>
<td>1.000</td>
</tr>
<tr>
<td>3</td>
<td>7.32431</td>
<td>2.09644</td>
<td>.002</td>
<td>2.3343</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>-7.32431</td>
<td>1.79647</td>
<td>1.000</td>
</tr>
<tr>
<td>3</td>
<td>7.29665</td>
<td>1.92760</td>
<td>.001</td>
<td>2.7085</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>-7.32431</td>
<td>2.09644</td>
<td>.002</td>
</tr>
<tr>
<td>3</td>
<td>7.29665</td>
<td>1.92760</td>
<td>.001</td>
<td>-11.8848</td>
</tr>
</tbody>
</table>

* The mean difference is significant at 0.05 level. 1 = Regular buyer, 2= Irregular buyer, 3= Potential customers

When analysed further to confirm which personal value makes a significant difference among the consumers to buy organic, results states that there is no statistically significant difference between egoistic value orientation and types of consumers [F(2, 97) = 1.85, p = 0.162]. However there exist a significant difference between egoistic value orientation and altruistic [F (2, 97) = 5.42, p = 0.006] / biospheric [F (2, 97) = 12.03, p = 0.000] value oriented consumers. Therefore, a consumer who has more altruistic/biospheric value orientation buys organic food products than an egoistic oriented person.

Regression analysis was performed to analyse the relation between attitude of consumers and their purchase behaviour. The analysis reveals that consumer’s attitude accounts for 23 percent of the explained variances for purchase behaviour of organic foods. The standardized regression coefficients of the independent variables in the regression model are significantly greater than zero (b = 0.486, p<0.0001) in the expected direction. Therefore H5 is accepted.

7. Conclusion

Based on the results of this study, several conclusions can be drawn. In general, consumers who are married and who have children at home are more concerned about the food they consumer, this confirmes the earlier studies on the profile of organic consumers (Hughner, Prothero, Schultz, & Stanton, 2007) [22]. Although personal value have an overall significant relation in forming consumers attitude towards organic food products, when segregated into ‘regular’,
‘irregular’ and ‘potential buyers’, their relation varies. Consumers who are more oriented towards altruistic and biospheric values have a positive attitude towards organic food products than egoistic value oriented people. This is in line with the earlier research findings (Shepherd, Magnusson, & Sjoden, 2005) [39]. Thus the study claims that while purchasing organic food products consumers are more concerned about the health of their loved ones rather than one’s own health.

This article will help to expand the knowledge of marketers who try to understand the consumers who demand for sustainable food products. As the value orientation of these buyers are different from others, the research findings will help the marketer to focus their attention on the target group. Furthermore, the results will also help the government to run a successful public awareness campaign as the theme they should focus on are ‘concern for others’ and ‘environment’.

8. Limitation and Scope for Future Study

The present study is confined only to Ernakulam district with limited number of respondents. For further study, researchers can increase the number of sample size along with taking into consideration of other districts. There might be other factors which affect the consumers to buy organic food products that aspect is not considered in this study.

9. Reference
29. Martin K. Banned pesticide residues found in vegetable samples. The Hindu. 2013.
32. Poortinga W, Steg L, Vlek C. Values, environmental concern, and environmental behavior: a study into