Religiosity on Consumer Behaviour, special reference to green food consumption

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Abstract- Religiosity as it relates to consumer behaviour has been under-researched (Cleveland & Chang, 2009; Swimberghe, Flurry, & Parker, 2011). This means that there is a need to develop a more robust theoretical understanding of how individual religiosity impacts consumer behaviour (Vitell, 2009). Therefore this study specially investigates the influence of Religiosity and Consumer Behaviour on green food consumption.

The descriptive research was used to 150 respondents resides in Mannunai North Divisional Secretariat Area in Batticaloa District in Sri Lanka as the convenient sample and the cross-sectional design was used to analyze the collection of data. The study considers Religiosity (intrinsic religiosity and extrinsic religiosity) as independent variable and Consumer behaviour as dependent variable. Data were collected through closed ended questionnaires and the analysis was conducted by SPSS Statistics, which are Univariate, Bivariate, Multivariate analysis.

The study found that this religiosity influences on Consumer Behaviour. The findings of the study suggest that the extrinsic religiosity influences high on consumer behaviour on green products consumption.

Key Terms: Religiosity, Intrinsic Religiosity, Extrinsic religiosity and Consumer Behaviour

1. Introduction

Marketers are keen to sell the green products to customers, and the consumers are keen to buy the green products. There are immense knowledge on environment, ecological, health and green products among the consumers. Environment friendly, healthy, organic, green products are becoming very popular among the consumers irrespective of age, education and gender. Marketers are also very keen in segmenting their market scientifically in order to achieve huge profit by providing the supplies of the consumers. The consumers are also very much concern over the generation, health issues, obesity, long living, brain function and innovative ideas generations are very keen in green food. Moreover consumers are willing to “pay for the privilege of buying green” (Mintu-Wimsatt and Bradford, 1995).

There is a progressive increase in the consumption of the green products specially food. Marketers of different industries are taken leadership in green in their relevant field such as green hotel, green banking, green electronic products, and green automobiles and so on. This leads the academics to study and explore the factors of this immense change towards green products. Besides these efforts consumer awareness, knowledge about the green also encouraged consumers to go for green products. According to Coddington
(1993), there is a change in consumer perspectives. Consumers are worried about the environmental change and damage towards their health and safety. There are many reasons why consumers behave towards buying the green products. They behave because of their concerns towards the health issues or rather is there any influences from the religiosity.

Huffman (1988), stated that religiosity is a stronger determinant of the values than any other predictor. This is a major theme in functionalist theory as well. It is also appropriate to examine the relationship between the religiosity and the consumer Behaviour of green food.

Therefore this study is to investigate the relationship between religiosity and consumer behaviour of green food in Batticaloa District.

**Literature Review and Hypothesis Development**

**Religiosity**

Religion is an abstract concept that challenges scholars in defining the term (Guthrie, 1996). Religiosity is a belief in the existence of God and a commitment to attending to and complying with rules that members of that religion believe have been defined by God (McDaniel and Burnett, 1990). Religiosity can both directly and indirectly contribute to the formation and shaping of individuals’ norms, thoughts, moral standards, opinions, attitudes, socializations, beliefs and decisions making (Y. Choi, 2010; Fam et al., 2004; Wilkes et al., 1986). Religiosity is categorized into two: intrinsic and extrinsic religiosity (Allport, 1950). Intrinsic religiosity is defined by internalized beliefs regardless of external consequences (Allport & Ross, 1967; Schaefer & Gorsuch, 1991). Extrinsic religiosity is a social convention, a self-serving instrumental method shaped to suit oneself (J. W. Clark & Dawson, 1996; Donahue, 1985a). Extrinsic religiosity further explained as personal extrinsic religiosity and social extrinsic religiosity. In this study intrinsic religiosity and extrinsic religiosity approach is used to measure religiosity because it is a highly relevant approach (Vitell, 2009).

**Consumer behaviour**

Consumer behaviour is the study of individuals, groups, or organizations and the processes they use to select, secure, use, and dispose of products, services, experiences, or ideas to satisfy their needs and wants. Consumer behaviour blends elements from social factors, cultural factors, personal factors and psychological factors.

**Hypotheses**

Hirschman (1981) was one of the first marketing academics to specifically investigate the link between religiosity and consumer behaviour (Cited in Cutler, 1991). His research into American Jewish ethnicity suggests that religious affiliation should be viewed as a variable with a large potential influence on marketing and consumer behaviour. In the literature, religiosity has been shown to affect consumer decision making, ethical beliefs and judgments. However, due to the sensitivity of religiosity as it relates to consumer behaviour has been under-researched (Cleveland & Chang, 2009; Swimbergh, Flurry, & Parker, 2011). Empirical studies suggest the need to integrate religiosity into consumer research (Delener, 1994, Delener and Schiffman, 1988, Essoo and Dibb, 2004, Mokhlis, 2009). Religiosity has been shown to influence consumption indirectly by significantly contributing to an individual’s norms, ethical beliefs and values (Bailey & Sood, 1993; Essoo & Dibb, 2004; Muhamad & Mizerski, 2013). According to Allport (1950), ‘intrinsic’ and ‘extrinsic’ religious orientations are the most dominant conceptual paradigm of psychology of religion. The Allport and Ross (1967), ‘Religious Orientation Scale’ distinguishes considering religion as an end in itself as Intrinsic orientation versus considering religion as a means to the end as Extrinsic orientation. Intrinsic religiosity refers to the motivation arising from goals set forth by the
Religion itself whereas Extrinsic religiosity refers to the inducement to pursue religious behaviour is driven more by selfish ends. Allport (1966) explained that extrinsically oriented people may be more egocentric, using religion to satisfy ulterior motives such as protection, attention, friendship, social acceptance and comfort. Nowadays the global trend to go for green products because it gives more health related outcomes. Therefore, extrinsics also would like to go for the green products because it gives much benefits to the self. Intrinsics, also are very serious about religious principles and are self-abnegating in religious matters. They are universally compassionate, and believe in brotherhood and sisterhood (Ryckman et al. 2004). Furthermore, there is a strong association between environmental attitudes and purchasing frequency and intention in the sense that more environmentally concerned individuals are more likely to buy green food with the perception that green products are healthier than conventional alternatives (Peattie, 2010; Vermeir and Verbeke, 2008; Zhou et al., 2013).

Above statements indicate the value of religiosity in consumer behaviour need to be researched this marketing world. Therefore, from the review of literature the following hypotheses are being formed:

H1: There is a significant and positive relationship between intrinsic religiosity and green food consumption behaviour.

H2: There is a significant and positive relationship between extrinsic religiosity and green food consumption behaviour.

![Conceptual Frame Work](image)

**Methodology**

The type of research is deductive and variables are measured with quantitative analysis. Primary data are collected through structured questionnaires with closed statements measured with Lickert’s scale (1 = strongly disagree and 5 = strongly agree). One hundred and fifty (150) respondents who are consuming Green food are selected by convenience sampling technique. The summary of this is shown in Table 1.

Table 1: Summary of sampling framework

<table>
<thead>
<tr>
<th>Study Setting</th>
<th>Consumers of green food in Batticaloa District</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit of Analysis</td>
<td>Consumers in Mannunai North Divisional Secretariat Division</td>
</tr>
<tr>
<td>Sample Size</td>
<td>Hundred &amp; Fifty (150) Consumers</td>
</tr>
<tr>
<td>Sample Method</td>
<td>Convenient Sampling Technique</td>
</tr>
</tbody>
</table>

Source: Survey Data, 2016
Results and Discussion

Intrinsic Religiosity and Extrinsic Religiosity as independent variables

Intrinsic religiosity as an independent variable has High Level attribute of the Consumer Behaviour (Mean X1 = 4.0244 and see Table 2). Extrinsic Religiosity also have high level of attribute towards Consumer Behaviour (Mean X2 = 4.0503 and see Table 2). In addition, most of the consumers expressed generally a common opinion regarding the variables: Intrinsic Religiosity and Extrinsic Religiosity (Standard Deviation = .40949 and 0.32558 respectively). Religiosity has high level of attribute on consumer behaviour (Mean X3 = 4.0608 and Standard Deviation = .31107 see Table 2).

Table 2: Overall Measures of Independent Variables

<table>
<thead>
<tr>
<th>Description</th>
<th>Intrinsic Religiosity X1</th>
<th>Extrinsic Religiosity X2</th>
<th>Religiosity X3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>4.0244</td>
<td>4.0503</td>
<td>4.0608</td>
</tr>
<tr>
<td>SD</td>
<td>.40949</td>
<td>.32558</td>
<td>.31107</td>
</tr>
<tr>
<td>Decision Attribute</td>
<td>High Level</td>
<td>High Level</td>
<td>High Level</td>
</tr>
</tbody>
</table>

Source: Survey Data, 2016

Consumer Behaviour as Dependent Variable

Consumer Behaviour towards green food consumption has high level attribute toward consumer behaviour (Mean X4 = 4.1667 and see Table 3). In addition, most of the consumers expressed generally a common opinion regarding the variable of Consumer Behaviour (SD = .35464)

Table 3: Overall Measures of Dependent Variable

<table>
<thead>
<tr>
<th>Description</th>
<th>Consumer Behaviour towards Green Food purchase X3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>4.1667</td>
</tr>
<tr>
<td>SD</td>
<td>.35464</td>
</tr>
<tr>
<td>Decision Attribute</td>
<td>High Level</td>
</tr>
</tbody>
</table>

Source: Survey Data, 2016

Relationship between Intrinsic Religiosity and Consumer Behaviour towards green food purchasing

The correlation analysis is taken to explain the correlation between Intrinsic Religiosity and Consumer Behaviour towards Green Food. Results indicate that there is statistically linear significant and positive relationship (r = .441, p <0.01) between them. Thereby, accept the Hypothesis H1- i.e., Intrinsic Religiosity has a significant influence on Consumer Behaviour of green food purchasing. It reflects that Intrinsic Religiosity positively influences the Consumer Behaviour of Green Food purchasing. It is shown in Table 4.
Table 4: Correlation between Intrinsic Religiosity and Consumer Behaviour

<table>
<thead>
<tr>
<th>Pearson Correlation</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Intrinsic Religiosity</strong></td>
<td>(Pearson Correlation)</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
</tr>
</tbody>
</table>

**.** Correlation is significant at the 0.01 level (2-tailed).
List wise N=150

Source: Survey Data, 2016

Further to know the impact of Intrinsic Religiosity on Consumer Behaviour of Green Food Purchasing, the liner regression analysis was undertaken and it’s shown in the following table 5, as bellow:

Table 5: Multiple Liner Regression Analysis

<table>
<thead>
<tr>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Change Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>.441</strong></td>
<td><strong>.194</strong></td>
<td><strong>.189</strong></td>
<td><strong>.31937</strong></td>
<td><strong>.441</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Survey Data, 2016

According to the table 4 indicates that the significance is at F Change (0.000) the Co-efficient of Determination (R²) is 0.441 and Adjusted R- Square is 0.189 indicates an Lower relationship between Intrinsic Religiosity on Consumer Behaviour of Green Food Purchasing. The multiple analysis indicate as 0.441 ie that the independent variable - Intrinsic Religiosity strongly predicts Consumer Behaviour of Green Food Purchasing. Also the R² indicates the proportion of variance that can be explained as 19.4% of the dependent variable. And Adjusted R² adjusts the value of R² to accurately represent the interest of sample, in this analysis Adjusted R² is 18.9%, more conservative than the unadjusted R² of 19.4%. It is different enough from the unadjusted R² to be worth reporting.

Relationship between Extrinsic Religiosity and Consumer Behaviour towards green food purchasing

The correlation analysis is taken to explain the correlation between Extrinsic Religiosity and Consumer Behaviour towards Green Food purchasing. Results indicate that there is statistically linear significant and positive relationship (r = .626, p <0.01) between them.
Thereby, accept the Hypothesis H$_2$- i.e., Extrinsic Religiosity has a significant influence on Consumer Behaviour of green food purchasing. It reflects that Extrinsic Religiosity positively influences the Consumer Behaviour of Green Food purchasing. It is shown in Table 6.

Table 6: Correlation between Extrinsic Religiosity and Consumer Behaviour

<table>
<thead>
<tr>
<th>Pearson Correlation</th>
<th>(Pearson Correlation)</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extrinsic Religiosity</td>
<td>.626**</td>
<td>.000</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).

List wise N=150

Source: Survey Data, 2016

Further to know the impact of Extrinsic Religiosity on Consumer Behaviour of Green Food Purchasing, the liner regression analysis was undertaken and it’s shown in the following table 7, as bellow:

Table 7: Multiple Liner Regression Analysis

<table>
<thead>
<tr>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Change Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>R Square Change</td>
</tr>
<tr>
<td>.626</td>
<td>.392</td>
<td>.388</td>
<td>.27737</td>
<td>.626</td>
</tr>
</tbody>
</table>

Source: Survey Data, 2016

According to the table 7 indicates that the significance is at F Change (0.000) the Co-efficient of Determination (R$^2$) is 0.626 and Adjusted R$^2$ Square is 0.388 indicates moderate relationship between Extrinsic Religiosity on Consumer Behaviour of Green Food Purchasing. The multiple analysis indicate as 0.626 ie that the independent variable - Extrinsic Religiosity strongly predicts Consumer Behaviour of Green Food Purchasing. Also the R$^2$ indicates the proportion of variance that can be explained as 39.2% of the dependent variable. And Adjusted R$^2$ adjusts the value of R$^2$ to accurately represent the interest of sample, in this analysis Adjusted R$^2$ is 38.8%, more conservative than the unadjusted R$^2$ of 39.2%. It is different enough from the unadjusted R$^2$ to be worth reporting.

Religiosity and Consumer Behaviour of Green Food Purchasing

Hypothesis test and ANOVA test analysis is performed to find out the result for the following research question: ‘Does Religiosity influences on Consumer Behaviour of Green Food Purchasing in Batticaloa District?’.
Table 8: ANOVA Test

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>10.994</td>
<td>1</td>
<td>10.994</td>
<td>210.048</td>
<td>.000*</td>
</tr>
<tr>
<td>Residual</td>
<td>7.746</td>
<td>148</td>
<td>0.052</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>18.740</td>
<td>149</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Religiosity
b. Dependent Variable: Consumer Behaviour

Source: Survey Data, 2016

According to the table 8 specifies, ANOVA test p-value is .000, hence it is less than 0.05. Therefore, the decision is reject the H₀. Also the table 4 indicating that correlation between Intrinsic Religiosity and Consumer Behaviour towards Green Food Purchasing is .441, moderate positive relationships at the significant level of 0.000. And table 6 indicating that correlation between Extrinsic Religiosity and Consumer Behaviour towards Green Food Purchasing is .626, Strong positive relationships at the significant level of 0.000.

Therefore there is enough evidence to conclude that there is a significant influence of religiosity on Consumer Behaviour of Green Food purchasing.

Conclusion and Recommendations

6.1 Conclusion

This study reflects Religiosity as an independent variable and as the Consumer Behaviour of Green Food purchasing as dependent variable. The both variables are individually having high level attributes of the customers and almost 76.6% of the further it is illustrated by the Pearson’s Correlation analysis, indicates that positive significant linear relationship between these two variables. The correlation coefficient (r) was 0.766 at the 1% level. This implies that Consumer Behaviour can be predicted with Religiosity. Based on the research findings Religiosity is influencing more on the Consumer Behaviour of Green Food Purchasing. The most noteworthy findings is consumer Behaviour of Green Food Purchasing explained variance, thus clearly influenced by the Religiosity. The study is, particularly surveyed the Green Food Purchasing the Mannunai North Divisional Secretariat area in Batticaloa District. A buyer’s Behaviour can be influenced by Religiosity such as intrinsic as well as extrinsic religiosity. This study also has the same positive
effect of Religiosity on consumer Behaviour of Green Food Products. The consumption is beginning with the consumers’ Behaviour of each individuals and the Religiosity of the consumers can influence on Green Food Purchasing.

**Recommendations**

Based on the conclusion some suggestions are forwarded to the green food industry to improve their marketing activities in order to understand consumer behaviour. Marketers should understand that religiosity influences on consumer behaviour of green food purchasing. So marketers can understand the religiosity of the consumers and they can provide the green food products to the consumers. And further marketers should understand the religiosity of consumers to promote the green food products. Food industry should consider the influence of green food and the consumer behaviour of green food purchasing. Because it will be help to reduce health and medical issues and increase healthy life.

This study focuses on Religiosity as independent variable and Consumer Behaviour as dependent variable and their relationship between them. However, it is explicit that there may be other variable to be considered to explain this variation. Future studies can be devised to identify those additional variable for explaining the Consumer Behaviour.

**REFERENCES:**