Choice of Retail Outlet for Fresh Fruits: The Case of Women in Trinidad and Tobago

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Abstract. Retailing in Trinidad and Tobago is in the midst of a major transformation as foreign retailers such as Price Smart attempt to penetrate the market. At the same time roadside retailers are emerging on a daily basis in the prepared food sector, fresh produce sector and dry goods sector. Traditionally fresh produce was predominantly sold in the public markets (wet markets) and roadside stalls in Trinidad and Tobago. Today the range of fresh produce offered by the supermarkets makes one wonder why some shoppers still frequent the public markets. Trinidad and Tobago is classified as a high income country and with relatively high levels of disposable income, health conscious and time pressured consumers; shoppers are faced with choices of the retail outlet from which they will predominantly purchase their fresh fruits. A review of the food marketing literature reveals that there is a paucity of research on the changing food market in the Caribbean. This study, which is just one part of the investigation into food marketing in the Caribbean, focuses on the socioeconomic variables that influence female consumers' retail outlet choice for fresh fruits in Trinidad. The results obtained indicated that the only demographic variable that was statistically significant was income. It is therefore concluded that age, educational level attained, marital status, household size and employment status does not influence where Trinidadian women purchase fresh fruits.

Keywords: Demographic variables, Trinidadian women, Fresh fruit, Retail outlet choice.

Introduction

Traditionally, in Trinidad and Tobago (T&T), as was the case in most developing countries, fresh produce retailing was limited to public markets (wet markets), roadside stands and at farmgate. However, in the last few decades consumers have been offered an expanded range of outlets from which to purchase fresh produce. This has been a result of the emergence and rapid growth of supermarkets. Reardon, T., Timmer, C. P., Barrett, C. B., & Berdegue. J (2003), Reardon, T., Henson, S., & Berdegue, J. (2007), Reardon, T., & Gulati, A. (2008) and many other researchers have analyzed and demonstrated the rapid rise of supermarkets in developing countries. Supermarkets are no longer located in niches in capital cities in developed and developing countries but are spreading rapidly into low-income communities[1].

A few of the commonly cited reasons for the increased importance of supermarkets in food retailing are:

● Urbanization – with the rapid increase in the urban centers in developing countries people become more removed from the farms and as such have become more dependent on buying food than producing it. Supermarkets provide an expanded range of food products, from fresh fruits and vegetables to highly processed and precooked meals;

● More women in the work force – with more women employed out of the home they are time pressured and have less time to prepare meals from scratch, hence the demand for convenience foods of which supermarkets provide a wide variety. Also supermarkets permit the time pressured women a "one stop" shopping opportunity;

●Rising per capita incomes – with increasing affluence, diets shift from basic staples to more fresh fruit and vegetables and protein, all available in supermarkets today;

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[1] For purposes of this study, the term supermarket is used to refer to all self-service retail food outlets, regardless of floor space and number of stock keeping units (SKUs) carried.

● Advances in technology – with advances in such areas as transportation people are now able to travel further distances to acquire their food. Also, fridges and freezers are now commonplace items in households, so larger volumes of food can be bought and stored;

Where do consumers buy fresh produce and why appears to be an overlooked area of research in the Caribbean. Marketing theory suggests that the choice of an outlet for a product is a multifaceted construct, driven not only by the product and brand but also by socio-economic status. According to Wikipedia," Socio-economic status is an economic and sociological combined total measure of a person's work experience and an individual's or family's economic and social position in relation to others based on income, education and occupation".

Trinidad and Tobago (T&T) is an archipelago that comprises of 23 islands located longitude 61 1/2° W and latitude 10 1/2° N. The two main islands in the archipelago are Trinidad and Tobago and are located in the southern Caribbean, south of Grenada. Trinidad and Tobago is considered a high income island nation. Table 1 illustrates the Gross Domestic Product (GDP) and Gross Domestic Product per Capita (GDP/Capita) for the period 2009 to 2013, in current US dollars. As is observed in table 1 the GDP/Capita displayed an increasing trend over the five year period. As can be deduced from the table the GDP/Capita in 2013 was 26% greater than the 2009 level.

Table 1: GDP and GDP/Capita for T&T in current US dollars, 2009 to 2013.

Year	GDP	GDP/Capita
2009	19,332,270,662	14,618
2010	20,758,191,858	15,630
2011	23,676,348,287	17,761
2012	23,436,342,520	17,523
2013	24,640,839,008	18,373

Source: World Bank Data

The nation's growth is very dependent on oil and natural gas, and is well known for being an excellent investment site for multinational businesses in this area. However, the performance of the economy has not only attracted foreign companies in the oil and gas sector but also in general retailing. T&T is also home for foreign retailers such as, Price Smart and Payless Shoes. T&T was the first Caribbean Community (CARICOM) member Price Smart entered in 2000 and by 2014 it had established four stores.

The World Economic Forum 2012 ranked T&T 86 out of 133 in the Global Competitiveness Report, while the United Nations Development Program Human Development Index ranked it 64 out of 182. Both are indicators of the attractiveness of the economy to foreign investors. So if this trend continues in the future one can expect a continued transformation of retailing in T&T, with other foreign investors entering the market. Tandon, S. et al (2011) in their study found that the penetration of modern grocery formats is higher in countries where GDP/Capita is higher. They also suggested that countries with high growth in modern retailing are being fueled by a demand for convenience.

The rest of the paper is organized as follows. The next section provides a brief review of some relevant literature to this study. This is followed by a statement of the problems addressed in the study and the hypotheses developed to try and address the research problems. Thereafter the analytical approach and data used in the study is described. This is followed by the results and discussion, and finally some conclusions are made.

Literature Review

What motivates and persuades consumers to choose one retail outlet over another and remain loyal has occupied the minds of practitioners and academics for several decades. Different researchers adopt various theories to explain consumers' behavior on these issues. For example, Bellenger, D. N., & Moschis G. P. (1982) grouped these theories into intrapersonal and interpersonal theories. Interpersonal theories suggest that social class, reference groups and family can influence retail outlet choice.

In many developing countries today, social class is determined by one's level of education, occupation and income. Many researchers have used different components of social class to predict store choice behavior. Myers, J. R. & Mount, J. F. (1973) and Hisrich, R. D. & Peters, M. P. (1974) are two early studies that suggest "ability to buy" (income) is a major explainer of consumer behavior.

The food and grocery products and retail outlet choice have received attention from many academics using different analytical procedures. Carpenter, M. and Moore, M. (2006) looked at consumer demographics, store attributes and retail outlet choice in the US grocery market. In this study they specified four outlet types, specialty stores, supermarkets, supercenters and warehouse clubs. They found that income was the only predictor of specialty store patronage. Household size is a significant predictor of patronage within the traditional supermarket category. For the supercenter format, education, income and household size predict patronage. In the case of the warehouse clubs income and education positively influenced patronage.

Gorton, M. et al (2009) for example, investigated Thai shopping behavior between wet markets, supermarkets and food quality. They found on all salient attributes affecting retail outlet choice, wet markets are perceived, in general, to be inferior to supermarkets. However for fresh produce sales, wet markets retain an advantage.

Ting Meng et al (2014) in their study on consumer's food shopping choice in Ghana found that income, education, marital status and household size had a positive influence on food shopping frequency in supermarkets, while occupation had a significant effect on food shopping frequency in open-air markets.

Salma Mirza (2010) in her study of urban Pakistanis found that age, gender and occupation had no influence on the choice of retail format, while household income, household size and education does influence choice of retail format. As she reports her findings differed from Prasad, C. J. and Reddy, D. R. (2007) who found age, occupation, educational level, household income level and household size does influence the choice of retail format. In another study by Iqbal et al. (2013) on Pakistani Society they found education level, occupation, income level and household size did influence store selection.

Prasad C. J. and Aryasri A. R. (2011) in their study on retail format choice for food and grocery products in India found that shoppers' age, gender, occupation, education, monthly household income, family size and distance travelled to store have significant association with retail format choice decisions.

More recently Okello, J. J. et al (2012) looked at the choice of vegetable retail outlet in Kenya, the case of Kale, and identified income, level of education, risk perception, living environment, willingness to pay for safe Kale and confidence in the consistency of quality of Kale as the major conditioners of the choice of retail outlet by consumers. Oghojafor, B. E. A. & Nwagwu, K. O. (2013) examined the choice of shopping outlets for grocery products and socio-economic profile of female consumers in Nigeria. They found that socio-economic variables such as, income, level of education, type of employment and marital status did not influence retail outlet choice for groceries.

In an attempt to increase our knowledge on food marketing in the Caribbean in general, and more specifically on fruit marketing in Trinidad, this study focuses on whether the socio-economic profile of Trinidadian women influences their choice of outlet for fresh fruits. Traditionally in Trinidad the purchase of fresh fruits such as banana, mangoes, watermelon, pawpaw, oranges, grapefruits and other citrus was primarily in the public market or at the fruit stall. Today, with globalization and trade liberalization apples, grapes, pears and peaches are also readily accessible at most fruit stalls and public markets and surely in the supermarkets all year round. For purposes of this study the public market and fruit stall are considered one category of outlet – traditional outlet.

Research Problems

Based on the brief review provided the problems that will be addressed in this study are as follows:

(1) To identify the retail outlet, traditional versus supermarket, most patronized for the purchase of fresh fruit by Trinidadian women?

(2) To identify if demographic attributes such as, age, income, level of education, marital status, household size and employment status influence the choice of retail outlet for the purchase of fresh fruit by Trinidadian women?

Research Hypotheses

H_{o1}: *There is no relationship between age and choice of retail outlet for the purchase of fresh fruits by Trinidadian women.*

H_{o2}: *There is no relationship between income and choice of retail outlet for the purchase of fresh fruits by Trinidadian women.*

H_{o3}: *There is no relationship between education level attained and choice of retail outlet for the purchase of fresh fruits by Trinidadian women.*

H_{o4}: *There is no relationship between marital status and choice of retail outlet for the purchase of fresh fruits by Trinidadian women.*

H_{o5}: *There is no relationship between household size and choice of retail outlet for the purchase of fresh fruits by Trinidadian women.*

H_{o6}: *There is no relationship between employment status and choice of retail outlet for the purchase of fresh fruits by Trinidadian women.*

Analytical Approach and Data

To investigate if there was a relationship between the socio-economic variables outlined above and retail outlet choice a questionnaire was developed and pretested in July 2014. The questionnaire tried to identify the main choice of retail outlet used by respondents when purchasing fresh fruits and their demographics, such as age, income, educational level attained, marital status, household size and employment status. The outlet attributes that influenced the women to shop at the different formats were also ranked on a scale from 1 to 5. However, these would be analyzed and presented in a separate paper.

A convenience sampling method was used to collect the data. Questionnaires were administered to prospective respondents who were willing to participate at banks, hospitals, the University of the West Indies and outside supermarkets and in public markets during the months of August and September 2014. Data collection was restricted to Trinidad. A total of 350 questionnaires were administered of which 306

were fully completed and returned, giving a response rate of 87 percent. The relevant data was analyzed using SPSS version 20.

 The data collected was primarily nominal and ordinal, as such, the analytical approach used was primarily descriptive. In marketing research the use of contingency tables or cross-tabulation analysis is very common, and this study used this approach to test the stated hypotheses.

Pearson Chi Square tests were employed to test relationships between outlet choice and all the demographic variables except employment status where a Fisher's Exact test was used, since this was a 2x2 contingency table. The decision rule employed in this study is as follows: reject the null hypothesis if the probability of the test statistic is less than or equal to alpha 0.05.

Results

Figure 1 illustrates the proportion of the sample that shopped at each outlet. As is seen in this chart the traditional market was the preferred outlet for fresh fruits, being chosen by twice the percent of respondents that used supermarkets.

Figure 1: Percent of sample purchasing fruit at the two outlet formats.
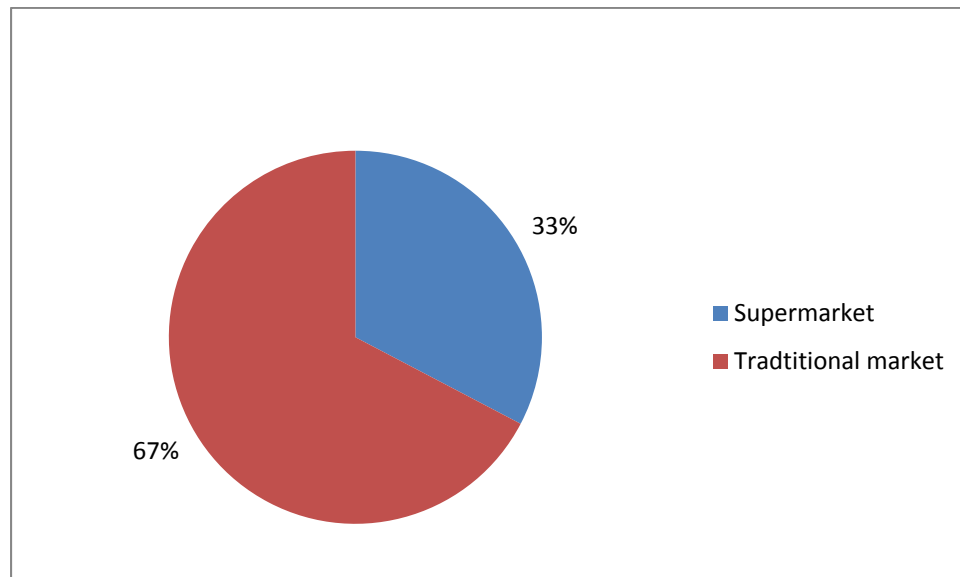
Table 2 illustrates the frequencies and percentages of the different categories of the demographic variables analyzed in this study. The demographic data of the respondents shows that 32% of the participants were in the age group 21-30 years. Overall the participants can be regarded as being young with more than 50% of the sample being under 50 years old. The majority of the women were single, 63%, with the remainder being either married, divorced or widowed. The majority, 78%, of the participants in the study had a monthly household income of under TT$ 20,000, with 10% in the TT$20,001- $25,000 and 12% over TT$ 25,001 income brackets respectively. Tertiary level education was attained by 70% of the participants, while 28% had secondary and the remainder primary education. The 1-4 household size accounted for 70% of the respondents, followed by 28% in the 5-8 persons category and the remainder in the over 9 persons group. Of the 306 participants 72% were employed.

Table 2: Frequency distribution of respondents' demographic data

Demographic variables		
Age	Frequency	Percent
<20	45	14.7
21-30	98	32.0
31-40	57	18.6
41-50	38	12.4
51-60	37	12.1
>61	31	10.1
Monthly family income level ($TT)[2]	Frequency	Percent
<$5000	35	11.4
$5001- $10,000	111	36.3
$10,001-$15,000	62	20.3
$15,001-$20,000	29	9.5
$20,001-$25,000	31	10.1
>$25,001	38	12.4

[2] US$1.00 = TT$ 6.27

Table 2: Frequency distribution of respondents' demographic data continued

Demographic variables		
Education attained level	**Frequency**	**Percent**
Primary	8	2.8
Secondary	84	27.5
Tertiary	214	69.9
Marital status	**Frequency**	**Percent**
Single	192	62.7
Married	96	31.4
Divorced	11	3.6
Widow	7	2.3
Household size	**Frequency**	**Percent**
1-4	215	70.3
5-8	87	28.4
>9	4	1.3
Employment status	**Frequency**	**Percent**
Employed	221	72.2
Unemployed	85	27.8

Pearson Chi Square tests were employed to test relationships between outlet choice and all the demographic variables except in cases where a 2x2 contingency table arose when a Fisher's Exact test was used.

H_{o1}: *There is no relationship between age and choice of retail outlet for the purchase of fresh fruits by Trinidadian women*

The Pearson Chi Square test result obtained for hypothesis 1 was p = 0.242. The null hypothesis is not rejected as the test result is not statistically significant. Hence, it is concluded that age of Trinidadian women does not influence their choice of retail outlet while shopping for fresh fruits.

H_{o2}: *There is no relationship between income and choice of retail outlet for the purchase of fresh fruits by Trinidadian women.*

The Pearson Chi Square test result obtained for hypothesis 2 was p = 0.026. The null hypothesis is rejected as the test result is statistically significant (p<0.05). Hence, it is concluded that income of Trinidadian women does influence their choice of retail outlet while shopping for fresh fruits.

H_{o3}: There is no relationship between education level attained and choice of retail outlet for the purchase of fresh fruits by Trinidadian women.

The Pearson Chi Square test result obtained for hypothesis 3 was p = 0.546. The null hypothesis is not rejected as the test result is not statistically significant. Hence, it is concluded that educational level of Trinidadian women does not influence their choice of retail outlet while shopping for fresh fruits.

H_{o4}: There is no relationship between marital status and choice of retail outlet for the purchase of fresh fruits by Trinidadian women.

The Pearson Chi Square test result obtained for hypothesis 4 was p = 0.672. The null hypothesis is not rejected as the test result is not statistically significant. Hence, it is concluded that marital status of Trinidadian women does not influence their choice of retail outlet while shopping for fresh fruits.

H_{o5}: There is no relationship between household size and choice of retail outlet for the purchase of fresh fruits by Trinidadian women.

The Pearson Chi Square test result obtained for hypothesis 5 was p = 0.108. The null hypothesis is not rejected as the test result is not statistically significant. Hence, it is concluded that household size of Trinidadian women does not influence their choice of retail outlet while shopping for fresh fruits.

H_{o6}: There is no relationship between employment status and choice of retail outlet for the purchase of fresh fruits by Trinidadian women.

The Fisher's Exact Test was used in this case because the contingency table was a 2x2. The test statistic obtained for hypothesis 6 was p = 0.684. The null hypothesis is not rejected as the test result is not statistically significant. Hence, it is concluded that employment status of Trinidadian women does not influence their choice of retail outlet while shopping for fresh fruits.

Conclusions and Discussion

This study offers an insight into the choice of retail outlet for fresh fruit purchases by Trinidadian women. In contrast to Oghojafor and Nwagwu (2013) who analyzed Nigerian women choice of retail outlet when purchasing grocery products, of which fresh fruits are a subsector, and found none of the socio-economic variables being statistically significant, in this study income does influence Trinidadian women choice of retail outlet for fresh fruits. The result of income influencing retail outlet choice for grocery products was also found by Mirza (2010) and Prasad and Reddy (2007).

Also, the traditional retail format, public markets and roadside stalls, appears to be outperforming the modern retail format of supermarkets as the preferred format for purchasing fresh fruits. This suggests that while the supermarkets might be making inroads in the sale of packaged and other food products the traditional format is still a competitor to be reckoned with in the fresh fruit sector.

As the food retailing landscape is transformed in Trinidad and Tobago, retailers would need to keep a focus on the total experience they provide their customers. In this regard the lowest price might not be enough to attract shoppers. Attributes such as, store atmospherics, convenient location, ease of parking, speed of service etc. can be expected to increase in importance as disposable incomes continue to increase. This study looked at only one component, demographics. Further research examining for instance, store attributes, psychographics etc. is needed to provide store managers with the type of information they will need in the food marketing arena of the future.

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