

Gender Differences of Perceived Fresh Produce Retail Outlet Attributes in Trinidad and Tobago

C. W. Ardon Iton

Department of Agricultural Economics and Extension, University of the West Indies, St. Augustine, Trinidad

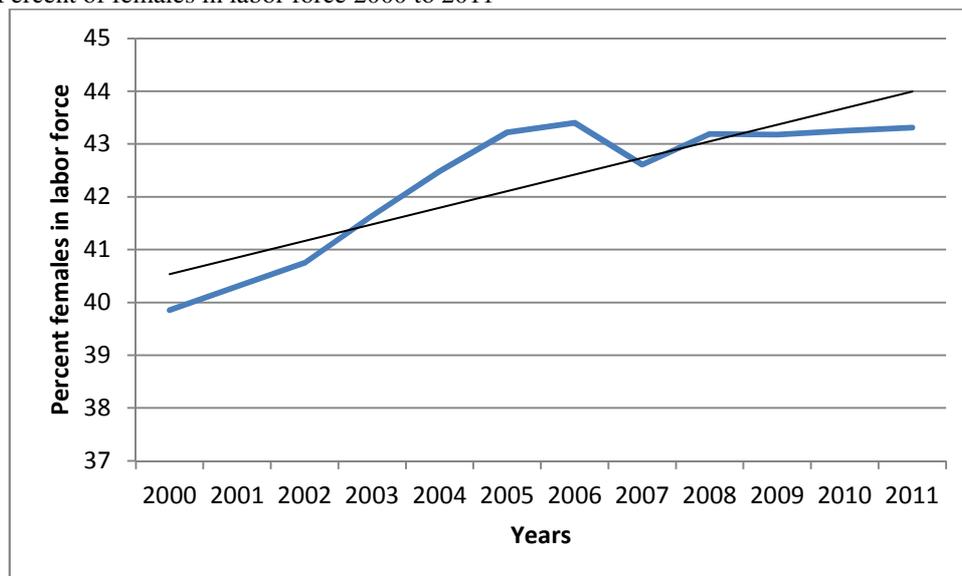
Abstract

In the Caribbean there is a dearth of literature on food marketing despite the significant changes taking place in food retailing in many developing countries. Traditionally, food shopping was considered woman's work. Today a casual stroll in the supermarket or public market will reveal a large number of males undertaking the household food shopping task. This study focuses on the difference in perceived importance of outlet attributes by male and female primary household food shoppers in the context of fresh produce shopping in Trinidad and Tobago. The results obtained indicated that the two most important attributes for both males and females were – cleanliness of place and quality of fresh produce, though in different order of perceived importance. Only two of the twenty attributes analyzed were statistically significant for males and females – presentation of fresh produce and ease of getting to and from the retail outlet. This study makes an attempt to understand purchase behavior as traditional gender roles change and marketers try to develop strategies to better match the contemporary food market in Trinidad and Tobago.

Keywords: Gender, Retail outlet attributes, Trinidadian and Tobagonian shoppers, Fresh produce

In the Caribbean until recently gender roles were clearly demarcated, men were bread winners and women homemakers. In this regard grocery shopping and meal preparation were primarily the woman's domain. Today, in Trinidad and Tobago (T&T) for numerous reasons – more educated career oriented women, more women working outside the home, more single father households etc – men can be seen in supermarkets and public markets purchasing groceries and fresh produce (FP) for the home. Figure 1 shows the percentage of females in the labor force in T&T for the period 2000 to 2011. As can be observed in this graph, as is depicted by the trendline, there is an upward trend over the period, with 2011 being a 9% increase over 2000. Internationally, there has been a steady stream of consumer behavior studies that point to the growth and presence of male food/grocery shoppers in the last two or three decades (Piper and Capella, 1993; Piron 2002; Helgesen and Nettet, 2010, Mortimer 2011). In contrast, there is a paucity of academic research in the Caribbean on food marketing in general, more so the influence of gender on food/grocery shopping. This study attempts to explore one area of the gender grocery shopping behavior – the perceived importance of store attributes.

Figure 1: Percent of females in labor force 2000 to 2011



Source: International Labour Organization, using World Bank population estimates.

Consumer behavior can be defined as the study of how, where, when and why people buy, use and get rid of products or services. It is well documented in the literature that a consumer making a purchase decision will be influenced by some of the following factors:

Personal – e.g. age, race, sex, income;

Social – e.g. family, reference groups, class structure;

Cultural – e.g. accepted norms;

Psychological – e.g. motives, perception;

Consequently, knowledge of consumer behavior must be a prerequisite for the successful development of any marketing strategy.

The literature on consumer behavior is replete with studies exploring the impact of gender and/or sex on shopping behavior. The American Psychological Association defines gender as “The attitudes, feelings, and behaviors that a given culture associates with a person’s biological sex”. Attributes associated with gender can therefore be considered acquired over time. Sex on the other hand is determined by one’s genes at birth. As (Fischer and Arnold 1994) opine biological, sociological, attitudinal, and trait-based explanations are variously offered, depending in part upon the behavior to be explained and in part on the assumptions upon which the research is grounded. Additionally, other studies seek to ascribe the difference in observed behavior – gender or sex – by investigating issues such as, difference in products bought, difference in response to sales promotion, making a list for the shopping trip, time spent looking for deals, information about the product etc. Against this backdrop this study seeks to identify gender differences in the perceived importance placed on food retail outlet attributes in T&T by the primary household food shopper, male or female.

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. Thereafter the analytical approach and data used in the study is described. This is followed by the results and discussion, and finally some conclusions and recommendations offered.

Literature Review

Store attributes influencing consumer shopping behavior have attracted the interest of researchers for many decades and still is an area of interest to researchers today. (Martineau 1958) suggested that the store’s personality or image has two components, its functional qualities and its psychological attributes. The functional attributes included such attributes as, location, assortment of products and store layout, while the psychological attributes related to the feelings generated by functional factors such as spacious, not crowded etc. Since then there has been many other aspects of the retail outlet that have been identified as influencing consumer behavior. (Kunkel and Berry 1968) suggested the following definition of store image: ‘retail store image is the total conceptualized or expected reinforcement that a person associates with shopping at a particular store’. In an attempt to operationalize their definition they suggested the following twelve components of store image: Price of merchandise; Quality of merchandise; Assortment of merchandise; Fashion of merchandise; Sales personnel; Location convenience, Other convenience factors; Services; Sales promotions; Advertising; Store atmosphere and Reputation on adjustments.

(Zameer and Mukherjee 2013) also studied store image, focusing on the food and grocery retail patronage behavior in India between Kirana stores and modern retailers; however, they focused on urban consumers. In this study seventeen components of store image were developed and analyzed: Distance (convenience of location), Parking facility, Product variety, Product quantity to be purchased, Expected prices, Phone order facility, Home delivery facility, Sales promotion schemes, Credit facility, Bargaining facility, Product quality, Self-service facility, Time required for shopping (convenience of quick purchase), Goods return facility, Goods exchange facility and Availability of loyalty programs. In this study they found that there was a significant difference in the role played by convenience of location, parking facility, product variety, product quantity, home-delivery facility, sales promotion schemes, bargaining facility, self-service facility, goods return facility, goods exchange facility and availability of loyalty programs between the two formats.

(Helgesen and Nettet 2010) investigated associations among gender, drivers of consumer satisfaction (antecedents e.g. satisfaction with store location, satisfaction with operating hours, store easy to find, satisfaction with price etc) and consumer satisfaction in a grocery context in Norway. Their research utilized a simple comparison of the means of selected variables, statistical tests of the means for significant differences, and regression analysis. Independent sample t-tests of the mean level of store satisfaction between females and males were not statistically significant. Of the 14 antecedents analyzed only the difference of the mean of price was statistically significant at the 0.10 level. In the multiple regressions controlling for the effects of the antecedents, gender appeared to have a significant direct effect on store satisfaction.

(Piron 2002) examined whether Singaporean husbands had become more active in grocery shopping decision-making and purchasing. Traditionally, in Singapore grocery shopping was a woman’s activity, so Piron investigated the husband’s input into activities, such as, initiating the purchase decision, influencing the decision, participating in grocery shopping, enjoyment derived from grocery shopping etc. The results suggested that males are getting more involved, with 51% of the male participants viewing grocery shopping as a family activity. Only 5% of the wives thought grocery shopping was not for men. Husbands’ involvement at the “buyer” stage was quite low, so their participation was mostly as influencers.

(Rongaghi et al 2013) investigated the effect of gender on consumer behavior with the case of mobile

phones. The five hypotheses tested in the study are: There is no significant difference between male and female shopping behavior, price, product, place and promotion. Their results suggested that there is a significant difference between the two groups in shopping behavior with regards to, place and promotion. (Sonner et al 1995) in a study titled “A Comparison of the Responsiveness of Male Shoppers Versus Female Shoppers to Sale Promotions”, examined the two groups responses to four types of sales promotion – special displays, in-store price discounts, retail feature advertisements, and coupons using a Tobit Model. The results suggested that there was no statistically significant difference between the two groups’ proportion of purchases using coupons, and based on retail store feature advertisement. There was a statistically significant difference between the two groups’ proportion of purchases made from a special display and in-store price discounts.

(Langrehr and Langrehr 1986) analyzed the difference in 17 attitude statements (e.g. food shopping takes up too much time), 13 behavior statement (e.g. I buy the highest quality food available) and 5 factor derived scales (e.g. concern about price). They found significant differences in 8 of the attitude statements, 4 of the behavior statements and 3 of the derived factor scales. They concluded that men are likely to have a lower interest in food shopping and cooking and to be less interested in shopping on the basis of price when compared to women.

(Mortimer and Clarke 2011) in a study titled “Supermarket consumers and gender differences relating to their perceived importance levels of store characteristics” compared the perception of 30 single attributes (e.g. ease of parking, competitive prices, no waiting, regular discounts) between male and female shoppers. Overall they found that female shoppers considered single attributes more important than that of males. Men rated 26 items as less important than women did, 2 items were rated the same by both men and women (well staffed departments, efficient operators), and 2 items higher than women did (no waiting, served quickly).

It is against this backdrop the following 20 store attributes were identified for this study: Price of FP, Variety of FP available, Presentation of FP, Quality of FP, Ability to self select FP, Ability to argue over price, Availability of other food products, Outlet near home, Ease of getting to and from outlet, Cleanliness of place, Appearance of place, Crowdedness of place, Speed of being able to select item, Speed of being able to pay for item, Outlet recommended by friends, Outlet frequented by friends, Customer advice offered by sellers, Friendliness of sales persons, and Operating hours. In an attempt to increase our knowledge on food marketing in the Caribbean in general, and more specifically in T&T, this study focuses on how different the selected attributes were perceived by primary male and female household food shoppers.

Research Problems

The research problems addressed in this study are:

- (1) To identify perceived importance of retail outlet attributes of male and female primary household food shoppers in T&T.
- (2) To compare the means of the perceived importance of retail outlet attributes of male and female primary household food shoppers in T&T.
- (3) To test if there is a statistically significant difference in the perceived importance of retail outlet attributes’ means between male and female primary household food shoppers in T&T.

Research Hypotheses

H₀₁: There is no significant difference in perception regarding the importance associated with price of FP between male and female primary household shoppers.

H₀₂: There is no significant difference in perception regarding the importance associated with variety of FP between male and female primary household shoppers.

H₀₃: There is no significant difference in perception regarding the importance associated with presentation of FP between male and female primary household shoppers.

H₀₄: There is no significant difference in perception regarding the importance associated with quality of FP between male and female primary household shoppers.

H₀₅: There is no significant difference in perception regarding the importance associated with ability to self select FP between male and female primary household shoppers.

H₀₆: There is no significant difference in perception regarding the importance associated with ability to haggle/argue over price of FP between male and female primary household shoppers.

H₀₇: There is no significant difference in perception regarding the importance associated with availability of other food products between male and female primary household shoppers.

H₀₈: There is no significant difference in perception regarding the importance associated with outlet being near home between male and female primary household shoppers.

H₀₉: There is no significant difference in perception regarding the importance associated with ease of getting to and from the outlet between male and female primary household shoppers.

H₀₁₀: There is no significant difference in perception regarding the importance associated with ease of parking

between male and female primary household shoppers.

H₀₁₁: There is no significant difference in perception regarding the importance associated with cleanliness of place between male and female primary household shoppers.

H₀₁₂: There is no significant difference in perception regarding the importance associated with appearance of place between male and female primary household shoppers.

H₀₁₃: There is no significant difference in perception regarding the importance associated with crowdedness of place between male and female primary household shoppers.

H₀₁₄: There is no significant difference in perception regarding the importance associated with speed of being able to select items between male and female primary household shoppers.

H₀₁₅: There is no significant difference in perception regarding the importance associated with speed of being able to pay for items between male and female primary household shoppers.

H₀₁₆: There is no significant difference in perception regarding the importance associated with outlet being recommended by a friend between male and female primary household shoppers.

H₀₁₇: There is no significant difference in perception regarding the importance associated with outlet being liked by a friend between male and female primary household shoppers.

H₀₁₈: There is no significant difference in perception regarding the importance associated with customer advice offered by sellers between male and female primary household shoppers.

H₀₁₉: There is no significant difference in perception regarding the importance associated with friendliness of sale persons between male and female primary household shoppers.

H₀₂₀: There is no significant difference in perception regarding the importance associated with operating hours between male and female primary household shoppers.

Data and Analytical Approach

To investigate if there was a difference in importance between the male and female food shoppers a questionnaire was developed and pretested in January 2015. The questionnaire collected data on where and why Trinidadian and Tobagonians purchased FP. The sample for this study is a subset of the data collected for the larger study. The first 75 male and female respondents that responded in the affirmative to the following question and successfully completed the questionnaire were utilized: Are you the primary food purchaser in your household? Previous gender studies have used sample sizes ranging from 70 to 150, as is pointed out in Mortimer and Weeks (2011). This study uses a sample of 75 males and 75 females.

A convenience sampling method was used to collect the data. Questionnaires were administered to prospective respondents who were willing to participate at roadside fresh produce stalls, outside supermarkets and in public markets during the months of February and March 2015. The collected data was analyzed using SPSS version 21.

The respondents were asked to rank the identified variables on a Likert scale of 1 to 5, where 1 was not important and 5 very important. Point Score Analysis, (Ilkbery 1977), was used to identify the ranking of the variables. Equation 1 illustrates the Point Score formula.

Equation 1:

$$\text{Point Score} = \sum_{i=1}^5 r_i n_i$$

Where: r = rank

i = ranking level.....i = 1, 2, 3, 4 or 5

n = number of respondents that choose the respective 'i'

Independent samples t-test was used to identify if there was a statistically significant difference in the means between the ranking of the attributes for male and female shoppers. 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

Tables 1 and 2 illustrate the point scores in a descending order of the attributes analyzed in this study by males and females. The attribute ranked 1st by females was cleanliness of outlet while quality of FP was ranked 1st by males. However, in both groups two attributes were common – cleanliness of place and quality of FP – in the top three ranked attributes. In the case of males outlet near home was ranked of least importance while outlet recommend by friends was least important for females.

In table 3 the mean scores and difference in the means of the attributes are presented. The female scores fell between 4.36 to 2.61 (important to neutral), a wider range than the male scores, which were between 4.17 to 2.69 (important to neutral). Observed in this table the means of sixteen of the attributes for females were higher (more important) than that of males. The males mean rankings were higher for ease of parking, outlet

recommended by friends, outlet frequented by friends and friendliness of sales persons than females. This suggests that males consider these attributes as being more important than females do while shopping for FP. Table 4 shows the results of the independent sample t-test conducted on the data collected from the sample. The Levene's Test for homogeneity of variances was used to check the variance between the two samples. For all twenty attributes tested the $p > 0.05$ was obtained and as a result the null hypotheses are not rejected. We can therefore proceed on the assumption of homogeneity of variance between the two groups.

Of the twenty attributes of the outlets tested only presentation of FP and ease of getting to and from the outlet were significantly different for the two groups of shoppers. As such the null hypotheses are rejected and the alternatives are accepted:

H_{A3}: *There is a significant difference in perception regarding the importance associated with presentation of FP between male and female primary household shoppers.*

H_{A9}: *There is a significant difference in perception regarding the importance associated with ease of getting to and from the outlet between male and female primary household shoppers.*

The results suggest that there are two attributes of the retail outlet that are perceived differently by males and females- the presentation of FP and the ease of getting to and from retail outlets.

Conclusions and Discussion

The objective of this study was to compare the perceived importance of male and female FP shoppers on a selected number of retail outlet attributes. The results indicated that there was a mathematical difference in the means for all the variables analyzed. However, mathematical differences are only the starting point for comparisons. As the results show, for the majority of the analyzed attributes – 90% - there was no statistically significant difference. (Helgesen and Nettet 2010) in their analysis of fourteen store antecedents also observed differences between males and females, but only one was statistically significant at the 0.10 level – Prices.

Both males and females ranked cleanliness of place and quality of FP as their two most important attributes, though in different order of importance. In T&T based on the findings of this study food retail outlet operators could opt to effectively market to both groups, males and females, by delivering high standards on both attributes - cleanliness of place and quality of FP. However, from a marketing strategy development perspective the attributes that were statistically different require special attention.

Presentation of FP was ranked 3rd by females and 5th by males and was statistically different in importance. For FP retail outlet operators that are attempting to attract one or the other gender groups this information can be used in the market segmentation process. For FP outlets that are focusing on a primarily female clientele, greater attention is needed on how FP is merchandized. Further these outlets must also focus on their location, since the results of the study suggest that females FP shoppers attach greater importance in getting to and from outlets than males.

In a study by (Mortimer and Clarke 2011), twenty eight of the thirty supermarket attributes analyzed were statistically different for males and females. In this case exploring the benefits of gender based market segmentation might be more beneficial than the results obtained from the present study suggest for T&T. The Australian food market might be at a more advanced stage of development than the T&T food market, and as such clearer demarcations are possible.

Food retailing in Trinidad and Tobago is a highly competitive industry, and it is expected to become more so in the years to come. As food retailers attempt to fine tune their strategies in an attempt to gain market share and fight off the competition, they will have to increase their knowledge of what attracts patrons and keep them loyal. In this regard, academic research can be helpful. This study looked at only one link of the myriad of possible impacts gender can have on consumer behavior – perception of store attributes and gender. Further research examining for instance, demographics of shoppers at the different outlet formats, psychographics etc. is needed to provide store managers with the type of information they need in tomorrow's food marketing arena.

Table 1: Point Scores of outlet attributes of males in descending order of importance

No.	Attribute	Males
1	Quality of FP	313
2	Cleanliness of place	302
3	Friendliness of sales persons	298
4	Appearance of place	290
5	Presentation of FP	282
6	Price of FP	279
7	Variety of FP	273
8	Ability to self-select FP	266
9	Operating hours	251
10	Customer advice offered by sellers	241
11	Ease of parking	237
12	Crowdedness of place	234
13	Speed of being able to pay	225
14	Ease of getting to and from outlet	222
15	Speed of being able to select item	214
16	Outlet frequented by friends	213
17	Ability to argue over price	209
18	Availability of other food products	207
19	Outlet recommended by friends	204
20	Outlet near home	202

Table 2: Point Scores of outlet attributes of females in descending order of importance

No.	Attributes	Females
1	Cleanliness of place	327
2	Quality of FP	325
3	Presentation of FP	311
4	Appearance of place	310
5	Ability to self-select FP	295
6	Friendliness of sales persons	295
7	Variety of FP	292
8	Price of FP	289
9	Operating hours	269
10	Customer advice offered by sellers	266
11	Ease of getting to and from outlet	254
12	Speed of being able to pay	250
13	Crowdedness of place	245
14	Speed of being able to select items	238
15	Availability of other food products	235
16	Ease of parking	231
17	Outlet near home	226
18	Ability to argue over price	215
19	Outlet frequented by friends	206
20	Outlet recommended by friends	196

Table 3: Difference in means of outlet attributes between females and males

Attribute	Female	Male	Difference
Price of FP	3.8533	3.7200	0.1333
Variety of FP	3.8933	3.6400	0.2533
Presentation of FP	4.1467	3.7600	0.3867
Quality of FP	4.3333	4.1733	0.1600
Ability to self select FP	3.9333	3.5467	0.3867
Ability to haggle over price	2.8667	2.7867	0.0800
Availability of other food products	3.1333	2.7600	0.3733
Outlet near home	3.0133	2.6933	0.3200
Ease of getting to and from outlet	3.3867	2.9600	0.4267
Ease of parking	3.0800	3.1600	-0.0800
Cleanliness of place	4.3600	4.0267	0.3333
Appearance of place	4.1333	3.8667	0.2667
Crowdedness of place	3.2667	3.1200	0.1467
Speed of being able to select items	3.1733	2.8633	0.3200
Speed of being able to pay for items	3.3333	3.0000	0.3333
Outlet recommended by friends	2.6133	2.7200	-0.1067
Outlet frequented by friends	2.7467	2.8400	-0.0933
Customer advice offered by sellers	3.5467	3.2133	0.3333
Friendliness of sales persons	3.9333	3.9733	-0.0400
Operating hours	3.5867	3.3467	0.2400

Table 4: Equality of means t-test and hypotheses test results

Attribute	Independent Sample t-test Sig.(2-tailed)	Accept or reject null hypothesis
Price of FP	0.541	Accept
Variety of FP	0.204	Accept
Presentation of FP	0.034	Reject
Quality of FP	0.372	Accept
Ability to self select FP	0.059	Accept
Ability to haggle over price	0.705	Accept
Availability of other food products	0.069	Accept
Outlet near home	0.145	Accept
Ease of getting to and from outlet	0.037	Reject
Ease of parking	0.728	Accept
Cleanliness of place	0.058	Accept
Appearance of place	0.144	Accept
Crowdedness of place	0.467	Accept
Speed of being able to select items	0.140	Accept
Speed of being able to pay for items	0.128	Accept
Outlet recommended by friends	0.589	Accept
Outlet liked by friends	0.654	Accept
Customer advice offered by sellers	0.108	Accept
Friendliness of sale person	0.823	Accept
Operating hours	0.300	Accept

References

- Beynon, B. J., L. A. Moutinho and C. Veloutsou. 2010. Gender Differences in Supermarket Choice: An Expositional Analysis in the Presence of Ignorance using CaRBs. *European Journal of Marketing* 44 (1): pp. 267-290.
- Chopra, A. N. 2014. Factors affecting Purchase behavior of Women grocery consumer – An Insight. *Journal of Business Management & Social Sciences Research* 3 (6): pp. 71-79
- Fischer, E. and S. J. Arnold. 1994. Sex, Gender Identity, Gender Role Attitudes and Consumer Behavior. *Psychology and Marketing* 8 (2):pp. 163-182.
- Helgesen, O. and E. Nasset. 2010. Gender, Store Satisfaction and Antecedents: A case Study of a Grocery Store. *Journal of Consumer Marketing* 27(2): pp. 114-126.

- Ilkbery, B. W. 1977. Point Score Analysis: A Methodological Framework for Analysing the Decision-making Process in Agriculture. *Tijdschrift voor Economische en Sociale Geographie*, Vol. 68 pp. 66-71
- Kraft, H. and J. M. Weber. 2012. A Look at Gender Differences and Marketing Implications. *International Journal of Business and Social Science* 3 (21): pp. 247- 253
- Kunkel, J. H., and Berry, L. L (1968) A Behavioral Conception of Retail Image. *Journal of Marketing* Vol. 32 October, pp. 21-26
- Langrehr, F. W. and V. B. Langrehr. 1986. A Comparison of the Attitudes and Behaviors Of Men and Women in their roles as Primary Household Food Shoppers. *Journal of Food Distribution Research* 17 (2) 32-42
- Martineau. P. 1958. The Personality of the retail store, *Harvard Business Review*, Vol. 36, 47-55
- Mortimer, G. 2011. The Emergent Male Grocery Shopper: An Identification of Male Supermarket Shopper Types. Downloaded March 25, 2015. http://marketing.conference-services.net/resources/327/2342/pdf/AM2011_0016.pdf
- Mortimer G. and P. Clarke. 2011. Supermarket consumers and gender differences relating to their perceived importance levels of store characteristics. *Journal of Retailing and Consumer Services*, 18 (6) 575 - 585.
- Mortimer G. 2013. A gender comparison of food shopper typologies. *Journal of International Food & Agribusiness Marketing*. 25 (4) 267- 286.
- Oghojafor, B.E.A., P. K. A. Ladipo, and K. O. Nwagwu 2012. Outlet Attributes as Determinants of Preference of Women between a Supermarket and a Traditional Open Market. *American Journal of Business and Management* 1 (4) 230-240
- Otnes, C. and M. A. McGrath 2001. Perceptions and realities of male shopping behavior. *Journal of Retailing* 77(1): 111-137.
- Piper, W. S. and L. M. Capella 1993. Male Grocery Shoppers Attitudes and Demographics. *International Journal of Retail and Distribution Management* 21(5): p. 22-30.
- Piron, F. 2002. Singaporean Husbands and Grocery Shopping: An Investigation into Claims of Changing Spousal Influence. *Singapore Management Review* 24(1): pp. 51-66.
- Ronaghi, M. H. Danae and H. Hamed. 2013. Survey of Effects of Gender on Consumer Behavior; Case Study on Mobile Phone. *International Journal of Advanced Studies in Humanities and Social Science* 1 (1): 1024 – 1033
- Sonner, B. S, G. Ayala and R. Mizerski. 1995. A Comparison of the Responsiveness of Male Shoppers Versus Female Shoppers to Sales Promotions: Downloaded March 24, 2015: <http://www.sbaer.uca.edu/research/sma/1995/pdf/16.pdf>
- Zameer, A and D. Mukherjee. 2013. Food and Grocery Retail: Patronage Behavior of Indian Urban Consumers. *South Asian Journal Of Management*. 18 (1), 119-149.
- Zeithaml, V. A. 1985. The New Demographics and Market Fragmentation. *Journal of Marketing* 2 (1): 64-75.