

SEGMENTATION OF FRESH FRUITS CONSUMERS BY PRODUCT AND STORE ATTRIBUTES AT KLANG VALLEY, MALAYSIA

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Abstract

Understanding consumer segment is important especially in marketing strategies. Segmentation of the consumers depend on many factors including socio demographic factors of the consumers, product line to be considered, types of retail formats used by the consumers, attributes of the product as well as that of retail formats among other factors. This study examined and segmented the fresh fruits consumers based on the product attributes and store attributes considered by the consumers in choosing the place for their fresh fruits purchases. Results of the study indicates the most important fresh fruits attributes and that of retail formats considered by the Klang valley fresh fruits consumers when purchasing the product. Also using statistical analysis technique with the data collected from the fresh fruits consumers; they were segmented into three different segments each with its peculiar characteristics different from the other. The result suggests that for effective marketing strategies, there is need to consider the needs of each member of segment in meeting their needs as well as capturing the targeted segment.

Keywords: Segmentation, Attributes Consumers Fresh Fruits.

JEL Codes: Q13

1. Introduction

The determinants of store image have been extensively covered in the literature (Bitner, et al., 1994; Erdem et al. 1999), the analyses of most researchers largely based on relationship among variables.

Consumer preference refers to the consumers' hierarchical prioritization of the store as a result of their patronage of the store. In essence, it is the selection of the consumers for certain store over another. The work of Mehrabian & Russell, (1974) as cited by Vieira (2013) conceptualize such emotional response as a process. Their framework considers the attributes of the environment as the antecedents that affect the intervening emotional state of the consumers and this eventually lead to taxonomy of either approach or avoidance. Many researchers, particularly environmental psychologist used Mehrabian and Russel, (1974) framework to produce large number of studies. Example Donovan & Rossiter, (1982) formulates the approach into Stimuli – Organism – Response (S-O-R) framework. They suggest that the stimuli (as antecedents) affect the consumers' emotional states whose response may be observed in their retail behavior such as patronage to a particular retail outlet. In the S-O-R framework, the stimuli emitted by the stores affect the perceptions of the consumers (Mazursky, & Jacoby, 1986) and this is the starting point of consumer behavior. The stimuli (attributes) are cues that enter a consumers' cognition and rouse, stir up or provoke the consumer consciously or subconsciously into action. The organism refers to the intervening internal process between the stimuli and the reaction of the consumer. Essentially, it consist of physiological feeling and thinking activities which causes change in the emotional state of consumer. The response is the final outcome/action or reaction of the consumers, such as behavioral reaction (Bagozzi, et al., 1992). Depending on the organism process, the resultant of emotional state can influence consumers' continue or cease his retail behavior in the store.

The S-O-R framework of the past studies largely focuses on the relationship between the variables, this study proposed different angle of enquiry—the linkage between stimuli and responses that is the attributes influence consumers' preference decision to the various retail formats. The S-O-R model or framework consist of stimuli as independent variables, organism as mediator and response as dependent variable (Yoo, et al.,1998; Vieira, 2013). In this study, we want to look at the only stimuli (attributes that influenced the consumers taking the action).

While the determinants of the store image have been extensively covered in the literature (Nevin, & Houston, 1980; Bitner, et al., 1994; Erdem, et al., 1999) and also influence of consumers' preference on store, most of these studies gave more emphasis mostly on the store attributes influencing consumers' patronage. But, little have been done on looking at product attributes and store attributes together to see how they influenced consumers' preference toward retail formats choice. Likewise, many researchers covered different product lines in analyses of consumers' preference, but in this research we looks at only one product line (fresh fruits) this will give us more understanding of consumer behavior toward different formats.

2. History of Retail Formats

The Malaysian's retail formats started with traditional neighborhood grocery stores, open markets, mini markets, night markets "Pasarmalam", wet and farmers markets. These types of retail formats were popular offering varieties of food products including foodstuffs, meat, seafood fruits and vegetables, with some offering a mixture general merchandize items (Che Wel et al., 2012).The retail formats then shifted to departmental stores and supermarkets, after which the emergence of shopping malls, hypermarkets and specialty stores were introduced (Che Wel et al., 2012). The retailing land scale continues to become more complex with these new retail formats and introducing of different types of products and services.

3. Consumer Preference

At the consumer level, household shoppers consistently report the two dominant factors that impact upon their decision to purchase fresh fruits and vegetables in retail outlets are the competitive price and quality. On quality issue however, it is multi-faceted variable (Chamhuri & Batt, 2009). On this perspective, quality could be viewed as extrinsic attributes (freshness, color, size and shape), intrinsic attributes (taste, flavor, texture and mouth feel), credence attributes (method of production) and service attributes which associated with shopping experience itself such as customer advice, ambience, convenience and credit facilities.

The choice behavior of consumers as well as the key factors influencing their decisions on type of retail formats preference were examined (Hwa 2006). Some of the attributes considered by the consumers in making decisions to choose a retail outlet include distance of the outlet from the home or work place, overall price offered, accessibility of parking space and services provided by the retail personnel among the others. Another work of Wądołowska et al., (2008) on food choice factors, they used 101 items which later the factors were grouped into six aggregated groups including advertising factor, functional factors, healthy factors, price, sensory factors and social factors.

A review of retail formats literature and consumer patronage studies of Arnold, et al. (1983) identified three outputs that influence consumers' choice of retail formats. These consist of functional, social and entertainment outputs. The relevant functional outputs include those associated with the product (e.g., freshness of the FF, quality of the product, production method); assortment (e.g., breadth and depth of the retail outlets); service (information of the products, responsiveness and expertise); time saving (store accessibility, one stop shopping) price (e.g., price level, return possibilities, payment terms). The relevant social outputs include interaction possibilities (e.g., with other consumers and with retailers) and position of the retail institution within the community. The entertainment outputs relate to the shopping environment (e.g., exciting and colorful) and non-shopping activities (e.g., promotions, events and eating facilities). To assess the reasons why consumers make a preference to a particular retail format, the researcher compare the frequency of visits to the different retail formats for FF purchase and consumers' rating among the retail formats.

4. Hypothesis

4.1 Store Attributes

Store attributes are the extent to which a consumer attached the "importance" to attributes of individual stores and the value assigned to an attribute in FF purchasing.

A chief attraction of a retail store centers on its product mix, this will provide a consumer with a wider choice products and services. Among the attributes of store is its atmosphere which is refers to the environment that is brought about by a coordinated visual display of products and ease of mobility within the store (Ghosh, 1994; Lee, 2001). In-store service also was reported to be among the store attributes. It includes the provision of information on the products, responding to the consumers' request, guidance and attendance by the sale personnel. This will strengthen the retail personnel –consumer relationship and increases consumers' pleasure and which will in turn their repeat visit to particular store (Reynolds, & Beatty, 2000). Accessibility, provision of infrastructures such as refreshment kiosks, children play area clean wash room etc., all these facilities increases the consumers' pleasure of being in the store and indirectly make the consumer to be loyal to such area.

H₀: Consumers' preferences toward FF retail formats are influenced by store attributes.

H₁: Consumers' preferences toward FF retail formats are not influenced by store attributes.

4.2 Product Attributes

There are four most important attributes of fresh food cited by different researchers that influence consumers' purchase decisions; quality, price, availability and reliability. Freshness of the product is often cited as one of the most influential variable impacting on the consumers' decision to purchase fresh food (Nor et al., 2012). On issues relating to fresh food attributes, Goldman, et al., (1999) added that the stock availability as well as more choice and variety of the products also influences consumers' purchasing decision.

With regard to freshness, consumers judge freshness, based on color and physical appearance of the product as at the time of purchase. In this perspective, weather affects quality of fruits especially in hot tropical countries compared with countries with four seasons.

Freshness and quality of the product are among the most important attributes in consumers' decision to purchase FF. To judge freshness, product appearance (color, physical form of the product) are utilized. These have the influence toward the retail formats to choose by the consumers and hence our hypothesis is:

H₀: Consumers' preferences towards FF retail formats are influenced by product attributes.

H₁: Consumers' preferences towards FF retail formats are not influenced by product attributes.

5. Methodology

A structured questionnaire was developed for this study as a survey instrument which sought to gather information regarding the retail formats preference of the respondents. Respondents were asked if they were aware of the existence of different retail formats in their areas and also if they used to purchased fresh fruits for themselves and their family. Respondents were also presented with the list of items which gathered from the literatures sought to be the characteristics of the fresh fruits considered by the respondents in choosing the retail formats to buy the products. Also from the questionnaire, a list of the items sought to be the characteristics of the stores considered by the respondents in choosing the retail formats for their fresh fruits purchases were presented. Respondents were asked to tick the characteristics of both fruits and stores they considered in choosing the retail formats for their fresh fruits purchases.

Respondents were also presented with a number of statements which sought to measure the product attributes, store attributes as well as the characteristics of the different retail formats considered and preferred for them in choosing the retail formats for fresh fruits purchase. A seven point scale was utilized where respondents were required to indicate the extent to which they agreed with each statement, where '1' was strongly disagree to '7' was strongly agree.

5.1 Sampling Procedure and Data Collection

Klang Valley area was purposively selected for this study. Cluster sampling technique was employed because the data was collected in six regions of the study area. Initially, it involves the clustering of the entire population in to six clusters based on the number of the regions in the study area. The six clusters include Kaula Lumpur, Putra Jaya, Petaling, Klang, Gombak and Hulu Langat. In each region, one city area was randomly selected. The selected areas are

Kuala Lumpur city, Putra Jaya city, Shah Alam, Selayan town, Klang and Kajang. Multi stage sampling technique will be applied in research when there are two or more stages in sample selection, and then multi stage cluster sampling was used in determining sample size. The respondents were selected based on the use of random sampling technique, 100 respondents were randomly selected from each area, making a total of 600 respondents and 598 completed questionnaires from the randomly selected respondents were analyzed.

5.2 Data Analysis Procedure

Data was analyzed using SPSS ver. 21 through both univariate and multivariate analysis. The univariate employed in this study includes descriptive statistics while the multivariate techniques employed include exploratory factor analysis and cluster analysis. Exploratory factor analysis was applied to the adopted and modified scales that have been used from the previous researchers as the determinants or the criteria considered by the consumers in their choice preferences of the stores for fresh fruits purchasing. The objective of using exploratory factor analysis is to reduce the data set to a much smaller number, but at the same time retaining as much information as possible. In the analysis, the correlation matrix was examined and KMO and Bartlett's Test of sphericity was performed. Principal Component analysis with varimax rotation was employed in identifying the factors. Eigen value and scree plot criteria were used in retaining the number of factors, and only those items with factor loading greater than 0.4 were retained. Also the reliability of each factor was evaluated using Cronbach's alpha, where a values greater than 0.7 were considered acceptable.

Cluster analysis technique was used in grouping and discovering the pattern of the fresh fruits consumers who have similar characteristics and dissimilarities between groups. Cluster analysis is useful for market segmentation, in product characteristics and identification of the new product opportunities, it allow one to identify competitors. The difference between cluster analysis and factor analysis is that in cluster analysis, its primary purpose is to group objects (e.g. respondents, products or other entities) based on the characteristics they possess in common and the grouping process is based on the distance (proximity) between them, whereas in factor analysis, the grouping of the variables are formed base on several people's responses to those variables.

For us to identify the procedure to be used in cluster technique, we try to answer the following questions: 1. How do we measure similarities? 2. How do we form clusters? and 3. How many groups do we form? To answer the first question, two most popular methods of measuring similarities have been mentioned in literatures which include correlation and distance measured. In this research, we used distance measured method in measuring similarities between cases, with higher values representing greater dissimilarities. For more information about similarities measures, reader can check. To answer the second question, we first used the hierarchical procedure with agglomerative method to generate a number of cluster solutions, starting with each observation as its own cluster and then combining the two nearest clusters at a time until all the observations are in single cluster. In answering the last question, two step methods (combination of hierarchical and non-hierarchical) were used. After identifying numbers of cluster solutions from the hierarchical procedure, non-hierarchical or K-mean procedure was used by using seed points in order to provide more accurate cluster memberships (to refine the result obtained from hierarchical procedure by allowing the switching of cluster membership). The clusters formed were validated using cross validation method.

6. Result and Discussion

Respondents were asked to indicate their agreement or disagreement between the listed items sought to be the characteristics of the fresh fruits considered by the respondents when purchasing the product. Table one (1) indicates the frequencies and percentages of the agreement and disagreement of each variable. From the Table 1, majority of the respondent (72.2%) considered the level of ripening of the fruits while purchasing the product, followed by 65.2% and 62.9% of the respondents who considered size and shape of the fruits and color of the fruits respectively as the important characteristics while purchasing the product. The least important characteristics considered by the respondents are graded fruits, labeled fruits and branded fruits with 22.7, 22.4 and 17.1 percent respectively. As color of the fruits is very important variable, make conclusion of their research on consumer preferences for color, price and vitamin C content of bell peppers that the overall consumer sample used viewed color as more important in purchase decision than retail price and vitamin C content.

This work also is in line with that of Wądołowska et al. (2008) who confirmed and reported that the greatest influence factors on food choice (fresh fruits and vegetables) depend mostly on freshness and taste.

Table 1. Frequency of the Respondents Showing Characteristics of Fresh Fruits Considered when Purchasing the Product

| Item Names N=598 | Yes | % | No | % |
|--------------------------------------|-----|------|-----|------|
| Level of ripening of the fruits | 435 | 72.7 | 162 | 27.3 |
| Size and shape of the fruits | 390 | 65.2 | 208 | 34.8 |
| Color of the fruits | 376 | 62.9 | 222 | 37.1 |
| Fresh looking of the fruits | 350 | 58.5 | 247 | 41.3 |
| Absence of spots/holes on the fruits | 309 | 51.7 | 289 | 48.3 |
| Smell and taste of the fruits | 302 | 50.5 | 296 | 49.5 |
| Safety of the product | 275 | 46.0 | 323 | 54.0 |
| Packaging of the fruits | 203 | 34.0 | 394 | 66.0 |
| Locally produced fruits | 220 | 36.0 | 378 | 63.2 |
| Imported fruits | 155 | 25.0 | 443 | 74.1 |
| Graded fruits | 136 | 22.7 | 462 | 77.3 |
| Labeled fruits | 134 | 22.4 | 464 | 77.6 |
| Branded fruits | 102 | 17.1 | 496 | 82.9 |

Likewise, respondents were asked to indicate their agreement or disagreement between the listed item in Table two (2) sought to be the characteristics or attributes of the store considered by the respondents in choosing the type of retail format for their fresh fruit purchases. From the Table 2, the most important attribute considered by the majority (71.6%) was the convenient of the store location, followed by the distance of the store from the respondents' residential area (58%). The least important characteristics considered by the respondents were availability of refreshment/entertainment facilities (14.7%) and availability of the public toilets (21.7%). Being convenience as the most important attribute considered by the fresh fruits consumers, the finding of this research was similar to the previous research of Chamhuri & Batt, (2013) who reported one segment of the fresh produce as 'transient shoppers' with the characteristics of not demonstrating any preference with regard to retail format types, rather

their consideration were on which retail format is perceived to be most convenient to them at the time of purchasing the fresh produce.

Table 2. Frequency of the Respondents Showing Characteristics of the Store Considered when Purchasing Fresh Fruits

| Item Names N = 598 | Frequency | | | |
|---|-----------|------|-----|------|
| | Yes | % | No | % |
| One stop shopping convenience | 263 | 44.0 | 339 | 55.9 |
| Convenient store location | 428 | 71.6 | 170 | 28.4 |
| Distance of the store | 374 | 58.0 | 251 | 42.0 |
| Time taking to reach the store | 251 | 42.0 | 347 | 58.0 |
| Convenient accessibility | 294 | 49.2 | 304 | 50.8 |
| Easy entry and exit within the store | 288 | 48.2 | 310 | 51.8 |
| Enough parking space | 255 | 42.6 | 343 | 57.4 |
| Convenient opening and trading hours | 237 | 39.6 | 361 | 60.4 |
| Availability of sales personnel to respond to my request/query | 264 | 44.1 | 334 | 55.9 |
| Provision of information of the products by the sales personnel | 157 | 26.3 | 440 | 73.6 |
| Offering personalize service | 105 | 17.6 | 493 | 82.4 |
| Availability of refreshment/entertainment facilities | 88 | 14.7 | 509 | 85.1 |
| Decorative features of the store | 150 | 25.1 | 448 | 74.9 |
| Availability of public toilets | 130 | 21.7 | 468 | 78.3 |

Principal component analysis revealed three factors each from the product and store attributes, explained 66% and 68% of the variance observed in the respondents' decision for product and store while purchasing the fresh fruits (Table 3, and Table 4).

From the Table 3, The Keiser-Meyer-Olkin (KMO) measure of sampling adequacy achieved meritorious level of 0.827, while the Bartlett's test of sphericity give significant level at $P < 0.0001$, confirmed appropriateness of the factor model. From the Table, factor one (1), with an Eigenvalue 36.67, captured five items and accounted for 29% of the variance. Collectively these five items were described as "freshness seeker". The Cronbach's alpha of this factor was 0.891 which is relatively indicating high reliability. Factor two (2) capture three items and has Eigenvalue of 16.63 and Cronbach's alpha of 0.705 indicating satisfactory reliability of the measurement. These three items were collectively described as "safety product seekers". The factor three has the Eigenvalue of 12.7, Cronbach's alpha of 0.70 and percentage of variance explained of 17.9. These items were collectively described as "quality product seekers".

Table 4 also revealed three factors captured from the principal component analysis. The Keiser-Meyer-Olkin (KMO) measure of sampling adequacy achieved satisfactory level of 0.735, while the Bartlett's test of sphericity give significant level at $P < 0.0001$, confirmed appropriateness of the factor model. From the table 4, factor one consists of three items with Eigenvalue of 32.5 and about 25 percentage of variance explained. This factor was described as "convenience seekers" while making decision in choosing the retail formats to buy fresh fruits. Factor two has Eigenvalue of 22 and its Cronbach's alpha of 0.73 with percentage of variance explained of 24.46. This factor was described as "Entertainment seekers". The last factor also captures three items with about 13 Eigenvalue and Cronbach's alpha of 0.776. This factor was described as "good services seekers".

Table 3. Number of Factors Extracted for Product Attributes Considered by the Consumers for Fresh Fruits Purchase

| Item Names | Factor | | |
|---|--------|-------|--------|
| | 1 | 2 | 3 |
| Size and shape of the fruits is my priority when purchasing the product | 0.820 | | |
| Good smell and taste of the fruit is important in making decision to buy the product | 0.813 | | |
| Color of the fruits is important in making decision to buy the product | 0.804 | | |
| I always concerned about the level of ripening of fruits while purchasing | 0.763 | | |
| Good smell and taste of the fruit is important in making decision to buy the product | 0.738 | | |
| I always ensure there is no any signed of contaminations from the fruit before making decision to buy the fruit | | 0.805 | |
| I always consider availability of organic fruits in making decision to purchase the product | | 0.799 | |
| *I don't care about how nicely the fruits are arranged stalls while making decision to buy the product | | 0.736 | |
| *I don't consider branded fruits as my priority in making decision to buy the product | | | 0.868 |
| *Branding is not an indication of fruits quality | | | 0.818 |
| *I don't have interest in purchasing imported fruits | | | 0.775 |
| Eigenvalues | 36.67 | 16.63 | 12.744 |
| Percentage of variance | 29.38 | 18.76 | 17.902 |
| Cumulative Percentage of Variance | 29.38 | 48.15 | 66.052 |
| Cronbach's Alpha | 0.891 | 0.705 | 0.701 |

Source: Field survey, 2014 *These are negative questions; they were revised before performing the analysis

Table4. Number of Factors Extracted for Store Attributes Considered by the Consumers for Fresh Fruits Purchase

| Item Names | Factor | | |
|--|--------|-------|--------|
| | 1 | 2 | 3 |
| Good layout of the store make it easier for me to find whatever I need | 0.870 | | |
| I prefer to go to stores with ample parking space while buying fresh fruits | 0.845 | | |
| I always want to get everything in one stop shopping | 0.775 | | |
| Decorative features of the store influences my decision in choosing the store for fresh fruit purchase | | 0.883 | |
| Presence of children play area make me to choose the store for fresh fruits purchasing | | 0.853 | |
| Attractive merchandise display influences my decision in choosing the store to buy fresh fruits | | 0.764 | |
| *Looking how hygienic the vendors/retailers are is not my concerned when purchasing fresh fruits | | | 0.761 |
| Looking how hygienic the premises are is important in making decision to purchase fresh fruits | | | 0.753 |
| I prefer to choose self service store while purchasing fresh fruits | | | 0.675 |
| Eigenvalues | 32.519 | 2.754 | 12.919 |
| Percentage of variance | 24.991 | 24.46 | 18.731 |
| Cumulative Percentage of Variance | 24.991 | 9.460 | 68.191 |
| Cronbach's Alpha | 0.70 | 0.739 | 0.776 |

Source: Field survey, 2014 *This is negative question; it was revised before performing the analysis

The hierarchical method was initially applied to the data in order to identify preliminary set of cluster solutions. The process of selecting the number of cluster depends on at the combination of observations that give large agglomeration coefficient (measure the increase in heterogeneity between the clusters). Based on the large discrepancy of agglomeration coefficients between cluster three and four, cluster three was selected from the hierarchical method.

The three cluster selected from hierarchical method, was used as the basis for non-hierarchical analysis from which a final cluster solution will be selected. Non-hierarchical has the advantage of being able to better ‘optimize’ cluster solution by reassigning observations until maximum homogeneity within clusters are achieved. Using the optimization algorithm of non-hierarchical procedure, three cluster solutions were obtained (Table 5). Also the ANOVA result (Table 6) showing the difference in variable mean across the three clusters. The ‘F’ value are statistically significance indicating predictive validity of each cluster. The interpretation of the segments (clusters) was based on the analyzing the mean value of each segment. Also the mean values were plotted as a profile diagram (Figure 1). Looking at the extreme mean values of each cluster is important in interpreting and comparing between clusters.

Table 5. Consumer Segment with Respects of Product and Store Attributes

| Variables | Mean Value of Segment Member | | |
|--|------------------------------|------------|-------------|
| | Segment I | Segment II | Segment III |
| Freshness seeker | 4.12 | 6.03 | 4.72 |
| Safety of the product seeker | 4.40 | 5.68 | 4.01 |
| Product quality seeker | 5.01 | 5.67 | 5.70 |
| Convenience seeker | 4.15 | 6.11 | 4.75 |
| Entertainment seeker | 3.74 | 4.96 | 5.60 |
| Interaction with others seeker | 4.78 | 5.89 | 5.77 |
| Segment size (number of cases per segment) | 110 | 277 | 211 |

Table 6. Variables Means Difference

| Variables | Cluster | | Error | | F | Sig. |
|--------------------------------|-------------|----|-------------|-----|---------|------|
| | Mean Square | df | Mean Square | df | | |
| Freshness seeker | 182.271 | 2 | .782 | 595 | 233.070 | .000 |
| Safety of the product seeker | 181.893 | 2 | .590 | 595 | 308.142 | .000 |
| Product quality seeker | 19.970 | 2 | .608 | 595 | 32.831 | .000 |
| Convenience seeker | 194.464 | 2 | .661 | 595 | 294.354 | .000 |
| Entertainment seeker | 124.581 | 2 | 1.148 | 595 | 108.548 | .000 |
| Interaction with others seeker | 50.425 | 2 | .667 | 595 | 75.559 | .000 |

Segment I member of the fresh fruits consumers were characterized by not considering entertainment of the retail formats as important attributes that will make them to choose the store for fresh fruits purchases. The variable mean values of segment II and III are higher than that of segment I, except of the variable mean value of ‘safety of the product seekers’ which is little high than that of segment III. The size of segment I is the smallest among the three segments (110 cases). This segment of the consumers is good to characterized it as fresh fruit

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consumers who have less consideration of both product and store attributes while choosing store to purchase fresh fruits. Based on the size of this segment (110 cases), it will be deduce that only 18% of the fresh fruits consumers are less concerned about the product and store characteristics in selecting the type of retail format in purchasing the product.

In segment II of the consumers, freshness of the product (fresh fruits) and convenience are the major attributes considered by this segment of the consumers while choosing the store to purchase the product. This segment also have higher product quality consideration and interaction with others while choosing the type of retail format to purchase the product, hence it is good to characterized consumers of this segment as those who concerned much about the product and retail formats' attributes while choosing the place to purchase the fresh fruits. Segment II of the consumers has the total size of 277 cases which indicates that about 47% of the total fresh fruits consumers are concerned about the product as well as store attributes while choosing retail formats to buy the fresh fruits.

Segment III of the consumers are more concerned of the product quality than the rest of the two segments. A part from product quality concerned, the segment III of the consumers are more similar to segment I than segment II and hence characterized as the consumers who concerned only with product quality while choosing the retail formats to buy fresh fruits. To visualize and see clearly the differences between the three segments of the consumers, a cluster profile was depicted at the figure 1 below.

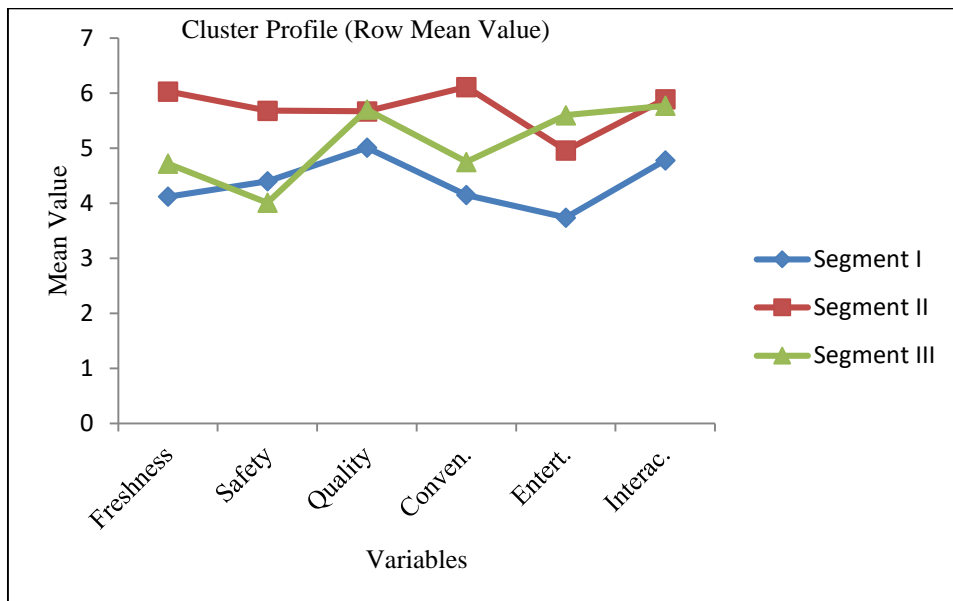


Figure 1. Segments of the Fresh Fruits Consumers

7. Conclusion

Understanding consumer segment is important especially in marketing strategies, this will help both marketers and policy makers in meeting the demands and needs of the consumers. Data was collected in six regions of the study area using cluster sampling technique. From the result of the study area, majority of fresh fruits consumers considered the level of ripening of the fruits, color and size and shape of the product while purchasing. For the store attributes the

most important considered by the majority was the convenient of the store location and the distance of the store from the respondents' residential area. This attributes should be given more emphases by both marketers and policy makers for designing and siting market place especially fresh fruits markets.

Principal component analysis results revealed different factors ranging from "freshness seekers", safety "product seekers", "quality product seekers", "convenience seekers" "entertainment" and "good services seekers". This study revealed the important attached to these different attributes by different consumers. Based on this, it is important for the policy makers as well as marketers to know and understand these categories of fresh fruits consumers. This will help in meeting the demand of each category and at the same time is a marketing strategy of capturing the consumers.

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