# Factors Influencing Customer Satisfaction of Horticulture Products in West Bengal: An Empirical Analysis

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## Abstract

Horticulture industry which deals with the art of garden cultivation and management of fruits, flowers and vegetables, is one of the largest industries in India wherein India has an immense potential concerning to the expansion of the product range and various commercial activities regarding this section of products. Floriculture is the most popular sub segment of Horticulture which consists of activities such as product trading, supplying saplings of plants, greens and ornamental plants, landscaping in real estate market, floral designing and customized products in weddings and festivities, extracting essential oils and natural dye from flowers and preparing ingredients required in the pharmaceutical industry.Floriculture is the most popular section of Horticulture and in India, it has been observed that fresh flowers are exported from Karnataka, Maharashtra and dried flowers from Tamil Nadu and West Bengal. The other significant issues which are related to this industry are the unorganized market structure, unscientific packaging and transportation of products, low level of product diversification and differentiation, high import tariff in African countries, non-availability of perishable carriers, insufficient infrastructural support, lack of quality control and certification, deficiencies in cold chain management, etc. Several initiatives for marketing and growth of the horticulture sector have been already taken by the

Government of India in many regards. However, the need of the hour is the adoption of more dynamic strategies by the Government of India along with the private organizations and research institutions in order to fulfill domestic as well as international demands of this sector on a national as well as on an international level. In our present study, a deliberate attempt will be made to frame a conceptual model on retail consumer behavior of rural Horticulture Industry in Eastern India. The findings of this paper will depict the retail consumer behavior in the retail horticulture business which has a effect on the perceived value of the customers which in turn affects the customer satisfaction.

**Key Words:** Horticulture Industry, floriculture**,** retail consumer behavior, conceptual model, deliberate strategies, Eastern India.

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## 1. Prelude

The Indian Retail Sector is at a stage where it is highly fragmented. It is still in its nascent stage and it needs a lot of development. Statistics state that approximately 91 per cent of the businesses are carried out in traditional family run stores as well as corner stores which furthermore showcases that there is a huge lacuna in the retail segment of India. Attempts are being made to increase the retail sector in India where it could generate lots of employment opportunities (Gupta & Jain, 2016; Vahoniya, Panigrahy, Patel & Patel, 2018). One of the flourishing retail sectors of India is Horticulture where efforts are being made in order to pave a success road in this industry (Sinha & Thomas, 2012; Shaikh, 2012). Horticulture consists of the art of gardening and cultivation of flowers, fruits and vegetables. Floriculture, which deals with flower cultivation, is one of the major segments of horticulture which is concerned with marketing, commercial production and the sales of bedding plants, potted flowering plants, cut flowers, foliage plants, flower arrangements, as well as noncommercial home gardening. Floriculture is also an emerging area which has great potential in both the domestic as well as foreign market. Nowadays, it is a very prosperous industry in Asian countries including India.Horticulture is one of the most booming industries in our country as it has huge potential to generate rural employment in India as well as it has huge potential to earn foreign exchange. It is now one of the important commercial crops in India. Horticulture products are now being used as important raw materials in multifarious manufacturing industries for the production of

medicines, perfumes and confectionaries. In the recent decade, this industry has shown significant progress. It is not restricted to normal horticultural products made by few rural families nowadays. Now, different farmers are growing as well as selling their products beyond the national frontier and they also earn a huge quantum of foreign earnings. These products are now reaching huge distances due to the availability of air freight and advanced cooling system which helps in their sustainability. The marketing of the cultivated products began traditionally through various small and vertically integrated firms specialised in selling floral products. In the 1950s, several grocery stores began to sell annual bedding plants in order to increase the surpluses annually. However, nowadays, sales of the floral products specifically have increased drastically through mass merchandisers, especially the supermarkets. They are the strongest competitors of the retail florists in the floriculture industry (Behe, 1993). Promotion of the products for any marketing strategy is very important. Ward (2004) had evaluated the impact of the advertising campaigns of the Flower Promotion Organization (FPO) on cut-flower sales. It was concluded that the promotions which are taking place have a huge impact on the demand for flowers which is showcased through the help of increasing buyer frequency as well as attracting new buyers. It was found that about 87 percent of the increase in the demand of the promotional programs is resulted from the increased number of transactions per buyer. He also found that the individual demographic groups who responded the most to the promotional program were the female buyers in particular who purchase flowers for their self-use. This was marked consistent with the target of the FPO promotion program.After the advent of LPG policy in 1991 and EXIM policies of 1992-2014, this sector has got immense importance in the contribution of foreign earnings. Continuous demand and much higher return in comparison to other agricultural products, farmers are showing their full interest to this rosy sector. The demand of this sector has been increased due to rapid urbanization, advanced technology, infrastructural development, hotel and tourism industry, temples, rising per capital income, changes in life styles, development of the economy in the rural belt (Ongeri, 2014) etc.

## 2. The Craft of Horticulture

The horticulture industry is gearing towards change. It is shifting its base from unorganized retail to organized retail (Rajkumar & Jacob, 2010). However, there are many challenges and constraints pertaining to this particular industry in terms of

marketing and production. It must not be forgotten that horticultural products are basically perishable products and hence, they are very difficult to produce as well as market because it has to be done within a specified time frame. Product quality is also hampered because of poor product handling. Marketing of these products are also hampered because of poor transport and road network system, lack of storage facilities, poor communication infrastructure, lack of a grading and standardization system, etc. (Rola-Rubzen, Janes, Correia & Dias, 2012). Majority of the households, even today, shop for horticultural products from the traditional markets (Johns, Lyon, Stringer & Umberger, 2017). The productivity of horticultural products have increased over the recent years, however, the slowdown in this industry needs to be measured and looked into in detail to sort out the problems of production (Chand, Raju, & Pandey, 2008). Floriculture is a sub segment of horticulture which is the most popular in the retail industry and hence, it deserves a special mention in this regard.

## 3.  Present Global Scenario of the Horticulture Industry

Consumption and demand of horticulture products are rising all over the world (Warrington, 2011) amongst which the floriculture industry is the most popular. There are 140 countries growing flowers. However, European countries have developed their flora business very early but they could not produce enough quantity which is a major problem. However, new production centers have been developing in Asian countries. Even though, Latin America and African countries have increased their production of these products, particularly flowers, India and other Asian countries have emerged as development centers of floriculture.

The floriculture industry is an age-old farming activity which is responsible for generating self-employment amongst the small and marginal farmers. Today the emphasis has shifted from the consumption of flowers domestically to that of exporting flowers. It has been revealed that USA is one of the most stable and the largest importer of flowers from India (Navalur, Tirlapur & Patil, 2015). Thus, this trade is fast emerging and the world trade of flowers of India is flourishing in spite of meeting multiple numbers of challenges (Devi, 2017). Trade had increased significantly in the last decade which showed a CAGR of 4.33 per cent. However, having said that, India's share of global floriculture trade is only about 0.6 per cent at present (Misra & Ghosh, 2016; Shahri, 2018). Hence, the commercial value of the Floriculture industry is increasing day by day (Ali, Singh, Mir, Ahmed, & Andrabi, 2017). Hence, certain

developmental activities need to be carried out in the certain states of India to boost up the floriculture trade. These states of India which have a rich flower diversity are Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Tripura and Sikkim (De & Singh, 2016). The flower market at present, is a business worth 2000 crore US dollars. India has a business worth of Rs. 280 Crore approximately in the domestic market (Geetha & Lissy, 2018). The Indian government is extending a helpful hand towards the development of the floriculture industry in India through the introduction of certain incentives which aim at increasing the commercial viability of the entire system (Chakraborty & Tah, 2018; Raman, 2016).

As already stated, there has been a rapid growth in demand and consumption of floriculture products in recent decades. Cultivation and consumption of flowers have been part of tradition over the world. Several countries like Netherlands, Italy, Germany and Japan have a strong tradition of growing and consuming flowers. The expansions in the areas and production of beautiful flowers in non-traditional regions have been found to have one of the noticeable features. Recently, new production centres have found to be developing in Africa, Latin America and Asia in order to meet the increasing demand of importing flowers from various countries and also to expand their domestic market. Columbia, Chile, Kenya, Rhodesia, Morocco, South Africa, Israel, India, China and Srilanka are now the new floriculture centres. The floriculture market has concentrated in North America, Western Europe, and Japan. Western Europe accounts for half of the world's cut flower production as well as the consumption of the product. The new markets have also emerged in Europe are Hungary, Poland, Slovakia as well as Ireland. The mostly preferred cut flowers which are found on an international market are tulip, roses, gerbera, chrysanthemum, orchids as well asgypsophilla.

Tilburg (1984) have analyzed a panel of cut flowers and potted plant consumers in the Netherlands. This was done in order to relate aspects of particular consumer behaviour to various marketing variables as well as demographic characteristics of the particular households. He has successfully identified three market segments in this industry. The first segment consisted of 44 percent of the sample households and they were too sensitive to prices but very insensitive to national advertisements. The second segment consisted of 40 percent of the sample households and they were insensitive to both prices as well as the advertisements. Lastly, the third segment consisted of only 13

percent of the sample households and they were sensitive to both the prices as well as the advertising.

Yue and Behe (2008) analyzed the varied preferences of the consumers the different floral retail outlets. They used a distinctive consumer panel data which was collected by the American Floral Endowment from the year 1992 to the year 2005. This data was used to evaluate the choice of the consumers of different floral retail outlets among traditional freestanding floral outlets, box stores, other stores, general retailer as well as other direct-to-consumer channels. Estimates showcase that the demand for the four different types of ornamental products, which included plants, cut flowers, dry/artificial as well as outdoor. They divided this particular demand into two different components, which are market penetration and buying frequency. They finally concluded that the drivers of demand for ornamental consumption were particularly driven by the entry of new buyers rather than repeated buying customers. This further leads to the increasing frequency of their transactions. Thus, this study tries to focus on the various factors that readily influence the consumer purchase decision of the horticulture as well as the floriculture industry.

## 4.  Literature Review

Behe (1989) analyzed the floral purchasing behaviour of the consumers belonging from Pennsylvania right at the ground retail level. She recommended that there are three ways which can be used to segment retail flower markets. This segmentation can be done by product, by location of the purchase and the volume of purchase as well. Behe et al. (1992a) carried out a very detailed analysis of purchases related to the consumers of the particular floral products in various Ohio supermarkets. They use principal components analysis which yielded around 34 independent factors. These factors accounted for 64% of the total variance which affects the floral purchases. These factors were grouped separately into five main categories. These categories included that of consumer, product, use (gift) store, as well as location. Behe et al. (1992b) continued on with her previous study and she also applied cluster analysis. This was done in order to identify the most important factors which affected the floral buying decisions by the different market segments. She used demographic characteristics as well as purchase factors which were identified in her previous works done to profile the various market segments as well as the distinguishing elements.

The paradigm of marketing has changed drastically over the recent years with the introduction of retailers targeting the mass market such as department stores, supermarkets, internet-based businesses, etc. Ornamental flowers are not essential for survival and hence, it has been seen that a substantial group of the population are non-buyers of the ornamental flowers. Hence, it is very important to gauge the intensity of the factors which are responsible for building the Customer purchase intention of the floriculture industry. Generally, floriculture products are purchased by the people for a variety of reasons. They might be for an expression for love or friendship, expression of appreciation and thankfulness, giving gifts or for beautification purposes. They might be bought by the customers on a regular basis for self-consumption as some people are regular customers of these products. On the other hand, these products may be bought by the customers during some special occasions which are based on a seasonal demand. It was observed that there are special calendar occasions where the demand for flowers was found to be substantially higher as compared to some non-calendar occasions (Palma, Collart & Hall, 2009; Palma, Hall & Collart, 2011; Schimmenti, Asciuto, Galati & Valenti, 2010). Miller (1983) carried out an extensive sub-sector analysis for the particular fresh cut-flower industry in the United States of America. This was done by analyzing the different parameters such as conduct, structure as well as performance of the pre-existing conditions of the particular industry. This was done in an attempt to predict the trends of the future. Miller observed that there were particular special calendar occasions. The demand for the flowers was substantially higher than those which were sold on other non-calendar occasions. In these occasions, the demand was noted to be substantially lower. He was also responsible for determining that the demand for the arrangements of the flowers was inelastic, which means that the consumers were not highly responsive to the changes in prices of the floral products. It was revealed in a study that potted plants were mainly purchased for regular use, whereas, cut flowers were bought for special occasions (Schimmenti, Galati, Borsellino, Ievoli, Lupi & Tinervia, 2013). Most consumers in the floriculture industry believe that the best place for the purchasing of the flowers is from the retail stores. This is because the stores are reliable and have a strong influence in the customer satisfaction and hence impact their purchase decision (Rihn, Yue, Behe & Hall, 2014). It is seen that the intended use for the purchase of flowers, be it for their use as gifts or for personal use, is the main factor which affects

the frequent purchase of flowers by the consumers (Huang, 2005; Rihn, Yue, Hall, & Behe, 2014). The experience of the consumers visiting the floral stores is very important to the retailers in terms of marketing of the floral products. The customer's experiences would either result in positive word of mouth marketing or negative word of mouth marketing. A positive word of mouth would intensively help the firm with respect to acquiring consumers as the satisfied customers will recommend the stores to the others which would expand the present market of the retail store (Eweida, Sverkel & Sorhammer, 2009). Retail stores with good services could be recommended to the others by the present customers who would result in the expansion of the customer base.

Becker (1993) studied the various differences in the service quality between the supermarkets and the other florists in Texas. He found out that the various differences on the particular types of retail outlets were particularly based on various parameters which are custom design, the types of products sold and other in-store services, delivery options and convenience. Earning a strong reputation in terms of providing quality products in the market and also a consistency in the delivery process marks a very important spot in determining the customer purchase decision (Ratnayake, 2016). It must also be noted that the store hours of operation is also crucial for determination of the consumer buying decision. As the products may be purchased as a gift on many special occasions, assistance in the decoration of the flowers could also motivate the consumers to purchase from a particular retail store. Stores must also prepare themselves to supply flowers in bulk during the celebration of certain events, be it social, religious or cultural. There is also a strong influence of background music on the purchase decision of the customers in the retail stores. Hence, retailers could enhance some of the features of the stores with the help of technology so as to facilitate the decision making procedure of the customers (Santos & Freire, 2013). The global supply chain of the horticultural products could be connected using technology like digital economy and ecommerce (Dastagiri, 2017).

Commercialisation of the floriculture industry partly depends on the skill of the knowledgeable sales associates who are responsible for marketing the flower products. The degree of know how about these products will increase drastically in the minds of the consumers which would facilitate their purchase decision towards the positive side (Mayett-Moreno, Popp, Sabogal-Salamanca, Rodriguez-Pineros, Salome-Castaneda & Flores-Alonso, 2018; Palma, & Ward, 2010). Adequate number of salespersons must

also be available at the stores in order to assist the consumers during the time of their purchase. Sales associates selling horticulture products in the retail stores must be trained properly in the same to provide good service to the customers of the horticulture retail industry. They must be groomed properly in order to provide optimal amount of service to the customers.

Girapunthong (2002) analyzed that the drivers of the demand for the various fresh cut-flowers as well as their substitutes in the United States of America. He found that all the direct prices effect were coefficients with the seasonal as well as the actual variables were statistically significant. Also, these changes in the particular relative prices had a significant impact on the various flower market shares which were among the potted flowering plants, fresh cut flowers as well as the dry or artificial flowers. In a study, it was seen that customers ranked the quality of the plant as the most important product characteristic which influences the consumer behaviour. This is closely followed by two other dimensions which also influence the consumer behaviour in the floriculture industry to a great extent. These dimensions are price of the flowers as well as the assortment of the different varieties of the same species of flowers based on their colour, structure and other characteristics (Behe, & Barton, 2000). The stock availability of the flowers was a major factor which helps in determining the purchase decision of the consumers. Freshness of the flowers are a must so that the quality of the flowers are not depreciated (Lavanya, 2013). The three most important parameters which must meet the expectations of the consumers in order to increase the trade of the floriculture industry are the price, promotion and production quality of the flowers (Anacleto, Negrelle, Cuquel & Muraro, 2017). Indian traders are facing multiple challenges in the marketing stage which is related to product diversification and product differentiation. With the emergence of floral retailers in the consumer market, management of transportation which ensures the availability of the flowers at the retail stores is a very critical factor which has a direct impact on the purchase decision of the consumers (Harisha, 2017; Mwase, 2015).

It has been seen that the attributes of the product, price, sales associates and the outlets have a significant positive impact on the perceived value of the customers. Perceived value is generated in the minds of the consumers who are repeated buyers of the retail store.

It has been revealed in a study that the service which is most desired by the customers for them to be satisfied is the availability of trained and professional help in the floral retail stores who are reliable and could provide quality service to the consumers (Barton, Brooker, Hall & Turner, 1998). In order to build customer satisfaction, it is imperative that the retailers come up with certain customised products. They do not need to come up with certain new products, however, they do need to customise the existing products in such a manner that they are in demand in the market (Gebreeyesus & Iizuka, 2010).

## 5. Research Gap

From the literature reviewed, it is very evident that there have been limited studies conducted n this filed regarding the retail consumer behavior of horticulture industry in eastern India. It is also evident that in the study location there have been fewer studies conducted in the horticulture sector. Undoubtedly these studies have contributed in their own way but they have also left certain gaps that need to be addressed in the long run.

## 6. Objectives of the Study

(i) To explore the factors which have an influence on customer's perceived value and satisfaction in Horticulture Industry of West Bengal.

(ii) To find out the degree of influence of the factors on customer's perceived value and satisfaction.

## 7. Hypotheses of the Study

**H1:** 'Product Attributes' positively influences the 'Perceived Value'.

**H2:** 'Outlet Attributes' positively influences the 'Perceived Value'.

**H3:** 'Sales Associate Attributes' positively influences the 'Perceived Value'.

**H4:** 'Price of the Products' positively influences the 'Perceived Value'.

**H5:** 'Perceived Value' positively influences the 'Customer Satisfaction'.

**Figure 1: Hypothesized Research Model Establishment on Customer Satisfaction in Horticulture Industry**
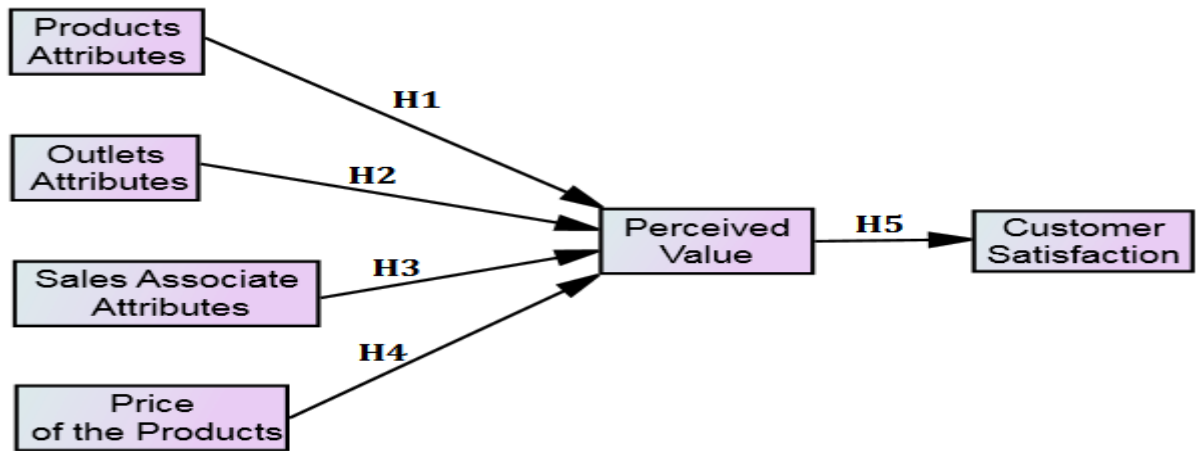


## 8. Research Methodology

### 8.1. Sources of Data

The primary data collection has been done through the questionnaire filled by the selected respondents according to the convenience and judgment of the researcher from different cities in West Bengal.

### 8.2. Sampling Method & Sample Size

We have used convenience and judgmental sampling techniques for the selection of different cities in West Bengal. After that, responses from 288 respondents (Out of distributed 300 respondents) were finally collected from different cities in West Bengal for this study.

### 8.3. Area & Period of the Study

This Research work have undergone at different cities in West Bengal during the period of 15st September, 2018 to 15th November, 2018.

### 8.4. Scale Selection

Constructs and related variables were derived directly from literature review and few probable variables were considered after discussion with the field expert. 5 point Likert scale (5: Strongly Agree, 4: Agree, 3: Neutral, 2: Disagree and 1: Strongly Disagree) has been used for measuring the responses of consumers related with horticulture industry.

## 9. Analysis and Results

SEM (Structure equation modeling) has been used here for creating the model and establishing the hypotheses by the help of AMOS software. Model fitness has been judged through structural model. Exploratory Factor Analysis (EFA) by the help of SPSS-21 describes the questionnaire validation through PCA (Principal Component Analysis).

Kaiser-Meyer-Olkin (KMO) statistics varies from 0 to 1.0 and KMO should be 0.60 or higher to proceed with factor analysis. In our study, we got the KMO of 0.828 which is quite rational to proceed for factor analysis. In this study, KMO and Bartlett's Test (Table 1) shows the appropriateness of Exploratory Factor Analysis (EFA). The result is shown below:

**Table 1: KMO and Bartlett's Test**

| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | | **0.828** |
|---|---|---|
| Bartlett's Test of Sphericity | Approx. Chi-Square | 8013.905 |
| | Df | 231 |
| | Sig. | **<0.001** |

Cronbach's alpha can measure the internal consistency of the variables. Alpha typically varies between 0 and 1. The closer the alpha is to 1.00, the greater the internal consistency of variables in the study. Here, the value of alpha is **.883** (Table 2) which is highly acceptable.

**Table 2: Overall Reliability Statistics**

| Cronbach's Alpha | N of Items |
|---|---|
| **0.883** | **22** |

With the help of factor analysis result, we can describe the proportionate variance of each factor in our study. Variables with factor loading of above 0.5 have formed 6 different factors which are extracted from RCM (Rotated Component Matrix). These factors describe total 88.31 % of the variations (Table 3) as shown below.

**Table 3: Result of Factor Analysis - Rotated Component Matrix (a)**

| | Rotated Component Matrix[a] | | | | | |
|---|---|---|---|---|---|---|
| **Variables / Items** | **Component** | | | | | |
| | **Price of the Products** | **Outlets Attributes** | **Products Attributes** | **Sales Associates Attributes** | **Customer Satisfaction** | **Perceived Value** |
| PR2 | **.916** | .128 | .115 | .125 | .187 | .235 |
| PR1 | **.911** | .089 | .071 | .114 | .200 | .217 |
| PR4 | **.906** | .135 | .099 | .120 | .157 | .233 |
| PR3 | **.899** | .141 | .118 | .105 | .200 | .233 |
| O3 | .089 | **.927** | -.104 | .054 | .082 | -.002 |
| O2 | .067 | **.911** | -.103 | .053 | .074 | .012 |
| O1 | .093 | **.878** | -.088 | .098 | .035 | .017 |
| O4 | .147 | **.867** | -.091 | .108 | -.005 | .003 |
| P2 | .074 | -.096 | **.938** | .027 | .005 | .102 |
| P3 | .022 | -.016 | **.907** | .031 | .089 | .067 |
| P4 | .112 | -.120 | **.899** | .055 | .020 | .133 |
| P1 | .128 | -.166 | **.810** | -.014 | .036 | .125 |
| SA4 | .086 | .071 | .036 | **.907** | .059 | .048 |
| SA1 | .117 | .110 | .034 | **.903** | .080 | .069 |
| SA3 | .077 | .047 | -.022 | **.883** | .078 | .097 |
| SA2 | .090 | .080 | .046 | **.859** | .055 | -.040 |
| CS1 | .247 | .063 | .021 | .090 | **.937** | .167 |
| CS2 | .185 | .037 | .143 | .075 | **.936** | .100 |
| CS3 | .196 | .086 | -.014 | .119 | **.934** | .132 |
| PV3 | .255 | -.016 | .168 | .032 | .132 | **.912** |
| PV1 | .302 | -.025 | .182 | .075 | .142 | **.907** |
| PV2 | .284 | .061 | .119 | .074 | .148 | **.891** |
| **% of Variance Explained** | **17.184** | **15.319** | **15.219** | **14.911** | **13.037** | **12.640** |

| |
|---|
| Extraction Method: Principal Component Analysis. |
| Rotation Method: Varimax with Kaiser Normalization. |
| a. Rotation converged in 6 iterations. |

We conducted Confirmatory Factor Analysis (CFA) on the basis of the result of Exploratory Factor Analysis (EFA). CFA has been used to determine the goodness of fit between hypothesized model & sample data. Then, the fitness indexes were verified as follows and hypotheses were tested through path analysis.

**Table 4: Fit Indices of Confirmatory Factor Analysis for Structural Model**

| Fit Index | Acceptable Threshold Levels | Structural Model Values |
|---|---|---|
| $\chi^2$/df ( Chi-Square / Degree of Freedom) | Values less than 3 | **0.373** |
| RMSEA (Root Mean-Square Error of Approximation) | Values less than 0.06 | **0.001** |
| GFI (Goodness of Fit Index) | Values greater than 0.90 | **0.999** |
| AGFI (Adjusted Goodness of Fit Index) | Values greater than 0.90 | **0.991** |
| NFI (Normed Fit Index) | Values greater than 0.90 | **0.997** |
| CFI (Comparative Fit Index) | Values greater than 0.90 | **0.999** |

Here the fit indices (Table 4) of Structural model (Figure 2) indicate the desirable range and prove a good model fit.

**Figure 2: Path Diagram of Hypothesized Structural Model on Customer Satisfaction in Horticulture Industry**
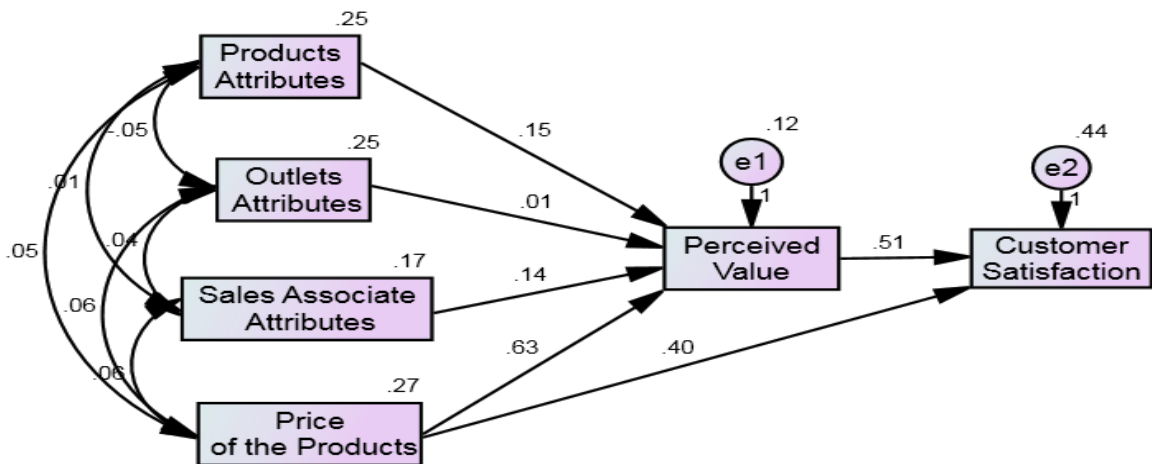
**Table 5: Path Analysis of Structural Model**

| Measurement Path | | | Hypo-thesis | Esti-mate | S.E. | C.R. | P-Value | Assess-ment |
|---|---|---|---|---|---|---|---|---|
| Perceived Value | ← | Products Attributes | H1 | .153 | .042 | 3.576 | *** | Supported |
| Perceived Value | ← | Price of the Products | H4 | .627 | .043 | 14.691 | *** | Supported |
| Perceived Value | ←- | Outlets Attributes | H2 | .010 | .041 | 2.241 | .008 | Supported |
| Perceived Value | ← | Sales Associates Attributes | H3 | .141 | .051 | 2.755 | .006 | Supported |
| Customer Satisfaction | ← | Perceived Value | H5 | .506 | .111 | 4.573 | *** | Supported |
| Customer Satisfaction | ← | Price of the Products | New | .396 | .107 | 3.683 | *** | Supported |

*Significant Regression co-efficient (P<0.01)

**Path Analysis for Hypotheses Testing and Research Findings (refer to Table 5):**

**H1:** 'Product Attributes' positively influences the 'Perceived Value'.

Structural model supports this hypothesis. The path coefficient is significant (p<0.01) statistically and it has the expected positive sign (+0.153) which means 'Product Attributes' positively influences the 'Perceived Value'. It implies that if the quality product is available at fair price then customers will show their purchase intension in the retail market in the horticulture industry by increasing their perceived value. The availability of the products must be ensured in order to tap into all the opportunities presenting themselves at the proper time. Availability of various varieties of products will also attract consumers towards the retail store in order to buy as it will have a positive impact on the perceived value of the customers.

**H2:** 'Outlet Attributes' positively influences the 'Perceived Value'.

The P-value for the path co-efficient from 'Outlet Attributes' to 'Perceived Value' is positive (+0.010) and significant (p<0.01), indicating that 'Outlet Attributes' positively

influences the 'Perceived Value'. Therefore hypothesis is supported. The store hours, delivery time of the store, decoration facilities, etc., should be taken care of as then, the customers will be willing to purchase the products from the retail market and it will have also have a significant positive effect on the perceived value of the customer.

**H3:** 'Sales Associate Attributes' positively influences the 'Perceived Value'.

The P-value for the path co-efficient from 'Sales Associate Attributes' to 'Perceived Value' is positive (+0.141) and significant (p<0.01), indicating that 'Sales Associate Attributes' positively influences the 'Perceived Value'. Therefore hypothesis is supported. If sufficient and skilled associates are available in the market, then customers will be motivated towards the retail horticulture market as it has a positive influence on the perceived value of the customers.

**H4:** 'Price of the Products' positively influences the 'Perceived Value'.

Structural model supports this hypothesis. The path coefficient is significant (p<0.01) statistically and it has the expected positive sign (+0.627) which means 'Price of the Products' positively influences the 'Perceived Value'.

**H5:** 'Perceived Value' positively influences the 'Customer Satisfaction'.

The P-value for the path co-efficient from 'Perceived Value' to 'Customer Satisfaction' is positive (+0.506) and significant (p<0.01), indicating that 'Perceived Value' positively influences the 'Customer Satisfaction'. Therefore hypothesis is supported. There is a direct proportional positive relationship between perceived value and customer satisfaction. If customers are do not have a positive perceived value through their repeated past experiences, they will be not satisfied with the product. The frequency of the buying of the present customers would drastically increase and also, new customers will be acquired through the positive word of mouth marketing of the present customers.

## 10. Findings

This study sheds light on the possible influential factors of the customer perceived value of the horticulture industry which ultimately leads to customer satisfaction. Our empirical result shows multiple factors such as price of the products, product attributes, outlets attributes and sales associate attributes positively influences the perceived value of the customers which furthermore has a positive influence on the customer satisfaction. This empirical study confirms that customer perceived value is a significant determinant of customer satisfaction in the horticulture Industry in West

Bengal, India. This study revealed a very interesting fact that the attributes of the product directly influences the customer satisfaction in the retail market of this industry.

## 11. Conclusions

From the start of many civilisations across the globe, flower is considered as the essence of worship as well as beauty. Hence, they are the products which are used to convey messages to each other as well as in the expression of one's feelings immaculately. They are used in various rituals such as birthdays, marriages, religious offerings, funerals, etc. They are also used in case of various political, social and historical events (Ara & Hosen, 2017).Floriculture is a major revenue generation in the horticulture industry. A study has been seen to depict that there is an increasing trend in terms of the area, production and yields per hectare which is taking up horticulture business; however, there is a decrease in the yield per hectare. The main reason for the growing interest in the floriculture industry is the increased return on investments. The reason for the poor yield are the inadequate knowledge about floriculture, poor technology, unfavourable climatic conditions, unseasonal rainfall, low quality planting materials, etc. (Shreeram & Leelavathi, 2017; Jana, 2017).The customer satisfaction is the ultimate motto of any organization. The customer with optimum level of satisfaction mobilizes and generates goodwill to the business. The customer satisfaction is highly dependent upon features of the product, features of the stores and sales associates as showcased in the study. So, in a nutshell, we may assert that the organization has to pay more attention on delivering qualitative product at a reasonable price. Retailers have to focus on proper maintenance of stores in respect of convenient sore hours, prompt delivery, decoration facility, etc. This sector has to give emphasis on deployment of adequate and skilled sales associate in order to draw the attention of existing and potential retail consumers. All these things will satisfy the retail consumers and they will be highly motivated to purchase the horticulture products from the retailers.

## 12. Future Scope

There are some limitations of the study that could be addressed in future research. Due to the exploratory nature of the study only three factors deemed to be the most important in influencing consumer perceived valuehas been included. Another limitation in this study, it only focuses on the horticulture segment. Further study

should be utilized this methodology for multifarious segments to confirm the model to ensure the model identified for customer satisfaction. Finally, further study should be addressed the customer satisfaction issues on all other typology of segments in horticulture industry. The customers' behaviour in the state of West Bengal of our country was only observed. It can be also extended to other parts of our country to predict the behaviour of retail consumer behaviour in the horticulture industry.

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**Annexure: 1**

| Factors | Questions on different Items |
|---|---|
| **Price of the Products** | q1: Fair price of horticulture products attracts customers. |
| | q2: Affordable price of horticulture products attracts customers. |
| | q3: Discount facility for horticulture products attracts customers. |
| | q4: You will recommend others to select retail stores for borrowing facility. |
| **Outlets Attributes** | q5: Convenient Store hours attracts customers. |
| | q6: Proper delivery time attracts customers. |
| | q7: Bulk purchase in occasions attract customers. |
| | q8: Assistance of Associated Facilities like Decoration, digitisation, etc. attracts customers. |
| **Sales Associates Attributes** | q9: Sufficient sales associate availability impresses customers. |
| | q10: Knowledgeable and skilled sales associates impress customers. |
| | q12: Trained Sales associates impress customers. |
| | q13: Groomed Sales associates impress customers. |
| **Product Attributes** | q14: Quality products attract customers. |
| | q15: Product Assortment attracts customers. |
| | q16: Variety of products attracts customers. |
| | q17: Sufficient stock attracts customers. |
| **Perceived value** | q18: Products and Outlets attributes have a positive impact on the Perceived value of customers. |
| | q19: Sales associate's attributes have a positive impact on the Perceived value of customers. |
| | q20: Fair price of the products have a positive impact on the Perceived value of customers. |
| **Customer Satisfaction** | q21: Good perceived experiences satisfy customers. |
| | q22: Reliability of Horticulture retailers satisfies customers. |
| | q23: Delivering customized products satisfies customers. |