

# CHANGING CONSUMER PREFERENCES: FACTORS INFLUENCING CHOICE OF FAST FOOD OUTLET

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## ABSTRACT

*Fast food has become a part of the food consumption for many consumers in the present day. The changing consumer preference along with concerns of health have made the consumers more aware of the food they choose for consumption. Fast food consumption has been linked to overweight, obesity, high cholesterol, and other health related issues. To counter these challenges the fast food outlets are starting to introduce healthy options in their menus. Creating a favorable consumer perception helps the brands to garner profitability in the long run. The researcher in this paper tries to find out whether variety of products, food quality, services speed, price and nutrition has an impact on consumer perception which might positively influences the purchase decision. For this research the researcher has undertaken two prominent brands, Domino's Pizza and Pizza Hut to study the influence of consumer perception on the buying decision.*

**Keywords:** Variety, Food Quality, Service Speed, Nutrition, Consumer Perception, Purchase Decision.

## INTRODUCTION

There is a lot of diversity in the Indian food due to diverse cultures in different regions of the country. Indians traditionally are accustomed to have food cooked at home. Home cooked food is believed to be fresh and hygienic. The belief is more profound with rural folks. It is seen that rural consumers has a greater interest in local food than the urban consumers (Weatherall et al., 2003). Less exposure of the rural folks to media has limited the taste to locally available foods.

There is a huge transformation in the lifestyle of consumers due to increase in disposable income and information available due to rapid evolution of the social media. Due to changing lifestyle and work culture we also see a change in trends in consumption patterns. The western culture too has also influenced the food consumption patterns to a large extent. Shortage of time is also a factor influencing the food consumption. Dual income families struggle to manage time for cooking their meal. This has led to the easier mode of consumption like fast food, where less or no cooking is required. Fast food from Dominos and Pizza Hut are quite common nowadays among young consumers. Even the elders due to scarcity of time sometimes prefer to go for fast food. The fast food outlets have adapted the dishes to the meet the Indian taste and requirements. This has further increased the demands of the products.

Consumer perception is based on the feelings developed about the product or service. Consumers develop certain perceptions about fast food outlets. The perceptions are generally by communication through word-of-mouth, promotions from fast food restaurants, past personal experience and other sources (Kara et al., 1995). It is essential to understand the difference in the

consumer perceptions across different cultures. Recently fast food joints have become a home for breakfast, lunch and dinner due to low costs associated and fast service.

Food available in the joints today are customized to meet the nutritional requirements of the consumers. The reason to comply is that there is a trend for low calorie, low fat and fat free food. Health concerns, salt intake, cholesterol are a priority. These priorities are overridden by ease of preparation, taste and children preference.

The research tries to understand the perception of consumers towards consumption and choice of food outlets. The researcher intends to study the factors which positively influence consumer perception. A positive perception impacts the purchase decision. There are studies which talks about the strategies for fast food restaurants but no study has been done on factors influencing consumer perception and the influence of consumer perception on the purchase decision of fast food brands.

## **LITERATURE REVIEW**

### **Fast Food**

Fast food is generally conceived as food prepared instantly with an aim to serve it at a fast speed. The concept is to serve food to a large group of consumers who do not have enough time to sit and dine. By making speed of service a priority the industry had been able to garner a large segment of consumers who has less time to sit and eat. Though the priority of fast food restaurants is speed of service but in due course there were other drivers which emerged with the change in consumer tastes and preferences. Recent research shows that consumer's main focus on fast food now are on price, taste and quality.

Research has shown that fast food consumption leads to overweight, obesity and other health problems. This has led to avoidance of fast food by consumers who are health conscious. It was found out that 39% of the global populations are overweight and 13% of the global populations are suffering from obesity (WHO, 2014). Though fast foods are popular yet many consumers considered it as unhealthy fearing it may lead to obesity and overweight. Due to increase in awareness of maintaining good health, the fast food industry struggles to have a space in the changing consumer trends searching for healthy options. This is why organic food is gaining popularity due to consumers concerns for health.

### **Global Fast Food Industry**

Globally the fast food industry generates a revenue of over \$570 billion (fast food industry analysis, 2019). It is expected to grow at a rate of 4.8% annually. The global fast food market is expected to reach \$743,859 million by 2022 (Allied market research, 2019). The per capita expenditure on meals taken outside home is \$1870 for US, \$750 for China, \$745 for Brazil and \$110 for India (The Economic Times (ET), Dec 17, 2017). The per capita expenditure on meals outside home as seen is low in India. There is provision for growth in India. The frequency of eating out in India is 4-5 times in a month whereas in Singapore it is 28 times in a month (ET, 2017). Nielsen's global consumer confidence report survey shows that customer confidence is very high in India. It is in number one position indicating a high spending intention.

## India's Fast Food Industry

The fast food market in India was not that attractive in the 90's. McDonalds entered the Indian market in 1996 when the Indian consumers were not much attracted towards fast-food (CNBC, 2015). The Indian food industry has grown by 10% (FICCI, 2018). The Indian Foodservice industry is expected to grow to INR 5,52,000 crore by 2022. The internet penetration and smartphone usage has further led to the growth of fast food market.

Rising disposable income, favorable business environment and the changing lifestyle in India is leading to the growth of fast food business in India. The increase in number of nuclear families, increase in women employment has led to more exposure to western cuisine which has led to increase in trends of eating out.

Indians have been accustomed to eating in roadside eateries which shows that there is a traditional link of eating fast foods from the unorganized sector. The organized sector is dominated by brands like Domino's, Pizza hut, McDonalds, KFC, Donkin donuts and Subway. The chains have accommodated the products to suit the Indian consumers.

The researcher has identified seven variables which has an impact on purchase decision of fast food. The variables are variety of food, food quality, services speed, price, nutrition and consumer perception.

### Variety of Food

The changing consumer demographics and lifestyle are shaping the fast food market in North America. In India too due to changing consumer demographics, more disposable income and the job involved, the fast food market is proliferating. Ease of preparation, taste, and appeal to children dominate the purchase decision (Kara et al., 1995). Variety of food appeals to the consumers. The desire for wholesomeness and the food variety is becoming more prominent (Kara et al., 1995). The more the food variety the more it becomes easier for consumers to choose the product. Variety of food adds positively to the consumer perception of the brand. Based on the discussion the following hypothesis is proposed.

*H1: Variety of food available creates a positive consumer perception.*

### Food Quality

Prime factors that consumers seek while fast food purchase is the freshness, taste and the food quality (Seyfang, 2006; Chambers et al., 2007; Murphy, 2011). Quality is intangible that can be perceived before and after the purchase (Grunert, 2010). Consumer's perception of quality is based on the expectations developed on the expected product performance and the services delivered (Boulding et al., 1993). Comparison between the consumer's expectations and perceived performance results in consumer perception of the quality (Tinoco & Ribeiro, 2008). It is seen that women are more committed to buy local food due to freshness and good quality (Penney & Prior, 2014). Consumers perceive local food to be more fresh, healthy and of better quality (Jones et al., 2003). Consumers today are more concerned about the quality and services of products. The increase in the pollution level and diseases have made the citizens to think more on the quality of food intake. The changing habits and lifestyle have even made the consumers more prone to diseases. Consumers prefer to purchase good quality food as compared to taste

only. Hygiene, cleanliness and quality of food matters most to Indians while purchasing fast food. Based on the discussion the following hypothesis is proposed.

*H2: Food Quality of the outlet has a positive impact on the consumer perception.*

### **Services Speed**

Another important factor influencing decision making is the service provided by the outlet. The nature of services provided determines the image of the brand. Brands are making service an area of differentiation. More customization and an efficient service helps the brand to stand out. Most important factors for choice of a fast food outlet for frequent buyers in the US are variety, speed and friendly staff (Kara et al., 1995). The speed of delivery along with a friendly staff helps brands to create a positive image. Increased accessibility, convenience, and customer service enhance consumer perception of the brand (Lindberg et al., 2018). India is a leading country in the Asia Pacific region in terms of fast food consumption (Manohar & Rehman, 2018). Research shows that 70% of the urban consumers in India go for takeaways once a month. In case of fast food speed of the processing matters a lot to consumers. Based on the discussion the following hypothesis is proposed.

*H3: High Service Speed creates a positive consumer perception.*

### **Price**

Everyone wants to save money from purchases done. It would be great if all products could be bought at a discount. In India we have maximum people in the bottom of the pyramid. It is seen that people are generally more price conscious. Basically for fast food items which is usually found in the roadside stalls, the product is available at a cheaper cost. Indian people generally likes to bargain for the products they buy. Consumers would prefer to buy products at a discount. Research shows that the growth for market for fast food is the low price, the ease of preparation, and the promotions (Tiwari & Verma, 2008). These factors along with variety of food, taste, environment and hygiene, speed of service, location and parking, effect the choice of an outlet (Morano et al., 2018). Consumers today is seen to wait for discounts to be provided for purchasing the product. Based on the discussions the following hypotheses is proposed.

*H4: Price has a positive impact on consumer perception.*

*H5: Price of the outlet has a positive impact on the purchase decision.*

### **Nutrition**

Due to the increasing pollution levels people very often fall sick. There are also instances of increasing immunity disorders among citizens. This has become very prominent among children too. The rising awareness about health concerns are making people go for fresh food with nutritional contents. Parents are also concerned about the nutritional requirements of the children. Consumers prefer to have food items with nutritional contents. In Canada, buyers consider seating capacity and nutritional value (Kara et al., 1995) as indicators for choosing a fast food outlet. Nutritional ingredients if incorporated in the food will have a direct impact on the purchase decision. Based on this discussion the following hypotheses is proposed.

*H6: Nutritional value has a positive impact on the consumer perception.*

*H7: Nutritional value has a positive impact on the purchase decision.*

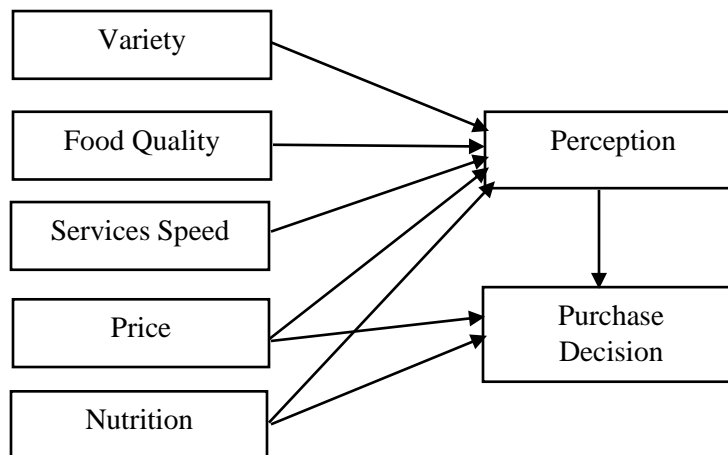
## Customer Perception

The fast food industry is spread across globally and is becoming more popular across nations. Consumers develop perceptions about fast food outlets based on word-of-mouth, through promotions by the outlets, personal experience, ratings on the social media, reviews etc. The perceptions vary across cultures and countries. Research shows the perception about food varies across age groups. Well educated, older and wealthier females are the most likely purchasers of local food (Institute of Grocery Distribution, IGD, 2008; Mintel, 2008; Socio-Economic Research and Intelligence Observatory, SERIO, 2008) which are healthy and considered to have good nutrients. Consumers above the age of 65 years are more likely to buy food which are nutritious. Consumers of the age group 25 to 34 years are not too concerned about healthy food (Mintel, 2008, 2011). This is the age group which is presumed to have the highest tendency to consume fast food.

Adaptations to the requirements of consumers as per the cultural norms will help the outlets to improve consumer perceptions. Investigation of consumer perception is needed to develop strategies to meet their preference which aid in the decision making. The five senses (vision, hearing, touch, taste and olfaction) are bases for consumer perception (Stone & Sidel, 2004). Consumers interpretation of the experience based on the information gathered by the various senses usually influence the purchase decision (Imram, 1999; Swahn et al., 2012). The following hypothesis are formulated based on the literature review.

*H8: Consumer perception has a positive impact on the purchase decision.*

Based on the literature review a conceptual framework is proposed for testing as depicted in Figure 1.



**FIGURE 1**  
**THE CONCEPTUAL FRAMEWORK**

## METHODOLOGY

A primary survey was carried out to measure the responses of the customers. A questionnaire was developed to collect the responses of the respondents. The variables for measurement used were Variety of food (Variety), Food Quality (FdQualit), Services Speed (ServSpee), Price, Nutrition (Nutritio), Consumer Perception (Perceptn) and Purchase Decision (PurDecis).

The questionnaire was divided into three parts. The first part consisted of the demographic details of the respondent, the second part consisted of questions relating their attitude and perception of Domino's Pizza outlet on the variables of variety of food, food quality, services speed, price, nutrition, consumer perception and purchase decision. The second part consisted of questions related to attitudes and perception on Pizza Hut outlet on the variables of variety of food, food quality, services speed, price, nutrition, consumer perception and purchase decision. A total of 700 questionnaire were distributed, out of which only 424 questionnaires contained fully filled data. There are 21 variables in the proposed model. If we consider 10 samples per variable the total sample required will be 210 (Hair et al., 2008). Also we see that several researchers mentioned that the minimum sample size for testing a SEM is 100 to 200 (Hoogland & Boomsma, 1998; Boomsma & Hoogland, 2001; Kline, 2005). So a sample size of 424 will suffice for testing the proposed model.

The respondents were customers who had consumed products from both Domino's Pizza and Pizza Hut. The survey was done in Shillong in the state of Meghalaya in India. The responses were measured on a 5 point scale. 1 being highly disagree to 5 being highly agree.

Random sampling method adopted was used. The respondents are between the age group 20 to 30 years. The reason for taking this specific age group is that this group are not too health conscious as mentioned in the literature review. The tendency to consume fast food is high in this age group.

## DATA ANALYSIS AND INTERPRETATION

Data is analyzed using SPSS 22 and LISREL 9.2.

### Gender

Out of 424 respondents surveyed 63.2% are male and 36.8% are female.

### Age

80.9% of the respondents are in the age group 20 to 25 years; 19.1% of the respondents are in the age group 26 to 30 years.

### Income

14.6% of the respondents have an annual household income INR 11 LPA to 15 LPA, 32.8% of the respondents have an annual household income of INR 16 LPA to 20 LPA, 30.2% of the respondents have an annual household income of INR 21 LPA to 25 LPA, 22.4% of the respondents have an annual household income of more than INR 25 LPA.

## Test of Validity and Reliability

Confirmatory factor analysis was performed to assess the overall model fit of the conceptual model in Tables 1-3. Tests were conducted separately for responses collected for both Domino's Pizza and Pizza Hut.

### Domino's Pizza

| <b>Construct</b>   | <b>Codes</b> | <b>Statements</b>   | <b>Factor Loading</b> | <b>Cronbach's alpha</b> | <b>AVE</b> | <b>CR</b> |
|--|--------------|---|-----------------------|-------------------------|------------|-----------|
| Variety<br>(Van Trijp & Steenkamp, 1992)   | Variety1     | When I eat out, I like to try the most unusual items, even if I am not sure I would like them.    | 0.930                 | 0.962                   | 0.854      | 0.946     |
|  | Variety2     | Items on the menu that I am unfamiliar with make me curious.                                      | 0.925                 |                         |            |           |
|  | Variety3     | I like to eat exotic foods.   | 0.917                 |                         |            |           |
| Food Quality<br>(Kivela et al., 2000; Namkung & Jang, 2007; Sulek & Hensley, 2004)               | FdQualit 1   | The food is tasty and I enjoyed   | 0.892                 | 0.920                   | 0.866      | 0.951     |
|  | FdQualit 2   | The food quality is standard across all outlets   | 0.949                 |                         |            |           |
|  | FdQualit 3   | The outlet provides healthy food options  | 0.950                 |                         |            |           |
| Services Speed<br>(Marković et al., 2015)  | ServSpee1    | Maintaining speed and quality services during busy times  | 0.764                 | 0.941                   | 0.624      | 0.833     |
|  | ServSpee2    | You get prompt service and solutions to your problems   | 0.801                 |                         |            |           |
|  | ServSpee3    | Extra effort to handle special requests   | 0.805                 |                         |            |           |
| Price (Amara, & Buslama, 2011)   | Price1       | I find the offered prices of some products interesting  | 0.823                 | 0.848                   | 0.769      | 0.909     |
|  | Price2       | I think that this store offers products at prices which reflect their quality                     | 0.867                 |                         |            |           |
|  | Price1       | I find it easy to compare prices since they are well displayed                                    | 0.936                 |                         |            |           |
| Nutrition<br>(Doustmohammadian et al., 2017)   | Nutritio1    | When shopping, the nutritional information about food ingredients is important for me.            | 0.942                 | 0.940                   | 0.902      | 0.965     |
|  | Nutritio2    | I share the nutritional issues that I obtain from various sources with others                     | 0.932                 |                         |            |           |
|  | Nutritio3    | I can understand information and recommendations about proper nutrition for children in the media | 0.975                 |                         |            |           |
| Consumer Perception  | Perceptn1    | This outlet is my first choice  | 0.808                 | 0.918                   | 0.540      | 0.778     |
|  | Perceptn2    | I have a positive feeling towards the outlet  | 0.650                 |                         |            |           |
|  | Perceptn3    | I will recommend this retailer to friends and relatives   | 0.738                 |                         |            |           |
| Purchase Decision<br>(Mattila, 2001, Krishnamurthy & Sivaraman, 2002; Evanschitzky et al., 2006) | Purdecis1    | I am likely to consider this outlet the next time I think about buying food                       | 0.874                 | 0.900                   | 0.833      | 0.937     |
|  | Purdecis2    | I would like to try more products from this outlet  | 0.877                 |                         |            |           |
|  | Purdecis3    | I would like to suggest products of this outlet to my friends and relatives                       | 0.984                 |                         |            |           |

\*Cronbach's Alpha for overall reliability for all 21 items is 0.882

\*AVE – Average Variance Extracted; CR – Composite Reliability

**Table 2**  
**DISCRIMINANT VALIDITY OF THE CONSTRUCTS (FORNELL AND LARCKER CRITERION)**

|               | Variety | Food quality | Service speed | Price | Nutrition | Perception | PurchaseInt |
|---------------|---------|--------------|---------------|-------|-----------|------------|-------------|
| Variety       | 0.924   |              |               |       |           |            |             |
| Food quality  | 0.803   | 0.931        |               |       |           |            |             |
| Service speed | 0.490   | 0.492        | 0.790         |       |           |            |             |
| Price         | 0.481   | 0.430        | 0.839         | 0.887 |           |            |             |
| Nutrition     | 0.483   | 0.406        | 0.808         | 0.750 | 0.950     |            |             |
| Perception    | 0.161   | 0.126        | 0.231         | 0.221 | 0.322     | 0.735      |             |
| PurchaseInt   | 0.180   | 0.302        | 0.261         | 0.270 | 0.289     | 0.771      | 0.913       |

\*Diagonals are the square root of the AVE of the latent variables and indicates the highest of any column or row

\*Off-diagonals are correlations of the construct

Table 1 provides factor loadings, Cronbach’s alpha measures, AVE and Composite Reliability from responses of Domino’s Pizza. Reliability is measured using Cronbach’s alpha (Cronbach, 1951) and Composite reliability gives the internal consistency (Fornell & Larcker, 1981). AVE gives the measure of content validity (Fornell & Larcker, 1981). Factor loadings of 0.5 and higher is good. CR above 0.7 is good. AVE of above 0.5 is good.

From Table 1, Cronbach’s Alpha value of the overall reliability is 0.882, which shows that the data is highly reliable. Cronbach’s Alpha of all the individual constructs is 0.848 and above, which indicates that the data of the individual parameters are reliable. Composite reliability of the constructs is 0.778 and above which is shows internal consistency.

AVE scores are 0.540 and above for all the constructs which shows convergent validity. In Table 2, the diagonals are the square root of the AVE. Off-diagonals are the correlations of the latent constructs. The diagonals indicate the highest of any column or row. Also in the cross loading in Factor analysis, the items under each construct fall under the same factors. This complies with the discriminant validity requirements.

The measurement model for Domino’s Pizza thus meets the reliability requirements. There is also compliance for convergent and discriminant validity.

**Pizza Hut**

**Table 3**  
**EVALUATION OF THE MEASUREMENT MODEL**

| Construct  | Codes      | Statements   | Factor Loading | Cronbach's alpha | AVE   | CR    |
|--|------------|--|----------------|------------------|-------|-------|
| Variety<br>(Van Trijp & Steenkamp, 1992)   | Variety1   | When I eat out, I like to try the most unusual items, even if I am not sure I would like them. | 0.797          | 0.968            | 0.672 | 0.860 |
|  | Variety2   | Items on the menu that I am unfamiliar with make me curious.                                   | 0.846          |                  |       |       |
|  | Variety3   | I like to eat exotic foods.  | 0.816          |                  |       |       |
| Food Quality<br>(Kivela et al., 2000; Namkung & Jang, 2007; Sulek & Hensley, 2004) | FdQualit 1 | The food is tasty and I enjoyed  | 0.827          | 0.952            | 0.549 | 0.784 |
|  | FdQualit 2 | The food quality is standard across all outlets  | 0.701          |                  |       |       |
|  | FdQualit 3 | The outlet provides healthy food options   | 0.687          |                  |       |       |



|  |           |   |       |       |       |       |
|--|-----------|---|-------|-------|-------|-------|
| Services Speed<br>(Marković et al., 2015)  | ServSpee1 | Maintaining speed and quality services during busy times  | 0.750 | 0.977 | 0.613 | 0.825 |
|  | ServSpee2 | You get prompt service and solutions to your problems   | 0.739 |       |       |       |
|  | ServSpee3 | Extra effort to handle special requests   | 0.854 |       |       |       |
| Price<br>(Amara & Buslama, 2011)   | Price1    | I find the offered prices of some products interesting  | 0.790 | 0.963 | 0.610 | 0.824 |
|  | Price2    | I think that this store offers products at prices which reflect their quality                     | 0.754 |       |       |       |
|  | Price1    | I find it easy to compare prices since they are well displayed                                    | 0.799 |       |       |       |
| Nutrition<br>(Doustmohammadian et al., 2017)   | Nutritio1 | When shopping, the nutritional information about food ingredients is important for me.            | 0.896 | 0.908 | 0.594 | 0.811 |
|  | Nutritio2 | I share the nutritional issues that I obtain from various sources with others                     | 0.769 |       |       |       |
|  | Nutritio3 | I can understand information and recommendations about proper nutrition for children in the media | 0.622 |       |       |       |
| Consumer Perception  | Perceptn1 | This outlet is my first choice  | 0.885 | 0.933 | 0.672 | 0.859 |
|  | Perceptn2 | I have a positive feeling towards the outlet  | 0.779 |       |       |       |
|  | Perceptn3 | I will recommend this retailer to friends and relatives   | 0.790 |       |       |       |
| Purchase Decision<br>(Mattila, 2001, Krishnamurthy & Sivaraman, 2002; Evanschitzky et al., 2006) | Purdecis1 | I am likely to consider this outlet the next time I think about buying food                       | 0.875 | 0.924 | 0.773 | 0.910 |
|  | Purdecis2 | I would like to try more products from this outlet  | 0.921 |       |       |       |
|  | Purdecis3 | I would like to suggest products of this outlet to my friends and relatives                       | 0.839 |       |       |       |

\*Cronbach's Alpha for overall reliability for all 21 items is 0.939

\*AVE – Average Variance Extracted; CR – Composite Reliability

|               | Variety | Food quality | Service speed | Price | Nutrition | Perception | PurchaseInt |
|---------------|---------|--------------|---------------|-------|-----------|------------|-------------|
| Variety       | 0.820   |              |               |       |           |            |             |
| Food quality  | 0.840   | 0.741        |               |       |           |            |             |
| Service speed | 0.826   | 0.896        | 0.783         |       |           |            |             |
| Price         | 0.197   | 0.202        | 0.209         | 0.781 |           |            |             |
| Nutrition     | 0.138   | 0.199        | 0.172         | 0.745 | 0.771     |            |             |
| Perception    | 0.214   | 0.152        | 0.133         | 0.812 | 0.686     | 0.819      |             |
| PurchaseInt   | 0.264   | 0.403        | 0.403         | 0.430 | 0.341     | 0.369      | 0.879       |

\*Diagonals are the square root of the AVE of the latent variables and indicates the highest of any column or row

\*Off-diagonals are correlations of the construct

Table 3 provides factor loadings, Cronbach's alpha measures, AVE and Composite Reliability from responses of Pizza Hut outlet. Reliability is measured using Cronbach's alpha (Cronbach, 1951) and Composite reliability gives the internal consistency (Fornell & Larcker, 1981). AVE gives the measure of content validity (Fornell & Larcker, 1981). Factor loadings of 0.5 and higher is good. CR above 0.7 is good. AVE of above 0.5 is good.

From Table 3, Cronbach’s Alpha value of the overall reliability is 0.939, which shows that the data is highly reliable. Cronbach’s Alpha of all the individual constructs are 0.908 and above, which indicates that the data of the individual parameters are reliable. Composite reliability of the constructs are 0.784 and above which shows internal consistency. AVE scores are 0.549 and above for all the constructs which shows convergent validity.

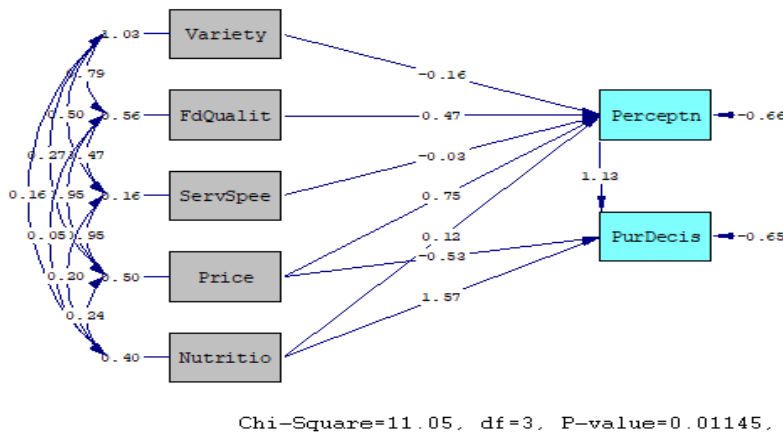
In Table 4, the diagonals are the square root of the AVE. Off-diagonals are the correlations of the latent constructs. The diagonals indicate the highest of any column or row. Also in the cross loading in Factor analysis, the items under each construct fall under the same factors. This complies with the discriminant validity requirements. The measurement model for Pizza Hut thus meets the reliability requirements. There is also compliance for convergent and discriminant validity.

**Path Analysis**

Structural models were estimated to test hypotheses H1 through H8 for responses collected for both Domino’s Pizza and Pizza Hut outlets separately.

**Domino’s Pizza**

The structural results of the proposed model for responses of Domino’s Pizza is depicted in Figure 2. Results of the structural model from Figure 2 is shown in Table 5.



**FIGURE 2  
RESULTS OF THE STRUCTURAL MODEL**

| Table 5<br>GOODNESS OF FIT INDICES FOR STRUCTURAL MODEL |                |             |
|---|----------------|-------------|
| Fit Indices   | Accepted Value | Model Value |
| Absolute Fit Measures                                   |                |             |
| $\chi^2$ (Chi-square)                                   |                | 11.05       |
| Df  |                | 3           |
| $\chi^2$ (Chi-square)/df                                | 3              | 3.68        |
| GFI (Goodness of Fit Index)                             | > 0.9          | 0.997       |
| RMSEA (Root Mean Square Error of Approximation)         | < 0.10         | 0.057       |
| Incremental Fit Measures                                |                |             |

|  |        |       |
|--|--------|-------|
| AGFI (Adjusted Goodness of Fit Index)  | > 0.80 | 0.973 |
| NFI (Normed Fit Index)                 | > 0.90 | 0.977 |
| CFI (Comparative Fit Index)            | > 0.90 | 0.983 |
| IFI (Incremental Fit Index)            | > 0.90 | 0.983 |
| RFI (Relative Fit Index)               | > 0.90 | 0.842 |
| <b>Parsimony Fit Measures</b>          |        |       |
| PCFI (Parsimony Goodness of Fit Index) | > 0.50 | 0.107 |
| PNFI (Parsimony Normed Fit Index)      | > 0.50 | 0.140 |

The test of the structural model was performed using SEM in order to examine the hypothesized conceptual framework Figure 1 by performing a simultaneous test. Table 5 depicts that the goodness-of-fit for the model was met:  $\chi^2$  (Chi-square)/df=3.68, CFI=0.983, GFI=0.997, AGFI=0.973 and NFI=0.977. The overall values provided evidence of a good model fit. All of the model-fit indices exceed the respective common acceptance levels, following the suggested cut-off value, demonstrating that the model exhibited a good fit with the data collected. Thus, it is possible to proceed to examine the path coefficients.

Properties of the causal paths for the structural model (standardized path coefficients ( $\beta$ ), standard error, and hypotheses result) are signified in Table 6.

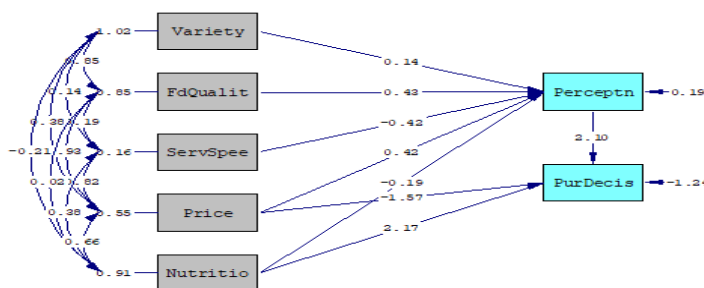
**Results of Path Analysis**

| Path                             | Estimate ( $\beta$ ) | S.E.   | p       | Results   |
|----------------------------------|----------------------|--------|---------|-----------|
| Variety $\rightarrow$ Perceptn   | -0.160               | 0.146  | 0.273   | Reject H1 |
| FdQuality $\rightarrow$ Perceptn | 0.470                | 0.0623 | 0.00001 | Accept H2 |
| ServSpee $\rightarrow$ Perceptn  | -0.256               | 0.245  | 0.917   | Reject H3 |
| Price $\rightarrow$ Perceptn     | 0.753                | 0.116  | 0.0001  | Accept H4 |
| Price $\rightarrow$ PurDecis     | -0.526               | 0.391  | 0.179   | Reject H5 |
| Nutritio $\rightarrow$ Perceptn  | 0.115                | 0.221  | 0.601   | Reject H6 |
| Nutritio $\rightarrow$ PurDecis  | 1.571                | 0.434  | 0.00001 | Accept H7 |
| Perceptn $\rightarrow$ PurDecis  | 1.127                | 0.345  | 0.001   | Accept H8 |

Note:  $\beta$  = standardized beta coefficients; S.E. = standard error; \*p< 0.05 (tested at 5% significance level)

**Pizza Hut**

The structural results of the proposed model for responses of Pizza Hut is depicted in Figure 3. Results of the structural model from Figure 3 is shown in Table 7.



Chi-Square=12.83, df=3, P-value=0.00503, RMSEA=0.063

### FIGURE 3 RESULTS OF THE STRUCTURAL MODEL

| <b>Table 7<br/>GOODNESS OF FIT INDICES FOR STRUCTURAL MODEL</b> |                       |                    |
|---|-----------------------|--------------------|
| <b>Fit Indices</b>  | <b>Accepted Value</b> | <b>Model Value</b> |
| <b>Absolute Fit Measures</b>                                    |                       |                    |
| $\chi^2$ (Chi-square)   |                       | 12.83              |
| Df  |                       | 3                  |
| $\chi^2$ (Chi-square)/df  | 3                     | 4.27               |
| GFI (Goodness of Fit Index)                                     | > 0.9                 | 0.995              |
| RMSEA (Root Mean Square Error of Approximation)                 | < 0.10                | 0.063              |
| <b>Incremental Fit Measures</b>                                 |                       |                    |
| AGFI (Adjusted Goodness of Fit Index)                           | > 0.80                | 0.953              |
| NFI (Normed Fit Index)  | > 0.90                | 0.909              |
| CFI (Comparative Fit Index)                                     | > 0.90                | 0.918              |
| IFI (Incremental Fit Index)                                     | > 0.90                | 0.929              |
| RFI (Relative Fit Index)  | > 0.90                | 0.363              |
| <b>Parsimony Fit Measures</b>                                   |                       |                    |
| PGFI (Parsimony Goodness of Fit Index)                          | < 0.50                | 0.107              |
| PNFI (Parsimony Normed Fit Index)                               | < 0.50                | 0.103              |

The test of the structural model was performed using SEM in order to examine the hypothesized conceptual framework (Figure 1) by performing a simultaneous test. Table 7 depicts that the goodness-of-fit for the model was met:  $\chi^2$  (Chi-square)/df = 4.27, CFI = 0.918, GFI = 0.995, AGFI = 0.953 and NFI = 0.909. The overall values provided evidence of a good model fit. All of the model-fit indices exceed the respective common acceptance levels, following the suggested cut-off value, demonstrating that the model exhibited a good fit with the data collected. Thus, it is possible to proceed to examine the path coefficients.

Properties of the causal paths for the structural model (standardized path coefficients ( $\beta$ ), standard error, and hypotheses result) are signified in Table 8.

#### Results of path analysis

| <b>Table 8<br/>Summary of Hypotheses Testing Results</b>  |                                      |             |          |                |
|---|--------------------------------------|-------------|----------|----------------|
| <b>Path</b>   | <b>Estimate (<math>\beta</math>)</b> | <b>S.E.</b> | <b>p</b> | <b>Results</b> |
| Variety $\rightarrow$ Perceptn  | 0.136                                | 0.0847      | 0.109    | Reject H1      |
| FdQuality $\rightarrow$ Perceptn  | 0.430                                | 0.0823      | 0.00001  | Accept H2      |
| ServSpee $\rightarrow$ Perceptn   | -0.421                               | 0.165       | 0.011    | Accept H3      |
| Price $\rightarrow$ Perceptn  | 0.424                                | 0.153       | 0.006    | Accept H4      |
| Price $\rightarrow$ PurDecis  | -1.569                               | 0.411       | 0.00001  | Accept H5      |
| Nutritio $\rightarrow$ Perceptn   | -0.192                               | 0.121       | 0.113    | Reject H6      |
| Nutritio $\rightarrow$ PurDecis   | 2.167                                | 0.594       | 0.00001  | Accept H7      |
| Perceptn $\rightarrow$ PurDecis   | 2.099                                | 0.205       | 0.00001  | Accept H8      |
| Note: $\beta$ = standardized beta coefficients; S.E. = standard error; *p< 0.05 (tested at 5% significance level) |                                      |             |          |                |

## DISCUSSION AND CONCLUSION

### Domino's Pizza

The results from path analysis of Domino's Pizza shows variety of food does not have an influence on customer perception. Majority of the consumers in Shillong are non-vegetarian. As compared to vegetarian products the non-vegetarian products available are few in numbers. So consumers do not have much of a choice while ordering the products. Increasing the product variety would have an impact on the consumer perception in the long run.

Food quality has a positive influence on customer perception. Consumers today are conscious of the quality of food available before they buy for consumption. Health concerns and hygiene are making consumers think twice before they buy. Consumers are willing to pay more for good quality food. The increasing concerns of deteriorating health due to increase in pollution and presence of hazardous substances is making the consumers go for good quality food. Service speed of the outlet do not have an influence on customer perception. It is also seen that the estimate has a negative impact. Fast food is known for quick service and taking the minimum time for delivery. Selection of outlets also is dependent on the total time lead-time taken for making the food available to the consumer. There is a huge problem of traffic congestion in Shillong. It always takes more than the promised time for home delivery. Moreover within the permissible limits of the city the delivery facility is limited to a selected few locations. There are occasions where the delivery is denied due to non-availability of delivery boys. The service speed inside the outlet also decreases in case of more consumers visiting the outlet. These concerns related to services speed create a negative influence on the consumer perception.

Price has an influence on customer perception. Price of the products available in Domino's Pizza is standardized across the country. Consumers feel that the price charged is reasonable as the quality is standardized across the country. Reasonable price for good quality influences consumer perception. Discounts provided from time to time add to the satisfaction of the consumers. Nutrition do not have an influence on customer perception. Consumers view pizza as an indulgence not a meal (Rangan & Youg, 2009). This is why the consumers may not expect pizza to have any nutritional value. Moreover the age group between 20 years to 30 years are not concerned too much about nutritional requirements. Taste is preferred more over nutrition. Nutritional requirements are gaining much attention among youngsters nowadays. Focus on addition of nutrients benefiting health is likely to boost consumer perception in the long run.

Price does not have a direct influence on the consumer purchase decision. It seems that price though influences the consumer perception but doesn't impact purchase intention directly. This shows that promotional discounts do not influence the consumer purchase intention for Domino's pizza. With the increase in competition consumers do compare price of products while making a purchase. Loyalty discounts for regular buyers may help in the long run to keep consumers stick to the brand. Nutrition has a direct influence on consumer purchase decision. Consumers like to have fresh made food. Good nutritional value in the products draws more consumers as it is beneficial for health. With the increase in concerns of health and wellness, consumers are more interested about the ingredients present in the food. Nutritional food attracts more consumers. Research shows even the fast food brands are incorporating healthy nutrients in their products. This is the reason we see nutrition to have a direct impact on the purchase decision.

Consumer perception has an influence on purchase decision. Perception is based on the knowledge and experience of the consumer. Positive feelings lead to favorable attitude towards a brand. A favorable attitude builds a positive perception towards the brand. A positive perception about the product and brand leads to positive purchase decision.

Thus we can conclude that in case of Domino's Pizza we see that food quality and the price influences the consumer perception, and consumer perception impacts the purchase decision of the consumers. Nutrition also has an influence on the purchase decision. This shows that consumers are more health conscious now. They want food with good nutrients for the price paid.

## **Pizza Hut**

The results from path analysis of Pizza Hut shows variety does not have an influence on customer perception. Though Pizza Hut across the country is quite popular and has a wide variety of products (Goyal & Singh, 2007) but in Shillong they do not provide a wide variety of products to the consumers. This is the reason why consumers are not concerned about the variety of products available.

Food quality has an influence on customer perception. Quality of food in Pizza Hut globally is considered to be of good standard. Pizza Hut also serves fresh salad for health conscious consumers. The quality is standardized across all outlets which marks a difference in quality. Consumers today are more concerned about their health. There is an increased awareness of health and safety issues (Viaene, 1997; Rohr et al., 2005). This has led to consumers researching more on the quality contents of the food being served. The growing concerns about the food quality and safety due to presence of contaminants like nitrates, pesticide residues and pathogenic micro-organisms has led to an increased demand for organic foods (Magkos et al., 2003).

Service speed of the outlet has an influence on customer perception. Pizza Hut's service in Shillong is more efficient as compared to Domino's. Irrespective of location and time of order it is known for delivery to all locations in the city. Most consumers often order from Pizza Hut due to the ease of ordering and services speed. Delivery services are provided to late hours in the evening as compared to Domino's. Price has an influence on customer perception. Consumers basically in the age group of 20 to 30 years are price sensitive. They would like to save money for other expenses too. Discounted food from time to time delights the customers.

Nutrition do not have an influence on customer perception. Consumers who take fast foods, sugary drinks and carbonated drinks generally intake more calories in terms of fats, carbohydrates, added sugars and proteins (Bowman, 2005). Consumers feel that though the meals taken at the fast food outlets were moderately nutritious but they had inhibitions that they were more calorific and contained harmful additives (McNeal et al., 1980). Fast Food industry is responsible for obesity (Adams, 2005). One of the reasons for obesity among the Indians is fast food consumption (Barker, 2006). Consumers in the age group of above 45 years usually look for nutritional value in the meals (Kara et al., 1995). In Shillong it was found out that the majority of the consumers who visit the fast food joints are in the age of below 40 years. This may be one of the reason why the nutrition doesn't matter to the consumers in the city of Shillong.

Price have a direct influence on the consumer purchase decision. Pizza Hut is known for quality of standardization. The products available in Pizza Hut Shillong is limited and as compared to Domino's products are available at a lower price. Due to the services efficiency and

also the low product cost consumers could make an instant purchase decision. Nutrition has a direct influence on consumer purchase decision. In case of Pizza Hut the nutritional values of the products are mentioned in the website. This helps the consumers to decide on the products if they are too concerned about the nutritional components. Since the chart is available consumers can promptly decide on purchasing a product.

Consumer perception has an influence on purchase decision. Due to the prompt and efficient service Pizza Hut has a better positive perception over Domino's. The only concern is the less variety of product available. Thus we can conclude that in case of Pizza Hut we see that food quality, services speed and the price influences the consumer perception, and consumer perception impacts the purchase decision of the consumers. Price and Nutrition also has a direct influence on the purchase decision. Consumers in western industrialized countries consider taste, appearance, healthiness and convenience as important food variables for trade (Brunso et al., 2002). In India too, we see the same traits being emphasized by consumers. Though Pizza Hut excels in operations efficiency yet Domino's is more popular due to the variety and size of products available. If Domino's Shillong have to sustain in the longer run it has to work on the service efficiency and customer satisfaction. This age group seems to be concerned about price and nutritional factors as well.

Product or services performance is usually measured by consumers based on the perceptions they hold. A higher level of expectations usually leads to dissatisfaction (Bearden & Teel, 1993). Due to availability of information over the internet consumers start comparing the services provided by the brands globally. This often leads to dissatisfaction. Care should be taken to promote the brand based on the geographical location and the resources made available.

### **LIMITATIONS**

The research was done only for the age group 20 years to 30 years. Thus the responses are limited only to this age group. A different kind of response may be found in the other age groups. Though the responses are also collected from consumers who are from different regions of the country residing in Shillong, yet the study is limited to the city of Shillong.

### **BUSINESS IMPLICATIONS**

Fast food is very popular in the city of Shillong. Several joints have surfaced in the recent years serving fast food. Knowing the consumer perception is important and it becomes easier to target consumers if you know their mindset. Such studies will help the fast food brands to decide on their strategies when targeting the consumers.

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