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Consumers' Preference and Acceptance of Branded Spice Powder in Sadar Upazila of Mymensingh District in Bangladesh

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Authors' contributions

This work was carried out in collaboration between all authors. Author TN designed the study, performed the statistical analysis, wrote the protocol and wrote the first draft of the manuscript. Authors MB and MRA managed the literature searches, assisted in the analysis and assisted in the preparation of manuscript. Author MIH managed the analyses and controlled the overall study. All authors read and approved the final manuscript.

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ABSTRACT

The study examines consumer brand preference and acceptance of spice powder in Sadar upazila of Mymensingh district in Bangladesh based on the primary data of 120 respondents. Correspondence analysis was drawn to analyze the factors influencing brand preference of spice powder. It was found that there was a strong association between spice users' income level, academic qualification, income source and preference of spice which mean that with the variation among the factors the choice for branded or non-branded spices also varied. The study found that

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42% consumers preferred only branded spice powder, 22% were loose users of spice powder, 20% prefer breaking (loose/self-made) spice powder and 17% use homemade paste spice. More than 98% of them used powder form and rest used paste or mashed form of brands found in market. Near about 92% consumer preferred poly pack for spice, 2% prefer paper box, 6% preferred plastic jar mainly for using and storing spice powder. Most of the consumer thought that those brands were exported really well brand and they have popular brand image not only in domestic country but also in abroad. The study revealed that RADHUNI spice powder compared to PRAN, ARKU, PURE, BD foods and other brands drew more attention of modern housewives those who had a latent demand for convenience and time saving cooking.

Keywords: *Branded spice powder; factors influencing; consumer preference and acceptance; Mymensingh district.*

1. INTRODUCTION

Spices are the imperative ingredient to make food tasty and delicious. It is the most common and important ingredient for food items of daily consumption. Flavoring food and making it tasty by adding different spices during cooking is a very common practice everywhere. A Bangladeshi cannot think of a meal without using spices, it is the food habit and tradition of Bengali people.

Since Bangladesh is a densely populated agrarian country dominated by rice where as a minor crop spices placed special emphasis as spices have been an integral part of diet. Bangladesh has certain natural comparative advantages with respect to production and utilization of spices; these include diverse agro-climatic production environments, availability of innumerable varieties and cultivars of each spice suitable for different climatic conditions, cheap labor, large domestic market and a strong tradition of using spices and their products in food, medicine and cosmetics [1]. Spices become agenda for politics by creating crisis in the market during the festivals like Ramadan, Eid, Puja and Christmas etc. Global trade in spices is expected to attain higher level due to anticipated advances in the global food industry and is posed for a major leap in the 21st century. Although a proper statistics of production and consumption is not available but it is true that a good quantity of spices is being imported every year to meet the huge demand of 160 million people of the country at the cost of foreign currency. Presently 109 kinds of spices are cultivated in the world but in Bangladesh only 27 different types are used and produced 17 different types [2]. On the basis of area, yield, demand and availability, spices are divided into three categories viz. major, minor and exotic. The days of mashing spices at home are set to be the soon past, now people are shifting to

powdered spices. They are showing interest in brands due to their health consciousness and the busy life, complex socio-economic condition leads to the popularity of readymade spices. Major spices are regularly used in daily diet at large amount such as chili, onion, garlic, turmeric and ginger. Minor spices are used in small scale in special items of food. These are coriander, fenugreek, black cumin, black pepper, dills, Joan etc. On the other hand, exotic spices are cumin, cardamom, cinnamon; clove, nutmeg, pistachio etc. are imported from outside the country.

The spice market is growing since consumers are showing reluctance to go for traditional systems of processing spices. As the women of today are busy with their carriers, the demand of branded spices powder is increasing day by day [3]. The country's packaged spices market is heating up as big business houses battle to win shares in the booming market. Recently availability of spice brands implies that market for spices product in Bangladesh is increasingly gaining momentum. This is growing by around 15% a year [2]. RADHUNI, SQUARE, PRAN, FRESH, ACME and BD foods are major players in spice market. Consumers' growing awareness about hygienic spices and busy urban life has led to rise in branded spices consumption. Since consumers have many options for choosing branded spices powder they want the one which assures the purity and deliver authentic taste and color. Attitudes towards a brand by a customer have been a critical domain for marketers [4]. Consumer's physical, psychological and social environment affects his/her motives for product usages and how he/she evaluates products [5]. Consumers have limited time, energy and financial resources. Within the available resources, they make purchase and consumption choices as they wish [6]. The main reasons for shifting from homemade to branded spice products were easy availability of branded spice products and as also because homemade spice

products preparation is laborious, lack of knowledge on recipe preparation and lack of time [7]. The majority of the respondents are satisfied for purchasing from the departmental stores [8].

A good number of studies have been conducted on economic analysis of production, marketing, consumption of spices in Bangladesh. But there is a lack of study on consumer preferences for branded spices in Bangladesh. Among all processed food items, spice powder is most popular because it is needed for people's daily requirement to prepare food. So, the researchers inspired to conduct a study on consumer preferences on branded spices powder. Therefore, the objectives of the study are to examine the using pattern of branded spice powder, level of consumer attitude, perception towards branded spice powder and analyze the factors influencing the consumers' brand preference of spice powder in Sadar upazila of Mymensingh district in Bangladesh.

2. METHODOLOGY

This study used both descriptive and analytical type of research in nature and it administered by collecting both primary and secondary data. Convenient sampling technique was used for the selection of sample. The total sample size for the study was 120 and all of respondents were user of branded spice powder in Sadar upazila of Mymensingh district in Bangladesh. The consumers who used spices powder especially housewives were considered as sample unit. Primary data were collected through personal interview at the place of home/resident by using a structured interview schedule. The questionnaire consists the basic questions such as identification of respondent's age, education, marital status, income, profession, causes of use of branded spices powder, choice of spices powder, reasons of choice, availability of spices powder and brand preference scale etc. Some secondary data were also collected from various journals, organizations like Department of Agricultural Extension (DAE), Bangladesh Bureau of Statistics and web searching. Data were analyzed with a combination of tabular and functional analysis using MS Excel and SPSS software.

2.1 Analytical Techniques

Descriptive statistics such as percentages were used to explore socio-economic characteristics of respondents and to categorize their characteristics in different way and to identify

their pattern of using branded spice powder. To measure consumer attitude, Likert scale was used. Likert scaling is a method designed to measure people's attitude. To test Likert scale, here compiled a series of items that express a wide range of attitudes from extremely positive to extremely negative. Each item calls for checking one of five fixed alternative expressions such as "strongly agree", "agree", "neutral", "disagree", "strongly disagree". In this five point continuum, weights of 5, 4, 3, 2, 1 was assigned for favorableness of the items and 1, 2, 3, 4, 5 was assigned for un-favorableness of the item. After that, a total score for each respondent was calculated by summing the value of each item that was checked. Afterwards, it was determined a basis for the selection of items for the final scale. This was done with the help of item analysis. With the item analysis, each item was subjected to a measurement of its ability to separate the highs from the lows. This is called discriminative power (DP) of the item. DP was calculated by using the following formula:

$$DP = Q_1 - Q_3$$

Where,

Q_1 = range above the upper quartile

Q_3 = range below the lower quartile

The DP value was computed for each of the possible items and those with the largest DP values are the items that best discriminate among individuals expressing deferring attitude toward the measure attitude. In calculating the DP, sum scored items for each respondent and places the scores in an array, usually from lowest to highest. Next, compare the range above the upper quartile (Q_1) with range below the lower quartile (Q_3) and the DP value was calculated as the difference between the weighted means of score above Q_1 and of those that fall below Q_3 .

2.2 Correspondence Analysis

Correspondence analysis is a technique that represents graphically the row and column categories and allows for a comparison of their "correspondences", or associations, at a category level. In this study, correspondence analysis was applied to understand the factors that influence the consumer brand preference of spice powder. How consumer preference changed in accordance with marital status, income, income source, education was also identified. To carry out the analysis with the data

and to make interpretation, findings were presented in tabular form.

3. RESULTS AND DISCUSSION

3.1 Consumer Uses Pattern of Branded Spice Powder

The interaction between changes in price and quantity consumer demand is an important context [9]. Consumer are chosen spices at various pattern as their preference, ability and convenient also different. Today most of the people prefer powder spices and select their preferred brand. But people still tend to use spices managed by their own as paste/mashed form. They also collected the raw spices and made the powder through local mill. Though there had hygiene question but many of people liked it as they believe color, aroma, and nutritional value remain constant in it.

The using pattern of spice is divided into two types- branded and non-branded. Branded spice also has two classification; powder and homemade paste form. On the other hand, non-branded divided in two parts; loose and self-managed powder. Again self-managed classified *bata*/paste spice and powder form. The user of paste form of branded spice is too little as knowledge and people much prefer the branded powdered form. Non-brand user also mixed up with branded spice powder. So, the user of branded spice powder seeing everywhere.

The pattern of using spices is clear from the Figure 1 that shows the types of spices that only the consumers used for cooking.

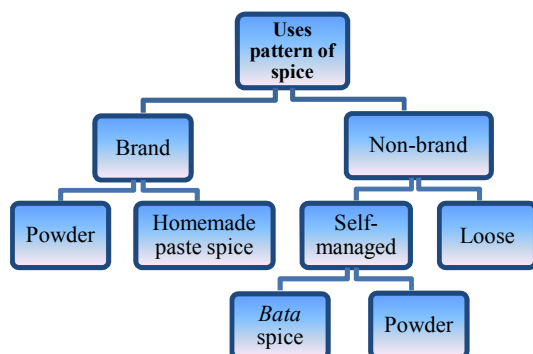


Figure 1. Types of spices

It is seen from the Table 1 that, among the sample spice users, about 43% consumers

preferred only branded spice powder, about 22% loose users of spice powder, 19% preferred breaking (loose/self-made) spice powder and 17% preferred paste/mashed spice. It is said that the most of the people used branded spice powder. The study found that when consumer preferred mainly non branded spice powder, at a time he/she also used branded spice powder to some extent.

Table 1. Uses pattern of spice user

Uses pattern	Frequency	Percentage
Brand (only)	51	42.50
Powder (self-made)	23	19.16
Loose	26	21.67
Homemade paste spice	20	16.67
Total	120	100

Source: Field survey (2015)

3.2 Factors Influencing Consumers' Brand Preferences of Spice Powder

Consumer research is extremely important to market strategy, because knowledge of the factors influencing consumer buying behaviour can help increase market share [10]. There are some reasons behind why people prefer branded spice powder. Today people are so much busy, they spend one third of the time in a day on their working space. Generally women bear many loads if she carries a job. With a lot of pressure people want relax. They seek those products or items which are simple, save the time and labor. In earlier day's historically and traditionally people used to purchase the food items in loose, unbranded because it is the domain of small local players. But due to changing consumer's lifestyle some progressive traders like local, regional, national and global retailers started the cleaning, grading, packaging and branding food items such as spice powder. Due to the rapid changes in consumer lifestyle, the branded spice powder is first choice to the consumer although the price of branded spice is higher than the raw spice. Most of the consumer uses the powder packet spice because of it can save time, easy to use, have good quality and convenience. Quality plays a major role in preferring powder spice.

Figure 2 exhibits that 12.50% consumers used powder spices for its good quality, 4.16% used for less price, about 36% used for easy use and 48.32% used for their convenient.

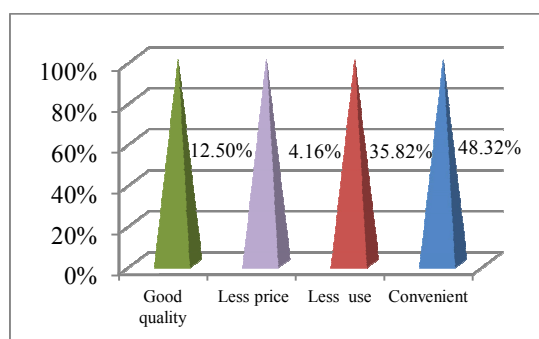


Figure 2. Reason of using powder spices

Following were the key factors which influenced the consumers for purchasing branded spice powder:

3.2.1 Experiences and suggestions

When consumer going to purchase any product some consideration always set up in his/her mind; his/her previous experience about the product, retailer or shopkeeper and friends and relatives' suggestions.

Figure 3 exhibits that about 98% consumers were considered their previous experience for buying branded spice powder, 1% took retailer suggestions, 1.2% took their friends and relatives suggestions when they had purchased. As the spice is a sensitive product for the cooking of daily food, people did not take the risk about the quality of the product. So, the spice users considered their concentration on the previous experience of using specific brand.

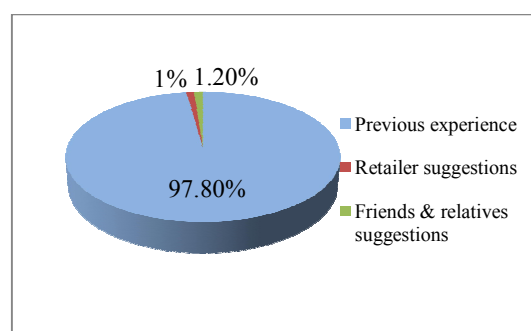


Figure 3. Experience and suggestions to purchase branded spice powder

3.2.2 Educational qualification

Educational qualification is an important factor which is mostly related with the consumer preference towards branded spice powder. The

educational level of the consumers of branded spice products was higher than those using homemade spice products [7]. The more the people educated the more she/he aware new product and early adaptation of the technological development.

Table 2 shows the educational qualification of the spice users and preference towards branded spice powder. The study revealed that the tendency of using branded spice is increases as the consumers' education increases. About 11% of branded spice powder users did not have basic education.

3.2.3 Marital status

Marital status was another important factor of consumer preference pattern of spice. The choosing and uses pattern of spice powder differ between married and unmarried people.

Table 3 shows that due to along with family as married members they had chosen only branded spice powder, brand with *bata* spice, brand with self-managed powder, brand with loose powder. But unmarried people without family had chosen only branded spice powder where main reasons were time saving and hassle free.

3.2.4 Income level

The income of spice users has great effect on their product preference. Generally people choose those products which match their income level.

Table 4 shows that the use of only branded spice powder was high in lower income level people. Most of time they used loose spice powder and *bata* spice along with brand that are low price than branded spice powder. Low income people avoid the self-managed spice powder method as it bears higher cost than the other methods. Medium level income group mostly used branded spice powder where highly medium and high level income group had much tendency to use self-managed because they were less price seeker.

3.2.5 Attributes of quality of branded spice powder

It is important thinking for a consumer that which issue he/she gives most importance for defining quality of branded spices powder based on color, taste, aroma or all.

Table 2. Educational qualification of spice users and their preference

Education	Preference				Total	Percent
	Only brand	Brand with <i>bata</i> spice	Brand with self-managed powder	Brand with loose powder		
No Schooling	0	5	0	8	13	10.83
Primary	3	5	2	7	17	14.16
Secondary	9	3	5	8	25	20.83
Higher secondary	15	3	8	3	29	24.16
Graduate	25	3	8	0	36	30
Total	52	19	23	26	120	100
Percent	43.33	15.83	19.16	21.66		100

*Source: Field survey (2015)***Table 3. Users' marital status and their preferences**

Marital status	Preference				Total	Percent
	Only brand user	Brand with <i>bata</i> spice user	Brand with self-managed powder user	Brand with loose powder user		
Married	32	19	23	26	100	83.33
Unmarried	20	0	0	0	20	16.66
Total	52	19	23	26	120	100
Percent	43.33	15.83	19.16	21.66		100

*Source: Field survey (2015)***Table 4. Income level of spice users and their preference**

Income level	Preference				Total	Percent
	Only brand	Brand with <i>bata</i> spice	Brand with self-managed powder	Brand with loose powder		
(5000-10000) low	7	10	0	15	32	26.66
(10001-25000) Medium	27	5	8	11	51	42.50
(25001-35000) Highly medium	9	4	9	0	22	18.33
(35001-above) High	6	2	7	0	15	12.50
Total	49	21	24	26	120	100
Percent	40.83	17.5	20	21.66		100

Source: Field survey, (2015)

It is observed from the Figure 4 that maximum spice users (85%) influenced by the spice quality based on their taste, color and aroma. Taste was the priority factor considered while choosing a branded spice powder followed by the color and aroma.

3.2.6 Quality of branded spice powder

Spice quality is most important factor to the consumers which they prefer or which spice they

use. Today, most of people want that their product will be nutritious and hygienic.

Table 5 shows that the users of only brand spice powder and self-managed powder along with brand were most aware group about their spice powder, rest of the *bata/paste* spice user. But consumers, who were main users of loose spice powder, were aware about the quality of spice powder, most of the time they remained neutral and quality was not important to them.

3.2.7 Quantity of branded spice powder

Quantity of spice in a packet is assumed an important factor on which people preference depends, because there are many of consumers who are quantity seeker than the other attributes of spice.

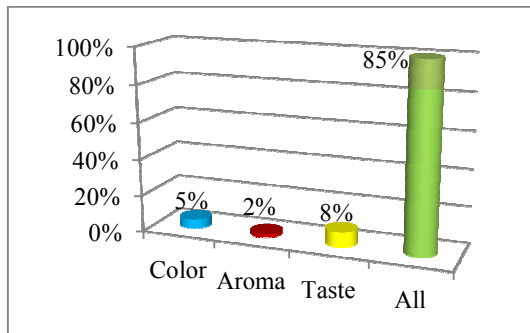


Figure 4. Attributes of quality of branded spice powder

Table 6 exhibits that loose powder users' quantity of spice powder was important and highly important to them, self-managed users, *bata* users and only brand users were also seek quantity but not as much.

3.2.8 Cost of branded spice powder

Consumer preference and product cost were related with each other. Cost of spice had great influence for their preference.

Table 7 shows that the cost was highly important and important to loose powder user, because they were price seeker and choose the spice powder which had low price and rest of price seeker were *bata* spice user. Cost was also important to the brand user and self-managed user but not as much.

3.3 Consumers' Attitudes towards Branded Spice Powder

Attitude is defined as a psychological path of evaluating a specific object with favor or disfavor [11]. Customer positive attitude is the extent to which a product or service's perceived performance matches a buyer's expectations. If the product or service's performance falls short of expectations, the buyer is dissatisfied or show negative attitude. If performance matches or exceeds expectations, the buyer is satisfied or delighted. Attitude tends to endure over time than an occasional event. For instance, hearing a loud noise over time could develop a negative attitude towards the sound [12].

Attitude towards branded spice powder developed through experiences or may change when new experiences were obtained. Consumers had attitude to specific brand behavior, for example which type of brand the consumers prefer to use. Attitude towards a more general consumption behavior can also occur, for example family members like and dislike affects the consumption pattern. Consumer agree or disagree about the importance factor also indicate that how far he/she health conscious. To examine the consumer attitude towards branded spice powder, five point Likert scale was followed.

Table 8 shows the response of the total number of respondents which were subdivided into strongly agree, agree, neutral, disagree and strongly disagree. In this five point continuum, weights of 1, 2, 3, 4, 5 or 5, 4, 3, 2, 1 were assigned. The direction of weighting being determined by the favorableness and unfavorableness of the items, the weights were assigned as follows: Strongly agree, 5; Agree, 4; Neutral, 3; Disagree, 2; Strongly disagree, 1.

Table 5. User preferences and quality of spice

Spice users	Quality of product				Total	Percent
	Highly important	Important	Neutral	Unimportant		
Only brand user	18	32	2	-	52	43.33
Brand with <i>bata</i> spice user	2	9	8	-	19	15.83
Brand with self-managed powder user	18	5	-	-	23	19.16
Brand with loose powder user	-	-	13	13	26	21.66
Total	38	46	23	13	120	100
Percent	31.66	38.33	19.16	10.83		100

Source: Field survey, (2015); '-' indicates no response

Table 6. User preferences and quantity of spice

Users	Quantity of product					Percent
	Highly important	Important	Neutral	Unimportant	Total	
Only brand user	-	30	22	-	52	43.33
Brand with <i>bata</i> spice user	-	8	11	-	19	15.83
Brand with self-managed powder user	-	9	7	7	23	19.16
Brand with loose powder user	17	9	-	-	26	21.66
Total	17	56	40	7	120	100
Percent	14.16	46.66	33.33	5.53		100

Source: Field survey (2015); '-' indicates no response

Table 7. User preferences and cost of spice powder

Users	Cost of product					Percent
	Highly important	Important	Neutral	Unimportant	Total	
Only brand user	0	26	18	9	52	43.33
Brand with <i>bata</i> spice user	3	10	5	1	19	15.83
Brand with self-managed powder user	0	2	16	5	23	19.16
Brand with loose powder user	8	6	2	10	26	21.66
Total	11	43	41	25	120	100
Percent	9.16	35.83	34.16	20.83		100

Source: Field survey (2015)

Table 8. Twelve statements of attitude measurement scale

Sl. no	Statements	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1.	Owning a branded spice powder is status symbol	-	7	8	90	15
2.	Uses of branded spice powder is time saving and hassle free	93	20	5	2	-
3.	Availability of branded spice powder is important for me	93	27	-	-	-
4.	I think it is hygienic	12	17	41	27	23
5.	I am willing to pay extra for it	12	11	29	40	28
6.	It contains less nutritional value	25	31	42	22	-
7.	I like it and want to consume it but my family members dislike it and I do not buy it	7	25	20	45	23
8.	Branded spice is costly compare then the quality	72	30	-	18	-
9.	I think smell and taste remain ok in branded spice powder	14	70	20	18	18
10.	Exported brand is well brand	83	25	12	-	-
11.	Advertisement is important for me to choose branded spice powder	30	28	27	35	-
12.	I have strong brand loyalty	22	51	13	34	-

Source: Field survey (2015); '-' indicates no response

3.3.1 Discriminating the discriminative power

After calculating the score for each spice user, it was needed to determine a basis for the

selection of items for the final scale. The work had been done with the method of item analysis. With the item analysis each item is subjected to a measurement of its ability to separate the high

from low. This is called discriminative power (DP) of the item. Table 9 shows the computing procedures of DP value for 12 statements as presented:

3.3.2 Selecting the scale items

The DP value was computed for each of the scale items, and those items with the largest DP values were selected. These were the items that best discriminate among individuals expressing differing attitudes toward the measured attitude. All the values have shown in Table 10 where the statements were arranged in descending order of DP values.

The consumer attitude on branded spice powder is clear from the Table 10. Most of the consumer thought that those brands were exported really well branded, they had popular brand image not only in domestic country but also in abroad. Product availability was important for consumers and they thought that the products should be available within their reach. Many consumers thought that they would give extra effort to get their desire product if that was not that available surrounded them. Most of the people had strong brand loyalty on his preferred brand; they used those branded spice powders which give him maximum satisfaction based on previous experience. People also thought that the cost of branded spice powder was higher than its quality. But at the end people preferred this because it saved their time and there was no hassle in preparation and at the same time to meet quality form. For this reason choosing the branded spice powder was the best option.

3.3.3 Favorableness and un-favorableness of consumers

From the calculation of total score value of individual, favorableness and unfavorableness of branded spice powder were presented. Consumers were categorized into three types;

- i) Highly favored of branded spice powder (range value: 49~60)
- ii) Medium favored branded spice powder (range value: 48~36) and
- iii) Less favored branded spice powder (35~12)

Here, the highest value of individual score could be 60 and lowest could be 12 because the number of items was 12.

Table 11 presents that 40.82% of consumers were in high favored attitudes on branded spice

powder; they did not seek any alternative option for choosing spice powder without brand. On the other hand, 43.34% was medium favored branded spice powder, they used and preferred it at a medium rate along with other option. 15.84% people were the less user, they preferred it but alternatives were used more than the branded spice powder.

3.4 Consumers' Perception about Different Spice Powder Brands

Increased competition in various spice brands in our country motivated the consumer by appearance of new or more heterogeneous products, adopting different technique to capture the market share as well as increase the customers. In addition consumers increased attraction about different spice brands associated with products environmental characteristics, health effects, quality, origin, etc. Consumers are aware of their brand of packaged spices powder mostly through advertisement (newspapers, journal, magazines and radio) which occupies 67.5 percent [13]. Consumers' preferences towards different spice brand became more complex and diversified. The precise selection of spices for each dish is a matter of national or regional cultural tradition, religious practice and to some extent, family preference [14].

Recently availability of spice brands indicate that market for spices product in Bangladesh is increasing at a large number. RADHUNI, SQUARE, PRAN, FRESH, ACME and BD foods brands were major players in spice market. The spice market is more competitive now-a-days. Customers look out for products that are more advanced in technology and quality and low price. The consumer brand preference of spice powder at different categories is discussed below:

3.4.1 Advertisement

Advertising is considered to be the best tool to stimulate demand of the spices powder in market. The company uses all the available media for the advertisement of its products. For introducing any new product of spice brand they use informative advertising, while for established products they go for reminder advertising. The advertisement program of different spice powder brands company done through three media. Print media by giving advertisement in newspapers, magazines, and leaflets. Broadcast media to reach mass people by television, radio etc. the corporate web-site provides necessary

information about their company products and benefits of each product. The display media is used to inform customer about products and additional offer through billboards, banners and sign board.

Figure 5 depicts that majority of the spice users put their opinion that promotion through advertisement was doing more by RADHUNI compared to other brands.

Table 9. Computation of discriminative power (DP) for each item

Item	Group	No. in group	Scale value					Weighted total	Weighted mean	DP (Q ₁ -Q ₃)
			5	4	3	2	1			
1 st	High (Top 25%) Q ₁	30	-	1	-	26	3	59	1.96	-0.18
	Low (Bottom 25%) Q ₃	30	-	2	3	22	3	64	2.14	
2 nd	Q ₁	30	24	5	1	-	-	143	4.76	+0.16
	Q ₃	30	21	7	1	1	-	138	4.60	
3 rd	Q ₁	30	29	3	-	-	-	157	5.23	+0.33
	Q ₃	30	27	3	-	-	-	147	4.90	
4 th	Q ₁	30	3	5	12	8	2	89	2.96	+0.39
	Q ₃	30	2	5	8	8	7	77	2.56	
5 th	Q ₁	30	2	3	8	10	7	73	2.43	-0.20
	Q ₃	30	4	3	7	10	6	79	2.63	
6 th	Q ₁	30	5	10	11	4	-	106	3.53	+0.07
	Q ₃	30	6	8	10	6	-	104	3.46	
7 th	Q ₁	30	1	6	5	10	8	72	2.40	-0.16
	Q ₃	30	2	5	5	14	4	77	2.56	
8 th	Q ₁	30	22	5	-	3	-	136	4.53	+0.20
	Q ₃	30	18	8	-	4	-	130	4.33	
9 th	Q ₁	30	3	18	5	3	5	113	3.76	+0.26
	Q ₃	30	3	15	5	5	5	105	3.50	
10 th	Q ₁	30	22	7	3	-	-	147	4.90	+0.56
	Q ₃	30	17	9	3	-	-	130	4.33	
11 th	Q ₁	30	9	6	5	10	-	104	3.46	+0.26
	Q ₃	30	5	7	7	11	-	96	3.20	
12 th	Q ₁	30	4	14	4	6	-	104	3.46	+0.19
	Q ₃	30	6	8	4	12	-	98	3.26	

Source: Field survey (2015); '-' indicates no response

Note: Weighted total= \sum (Score \times numbers who check that score); Weighted mean= weighted total /number in group

Table 10. Table for the selected statements

Sl. no	Statements	DP values
1.	Exported brand is well brand	+0.56
2.	Availability of branded spice powder is important	+0.33
3.	I am willing to pay extra for it	+0.20
4.	Branded spice is costly compare then the quality	+0.20
5.	I have strong brand loyalty	+0.19
6.	Uses of branded spice powder is time saving and hassle free	+0.16

Table 11. Favorableness and unfavorableness of branded spice powder by individual score

Score	Participant	No. of spice users	Percentage
49~60	Highly favored of branded spice powder	49	40.82
48~36	Medium favored branded spice powder	52	43.34
35~12	Less favored branded spice powder	19	15.84
	Total	120	100

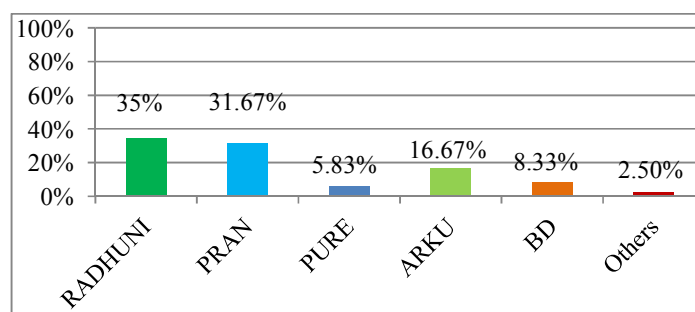


Figure 5. Consumer brand preferences based on advertisement

3.4.2 Attractiveness of spice packaging

Product packaging is an important consideration of different company to attract the consumer.

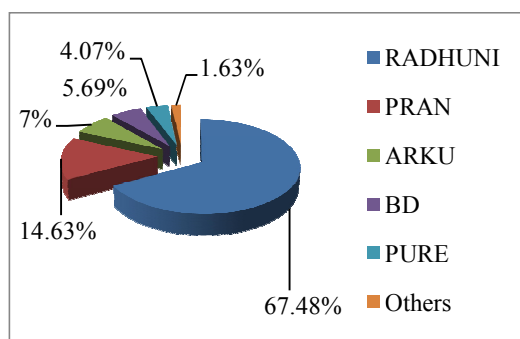


Figure 6. Attractiveness of spice packaging

The study found that about 68% consumers attracted with the RADHUNI spice packaging and most of the consumers thought that RADHUNI spice was more attractive rather than other spices.

3.4.3 Availability

Product availability refers company activities that make the product or service available to target customers. It has much important because for unavailable product consumer attraction may derive to other brand.

Table 12 indicates that as consumer opinion brand RADHUNI's spices were available everywhere in Mymensingh Sadar, brand PRAN also found everywhere but no more than like RADHUNI. ARKU has a medium position. PURE brand was more unavailable then all other brands.

Table 12. Availability

Brand Name	Availability		
	High (%)	Medium (%)	Low (%)
RADHUNI	100	-	-
PRAN	87.5	12.5	-
ARKU	-	44.17	39.17
BD	-	25	75
PURE	-	15	85

Source: Field Survey (2015); '-' means no response

3.4.4 Price

It is very important that the correct price is charged for a product. If the price is too high consumers will avoid the product as they will believe it to be too expensive yet if the product is priced too low they may believe that there is something wrong with the product for it to be so cheap. Also if the company charges too low a price, it may not cover its costs. The price of the different brand spice powder was collected from various retail store. Table 13 shows the price of different brand spice powder.

Table 13. Prices of different brand spice powder

Spice Powder (500 g)	Brand name				
	RADHUNI	PRAN	ARKU	PURE	BD
Chili	128 TK	120 TK	120 TK	120 TK	120 TK
Turmeric	65TK	62TK	60TK	55TK	55TK
Coriander	68TK	60TK	60TK	58TK	55TK

Source: Field Survey (2015)

Table 13 shows only those brands which were top most in market. There was more or less price variation but variation in consumers' preference of brands which match their expectation. The average price of four types of spice powder price was lower of ARKU, PURE and BD, price was higher in case of RADHUNI and PRAN. Although there had little price variation of all spice powder brands that influence the consumer preference towards RADHUNI and PRAN spice powder.

3.4.5 Quality standard

Without spice Bengali food is trestles. All brands claim that the raw material of spice comes from nature of Bangladesh and produced it without any chemical which are hazard for human life, taste and fresh is always remain. Today's most successful companies are raising expectations by delivering quality product. Such companies track their customers' expectations, perceived company performance, and customer satisfaction. Highly quality satisfied customers produce several benefits for the company. Quality satisfied customers are fewer prices sensitive, remain customers for a longer period, and talk favorably to others about the company and its products and services. All spice powder brands claims that through completely automatic process that ensures absolutely free from hand touch, so spice powder is 100% pure. It ensures natural coloring and taste of the curry, at the same time, is helpful for health and hygiene, level grade is high and easily meeting standard quality than others.

Table 14. Quality standard brand

Brand name	Quality standard		
	High (%)	Medium (%)	Low (%)
RADHUNI	76.67	23.33	-
PRAN	59.16	40.83	-
ARKU	-	68.33	31.66
BD	-	71.67	28.33
PURE	-	80.83	19.16

Source: Field Survey (2015); '-' means no response

In consumers daily life they used different types of spices to make their foods. As consumers are the main user, so they have a minimum idea which brand gives high taste and freshness. The customers are more careful about quality of spice and in that case they have own choice. The study found that RADHUNI and PRAN brand provided standard quality compared to other spice powder that were available in the market.

3.4.6 Having high product /brand image

A brand, on the other hand, is a name, symbol, design, or mark that enhances the value of a product beyond its functional value. Due to the rapid changes in the consumer life style, choice and increased competition experienced between firms for "Brand Management" has become more important. Good brand image comes from consumer perception, satisfaction towards the product, depends on consumer clear differentiation between products, consumer loyalty and that may lead to a greater market share.

Table 15. Brand image

Brand name	Brand image		
	High (%)	Medium (%)	Low (%)
RADHUNI	100	-	-
PRAN	80	16.66	-
ARKU	-	17.75	82.5
BD	-	15	85
PURE	-	16.66	83.33

Source: Field Survey (2015); '-' means no response

In the country aspect, leading spice powder companies want to build their brand image in front to the users. Not all companies have similar brand image. The study revealed that most popular brand image is RADHUNI and PRAN occupies the next in comparison to ARKU, BD and PURE.

3.4.7 Most wanted branded spice powder at a glance

The Figure 7 illustrates that most of the spice users' first preference was RADHUNI spice powder. Now it is the most common spice brand in the market. They also took many promotional activities to attract the people. The study revealed the consumers' view towards different brands of spice at different category, which she/he used or not.

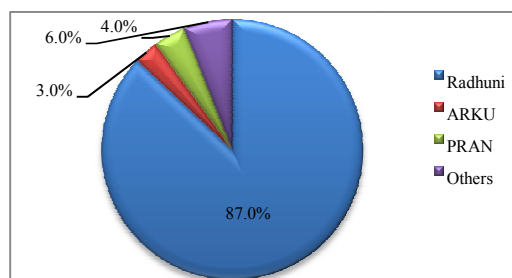


Figure 7. Most wanted brand of spice powder at a glance

4. CONCLUSION

Various spice brands such as RADHUNI, PRAN, BD, ARKU and PURE etc. are booming in Bangladesh. Among them RADHUNI spice powder drew more attention of housewives those who have a latent demand for convenience and time saving cooking. Today, consumers are becoming more dependent on powdered ready spice for its easy and convenient uses. Consumers' previous experiences, education, income level, marital status, quality, quantity and cost of branded spice powder are some of the factors which influence the consumers for purchasing branded spice powder. Exported branded spice powder is good to the consumers but its quality is low and cost is high. Based on the advertisement, attractiveness, price, quality of the product and brand image etc., consumers use their preferred branded spice powder. RADHUNI spice powder is the most preferred spice brand to the consumers.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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