# Consumer Purchasing Behaviour on Spicy Products in Matara District, Sri Lanka

N.G.K. Wickramasinghe<sup>1</sup>, M.B. Fathima Jemziya<sup>2</sup> and H. Weerathunga<sup>3</sup>

<sup>1,2</sup>Department of Biosystems Technology, South Eastern University of Sri Lanka <sup>3</sup>Matara Freelan (Pvt) Ltd, Matara, Sri Lanka

<sup>1</sup>nirodhawickram98@gmail.com, <sup>2</sup>jemziya@seu.ac.lk, <sup>3</sup>hasithaweerathunga76@gmail.com

#### Abstract

*Various factors influence the consumption of spicy* products, making it essential to identify their significance for satisfactory consumption levels. The purpose of this study is to identify the elements that influence customer purchase decisions in the Matara district, as well as their awareness of available spicy items and future demand trends. A semi-structured questionnaire was administered to a sample of 384 spicy product consumers, collecting data across eight dimensions: price, quality, brand name, convenience, availability, packaging, nutritional value, and recommendations. Descriptive and multiple regression analyses revealed that quality, nutritional value (16.15% for both), and price (15.89%) significantly influence purchasing decisions, while other factors were not statistically significant at 0.05. Preference hierarchy among consumers shows that chilli pieces are the most preferred, followed by curry powder and chilli powder. The study found high consumer awareness of Freelan's spicy products, with 95.05% of participants familiar with the brand. The most commonly used spices include chilli pieces, curry powder, and chilli powder, with awareness rates of 17.71%, 15.89%, and 15.63%, respectively. Consumers primarily learn about Freelan products through Freelan outlets and supermarkets, which capture 23.96% and 23.44% of awareness, respectively. This research provides valuable insights for marketers and producers of spicy products, highlighting the importance of competitive pricing strategies and brand development to meet consumer preferences and enhance market share in the Matara district.

Keywords: Consumer Awareness, Matara District, Purchasing Decisions, Regression Analysis, Spice Consumption, Spices

#### I. INTRODUCTION

Spices grown on our own soil and its group of food products. It has a very complex composition and varies effects. Spices as products of plant origin, and is the case with seasoning mixes. Spices are commonly used in the kitchen to give spice to food and as a remedy. Asians mostly utilise spices or spice mixtures to make food fragrant, spicy, savoury, and sweet. Spices vary in nutritional content and provide numerous health advantages. Some spices include cinnamon, garlic, cloves, cumin, basil, star anise, galangal, ginger, coriander, turmeric, cilantro, pepper, and ajowain Balasubramanian et al., 2015). The several ranges of spicy products are available in the market. For example: - Chilli powder, Chilli pieces, Curry powder, Pepper and Turmeric and etc. Curry is one of the most common spicy foods. Curry powder is a blend of spices (including turmeric, cumin, coriander, paprika, cardamom, and others) and herbs. It contains fat, protein, minerals (such as iron, calcium, and salt), carbs, fibre, and phytochemicals. Spices have a high antioxidant property. Due to this antioxidant property spices are play very special role in the medicine industry. Spices are essential as both medicine and nourishment. The medicinal value of spices is inhibiting the cancer, reduce fever, malaria, stomach offset, nausea, benefit for heart health, immune system and many more. The Ceylon spices are very popular. One of the reasons for it our spices have a taste. Ceylon spices were wellknown throughout the world as far back as the 15th century. The spicy industry has a diverse product range. It consists of cinnamon, pepper, cloves, cardamom, nutmeg, mace, and vanilla. In the Sri Lanka the crop production is consist of mix home garden agroforest system. Examples include pepper, cloves, nutmeg, and cardamom. However, 70% of cinnamon is farmed as a pure crop on tiny farms. Sri Lanka is a lower middle-income country with a tiny economy. Consumer purchases are more sophisticated. Consumer purchases are

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influenced by various factors. Some of they are sociological, physiological and psychological factors. People's previous experiences shape their views and attitudes towards specific types of goods, commodity brands, and retail places. According to that, the selection of a good becomes vital for consumers due to the huge variety of consumer goods available on the market (Frewer, and Trijp, 2007). Customers are required to obtain information on the many sources of supply for the items, the brand name, product advantages and disadvantages, the uses and value of their characteristic features, and the services provided. Consumers obtain information from a variety of sources, including markets, advertising media (television, radio, and newspapers), friends, recommendations from others, local retailers, store displays, and product labels. The research area is Matara district in southern province, Sri Lanka. So, this study focusses on what are the factors influence for purchase decision of spicy products in Matara district because there are no more studies done in Matara district related to this area. The study is helpful to the marketers as they can create various marketing programs such as customer promotion programs and that they believe it will be help of interest to the consumers. And also, it can also boost their marketing strategy. The current study tries to analyse the factors influencing consumers' purchase decisions regarding spicy products, focusing on consumer awareness, preferred types of spicy products, the media channels that raise awareness, and the key label considerations that impact purchasing choices.

## II. METHODOLOGY

## A. Location of this Study

This study was conducted in Matara district, accompanied by Matara Freelan (Pvt) Ltd, Sri Lanka from August, 2023.

# B. Description of the Research Area

This investigation was carried out in the Matara district, located in the southern region of Sri Lanka. This district is one of the 25 administrative divisions of Sri Lanka. It has a population of 873,000 people, according to the final result of the Census of Population and Housing (2021).

## C. Sampling Technique

The sample size consists of 384 consumers who use spiced products in the Matara district. The

sampling approach employed is cluster sampling. It signifies the segmentation of the population into subgroups or clusters based on different areas within the Matara district.

### D. Pilot Survey

A pilot survey looks at the validity of each question. In the pilot survey, 10% of the full-scale survey sample size was used. Therefore, 35 spiced consumers were used to conduct the pilot survey.

### E. Research Tool

In this research, a semi - structured questionnaire was used. The questionnaire consists five sections. The first section discusses the demographics of the consumers. The second section consist spicy usage also third section include about perceptions of spiced products and fourth section consist of intentions to purchase spiced products and last section consist about Freelan products.

### F. Data Collection and Analysis

Data were gathered using in-depth interviews and questionnaires. It included open - ended questions and close-ended questions. Quantitative research collects and analyses data using numbers, and statistics are expressed as numbers and graphs. This was used to test or confirm hypotheses and assumptions. Qualitative research focusses on words and their meanings. These help people understand concepts, thoughts, and experiences. Data analysis is the systematic application of statistical and logical approaches to describe and visualise data. Different tests were performed to analyse the different aspects of the study. Descriptive analysis was carried out for to analyse the demographic factors and sample profile. SPSS 25 (Statistical Package for the Social Sciences) was used to analyse the data. The variables' relationships were determined using multiple linear regression analysis. The present study used regression analysis to determine the association between consumers' purchasing decisions of spicy products (dependent) vs. price, quality, brand name. packaging. previous. availability. convenience, nutritional value, and recommendations from others (independents).

## III. RESULTS AND DISCUSSION

The Table 01 is shows to there are 384 individuals in total, with those aged 18-29 being the most represented at 120 individuals (31.3% of the sample). The next largest group is those aged 30-39, comprising 101 individuals (26.3%), followed

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by the 40-49 age group with 59 participants (15.4%). The under 18 category and the 50 and above category are the least represented with 58 (15.1%) and 46 (12.0%) individuals respectively. This table shows that females are the majority, which accounts for approximately 80.99 of the totals. Males represent a smaller fraction, 19.01% of the sample. Out of the 384 respondents, a significant majority, the 85.2%, reported being employed ("yes" to doing a job), while a minority 14.8% reported not being employed ("no" to doing a job). Table 01 shows the distribution of monthly household income among the participants of the study. The majority of respondents fall within the middle-income brackets. The 28.13% respondents earn between 15,000-24,999, and the largest group 29.69%, earn between 25,000-49,999. The next highest category is 50,000-99,999 with 23.70% respondents. The lowest income bracket, under 15,000, is represented by 11.20% respondents, and the highest income bracket, above 100,000, has the fewest number of individuals as a 7.29%. The Table 01 shows that the majority of participants, 334 individuals, identify as Sinhala, making up 87.0% of the sample. The Tamil ethnicity represents a smaller portion with 39 individuals, accounting for 10.2% of the respondents. Those who identify with ethnicities other than Sinhala or Tamil are the least represented, with individuals or 2.9% of the sample.

The Figure 01 is indicating that quality and nutritional value are the most valued factors, each

accounting for 16.15% of respondents. Price is the next most considered factor at 15.89%. The factor of packaging concerns 14.58%. Next factor of brand name 13.54%. Convenience is considered by 10.42% showing a moderate level of importance. Availability is important to 7.55%. Which is relatively less compared to other factors. The least considered factor, according to this chart, is recommendation, which influences only 5.73%. Figure 02 displays a pie chart detailing the common use of specific spices in the kitchen by respondents. The most commonly used spice is chili Pieces, with 17.71% reporting its use. Following closely Curry powder, by 15.89% then next Chilli powder 15.63%. Turmeric powder is used by 13.02%, and pepper by 11.96%. Lesserused spices include Roasted curry powder by 10.94%, Meat curry by 7.03% and Cumin by 4.43%. The least common is Cloves reported by only 0.78%.

The Figure 03 shows that the largest group of respondents, 23.96%, learned about Freelan products through Freelan Outlets. A close second is the 23.44% who became aware via Super markets. Retail shops is the third most common source of awareness, accounting for 19.53% of the responses. Learned about Freelan products via Advertisement 17.45%, Other recommendations, possibly including word of mouth or social media, informed 15.63% of the respondents about Freelan products.

Table 01: Demographic Features of the Respondents

Factors	Description	Frequency	Percent	Valid %	Cumulative%
Age	Under 18	58	15.1	15.1	15.1
	18-29	120	31.3	31.3	46.4
	30-39	101	26.3	26.3	72.7
	40-49	59	15.4	15.4	88.0
	50 above	46	12.0	12.0	100.0
Gender	Male	73	19.0	19.0	19.0
	Female	311	81.0	81.0	100.0
Occupation	Yes	327	85.2	85.2	85.2
_	No	57	14.8	14.8	100.0
Income	Under 15000	43	11.2	11.2	11.2
	15000-24999	108	28.1	28.1	39.3
	25000-49999	114	29.7	29.7	69.0
	50000-99999	91	23.7	23.7	92.7
	Above 100000	28	7.3	7.3	100.0
Ethnicity	Sinhala	334	87.0	87.0	87.0
-	Tamil	39	10.2	10.2	97.1
	Other	11	2.9	2.9	100.0

(Source; Survey, 2023)

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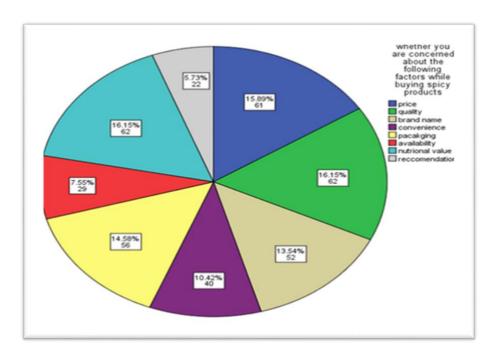


Figure 01: The Factors Affecting the Purchasing Spicy Products

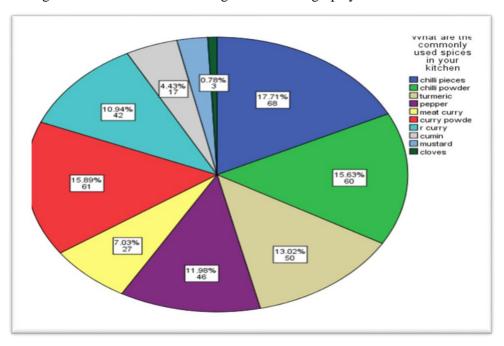


Figure 02: Type of Spicy Products and Consumption

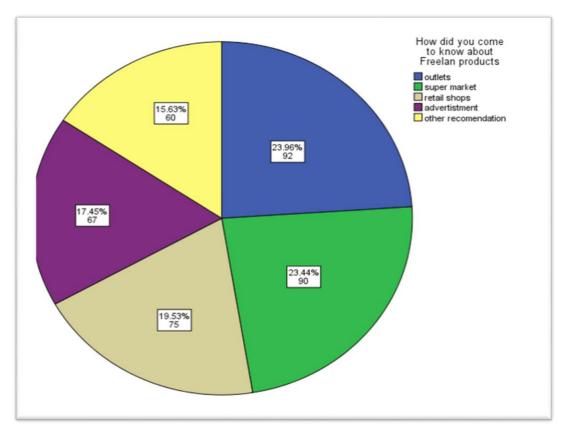


Figure 03: Media and Consumer Awareness

## a. Reliability

Table 02: Reliability Analysis

Reliability Statistics	
Cronbach's Alpha	N of Items
.827	27

The Table 02 displays reliability statistics for a scale used in a study. The Cronbach's Alpha value is .827, which indicates a high level of internal consistency among the 27 items in the scale. In research, a Cronbach's Alpha value greater than .7 is generally considered acceptable.

Table 03: Model summary

Model Summa	ıry			
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.804a	.647	.639	.503

a. Predictors: (Constant), recommendations for others, availability, packaging, nutrional value, brand name, convenience, price, quality

Table 03 shows a model summary for a multiple regression study. The R value, or correlation coefficient, is 0.804, suggesting a high positive correlation between the independent factors and the dependent variable. The R Square value of 0.647 indicates that the model's predictors can explain about 64.7% of the variance in the dependent variable. The Adjusted R Square score is somewhat lower, at 0.639, which takes into account the number of predictors in the model and

provides a more accurate estimate of the variance explained when applied to the larger population.

The Table 04 indicates that the regression model has a Sum of Squares of 173.134 with 8 degrees of freedom, resulting in a Mean Square (the average squared deviation from the mean) of 21.642. This model yields an F-statistic of 85.661, which is statistically significant (Sig. value of 0.000, which is less than 0.001, indicating a very strong level of

significance). The Residual (or Error) Sum of Squares is 94.490 with 374 degrees of freedom, giving a Mean Square of 0.253. This suggests that the model is highly significant in explaining the variance in consumer purchase decisions, with the predictors. The F-statistic and its associated p-value indicate that the model is a good fit for the data, and the predictors collectively have a statistically significant effect on consumer purchase decisions.

The regression equation is constructed using the unstandardized coefficients (B) from the regression table. Here's how you can write the regression equation based on the given table:

**Consumer Purchase** 

Decisions= $1.356+(0.111\times\text{price})+(0.123\times\text{quality})$ + $(0.272\times\text{brand name})$ -

(0.082×convenience)+(0.089×packaging)-

(0.048×availability)+(0.097×nutritional value)-(0.037×recommendations for others)

Each variable (price, quality, brand name, etc.) is multiplied by its respective unstandardized coefficient and then added to the constant term, which is 1.356 in this case. The result of this equation would give you the predicted value of the dependent variable, Consumer Purchase Decisions, based on the values of the independent variables

Table 04: ANOVA

			ANOVA <sup>a</sup>								
	Sum of Squares	df	Mean Square	F	Sig.						
Regression	173.134	8	21.642	85.661	.000 <sup>b</sup>						
Residual	94.490	374	.253								
	U	Residual 94.490	<b>Residual</b> 94.490 374	<b>Residual</b> 94.490 374 .253	<b>Residual</b> 94.490 374 .253						

a. Dependent Variable: Consumer Purchase Decisions

## IV. CONCLUSION

The statistical analysis carried out in this study provides valuable insights into consumer purchasing behaviour concerning Freelan spicy products. The demographic breakdown revealed that the sample was predominantly female, with a wide distribution across various age groups, mainly concentrated in the 18-39 age range. The majority of participants were employed, with a significant portion falling within the middleincome brackets, suggesting that the economic status of most respondents was relatively stable. Ethnically, the Sinhala community substantially overrepresented in the sample, which could influence the generalizability of the results to the broader population. As for the perception of Freelan products, most respondents considered the prices to be moderate to high, indicating a perception of reasonable value or premium pricing for these goods. A significant 95.05% of respondents are aware of Freelan products, with spices being the most recognized category. When it comes to consumption preferences, chilli pieces, curry powder and curry powder are the spices most commonly used in the kitchen. Freelan Outlets and Supermarkets emerge as the primary sources of consumer awareness, suggesting that physical stores play a crucial role in influencing purchasing decisions.

In terms of purchasing behaviour, consumers prioritize quality and Nutritional value equally when considering the labels of spicy products, with price, packaging and brand name also being an important factor. The reliability of the survey instrument was high, with a Cronbach's Alpha of .827, suggesting that the survey questions were consistent in measuring the intended constructs across 27 items. This level of reliability strengthens the confidence in the subsequent findings of the regression analysis. Hypothesis further supported these findings, testing confirming significant relationships between quality, name, packaging, price, brand recommendations from others, nutritional value, convenience, and availability with consumer purchase decisions. In conclusion, the study indicates that consumer purchase decisions for Freelan spicy products are primarily driven by brand name, product quality, and packaging. These factors are instrumental in shaping consumer behaviour, and any marketing strategies should focus on enhancing these product

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b. Predictors: (Constant), recommendations for others, availability, packaging, nutritional value, brand name, convenience, price, quality

attributes. Additionally, while price and nutritional value are also important, they are less impactful compared to the brand-related factors. The study suggests that to capitalize on consumer behaviour, Freelan should continue to invest in brand equity and ensure high product quality and appealing packaging while considering the pricing strategy and nutritional aspects of their products

#### REFERENCES

Balasubramanian, S., Roselin, P., Singh, K.K., Zachariah, J. & Saxena, S.N. 2015, 'Postharvest processing and benefits of black pepper, coriander, cinnamon, fenugreek, and turmeric spices', Critical Reviews in Food Science and Nutrition, vol. 56, no. 10, pp. 1585–1607.

Frewer, L., & van Trijp, H. (2007). Understanding Consumers of Food Products. A volume in Woodhead Publishing Series in Food Science, Technology and Nutrition. https://doi.org/10.1533/9781845692506