CONSUMER PURCHASE MOTIVES TOWARDS FLAVOURED MILK PRODUCTS - GENDER AND LOCATIONAL INFLUENCE PERSPECTIVE

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Abstract

This study focuses on the various antecedents influencing the satisfaction of customers consuming flavoured milk (FM) and also to find the differences in gender and location on the consumption of FM. In order to find the impact of the various antecedents individually on the consumers' feeling of overall satisfaction on the flavoured milk of their choice, linear regression was conducted. Also, to find the impact of all the antecedents together on the overall opinion, multiple linear regression was carried out. The outcome of the analysis shows that impact of quality, taste and quantity respectively are the primary factors that influence the overall satisfaction on FM apart from other factors. An independent sample t–test was done to determine the gender difference and the locational influence on the preference of FM. It was found that there is no difference in the preference and satisfaction among gender and location of consumers.

Keywords:

Flavoured Milk, Consumer Satisfaction, Gender Difference, Location Influence

1. INTRODUCTION

A pertinent fact is that, India is one of the largest milk producers in the world. During 2016-17, total milk production in India was 165.4 Million Tonnes [1]. Ken Research Report [2] observed that the Indian dairy food market will grow at a significant rate and may cross INR 250 billion by 2019. This is likely to happen due to the increasing number of dairy farmers and rising average yield of cows. Further, per capita income of Indians has increased by 7.4% to INR 93,293 in 2015-2016 as compared to the previous fiscal year. This has encouraged Indian consumers to increase their spending on value added food products and consumers have become more mindful of food products they consume [3]. Presently there is a shift towards healthy and ready-to-eat dairy products due to the increasing employed population, their hectic lifestyles and increasing health consciousness among them. Further, the sustained growth of the Indian economy has led to a rise in the spending power of consumers, changes in the dietary patterns and a large number of affluent consumers prefer value-added and premium dairy products [4].

The significant factors driving the growth in the value added products such as flavoured milk in the dairy sector are increasing urbanization, increasing number of working women, increased disposable income and rise in hotels, restaurants and cafes segment. During the last decade, India has seen dramatic shift towards consumption of value-added milk products such as cheese, yoghurt, ultra-heat treatment milk, flavoured milk, and whey. Most of the organized players in the dairy industry are expanding their product portfolios in the value-added segment to take advantage of the changing consumer food preferences. [3] [5].

In India, flavoured milk is the second most consumed liquid dairy product after liquid milk and has a continuously rising demand and this would spur the growth for dairy companies in India [3] [6]. Sales of flavoured milk products have increased with a number of product launches in the category. In 2015, 72 million litres of flavoured milk were sold, compared to 55 million litres in 2012 [7]. In 2015 the flavoured milk market was INR 2466 crores [8]. According to Mintel Global New Products Database (GNPD), during 2016 in India, flavoured milk products accounted for 43% of dairy drink introductions, which is a significant jump from just 20% in 2012 [9]. The Tetra Pak [6] study divulges that over the next three years, developing countries including China, India, Indonesia and Brazil will drive the global demand for flavoured milk. Globally, consumption of flavoured milk grew at more than double the rate of milk in 2015. Further, the flavoured milk market is expected to grow by 4.1% at a compounded annual growth rate (CAGR) between 2012 and 2015.

In India, due to the increasing awareness of the unhealthy side effects of carbonated soft drinks, there is a shift away from carbonated soft drinks to healthier alternatives like dairy products and juices which is fuelling on-the-go consumption in these categories [3]. This has made the Indian government to take keen interest in developing and enhancing the dairy products industry. Ready-to-drink (RTD) flavoured milk segment is becoming very popular among Indians due to the increasing consumer awareness and their shift towards natural, nutritious and healthy drink. Due to this shift, companies are experimenting with flavours that are right for the appropriate target audience, portion sizing and formulation, to make flavoured milk meet the huge range of health, nutritional and lifestyle needs [11]. Majority consumers of pre-packaged RTD flavoured milk agree that RTD dairy drinks are healthy and 48% perceive that dairy drinks provide them energy. Further, over half (54%) of the flavoured milk consumers see these as convenient choices, while close to half (46%) agree this beverage type is hygienic [9]. Consumer preference for healthier RTD alternatives is changing the composition of the food and beverages industry. This is making the milk-based beverages industry to carve a niche for itself [12].

2. REVIEW OF LITERATURE

The phrase 'consumer behaviour' denotes the entirety of consumers decision they exhibit in searching for, purchasing, consuming, evaluating and disposing of products and services that the consumers expect to satisfy their needs [13]. From the definition, it is evident that consumer behaviour relates to three key consumer processes such as acquisition, consumption and disposition of products and services. Thus the analysis of consumer behaviour is the study about how consumers as individuals or groups make purchase decisions to spend their resources on consumption of goods and services. Consumer

behaviour is about the study of what consumers buy, why they buy those products or services, when they buy them, where they purchase those products or services, how often they buy those and how often they use that product or service. Consumers' product choices and purchase decisions depend on the product attributes that match their socio-economic, physical and cultural needs [14]. Information about the consumption pattern of consumers from the various strata of the society and the differing dynamics of consumer behaviour are essential in understanding and development of new concepts in marketing. All these elements need to be geared towards identifying and satisfying the needs of the consumers [15].

Numerous studies have attempted to identify the factors influencing consumer behaviour. Lake [16] posited the classification of factors influencing consumer behaviour as internal factors originating from cognitive, affective and conative aspects such as attitudes, beliefs, motivation or emotions; and external or socio-cultural factors ensuing from the external environment of a consumer such as culture, social setup or household structure. Sandhusen [17] categorized the antecedents of consumer behaviour into interpersonal antecedents (cultural and social groups) and intrapersonal antecedents (drives, perceptions and attitudes). Factors influencing consumer behaviour are cultural factors (culture, sub-culture and social class), social factors (member groups, reference groups, family, role and status), personal factors (age, family life cycle, occupation, economic situation, lifestyle, personality and self-concept) and psychological factors (motivation, perception, learning, attitudes and beliefs) [18].

Jain [19] suggests a four-category classification of factors affecting consumer behaviour such as (a) economic determinants including factors such as income of an individual or family, their liquid assets, their credit available, their living standard, their economic conditions; (b) sociological determinants involving factors such as the influence of family, impact of reference groups, influence of opinion leaders, social class and culture; (c) psychological determinants covering factors like motivation of a consumer to make a purchase, consumers' perception, brand image, consumer learning, their attitudes and beliefs, consumer personality, lifestyle; and finally (d) personal determinants encompassing factors such as consumers' age, education, occupation, family life cycle, and social status.

Tanner and Raymond [20] divided the factors influencing consumer behaviour into the four groups namely (a) situational factors, like store's environment, social circumstances of the customers, time available with them, reason for purchase, present mood they are in; (b) personal factors, such as individual personality of the customers, their perception of self-concept, their demographics such as gender and age, customers' stage of family life cycle and their lifestyle; (c) psychological factors, like motivation to buy a product, perception about a product and brand, customer learning process and attitude; and (d) societal factors, such as culture the customer is in, their subcultures, their social class, the reference groups that influence them, their opinion leaders and their family. It can be seen from the above discussion that there is congruence among various authors about the factors affecting consumer behaviour.

In case of dairy products, consumers are more cognizant of the purchase decision they make due to their frequent consumption and its immediate impact on consumers' health. Consumers of dairy products are particularly quality conscious due to the perishable nature of the product and additionally look for health benefits, convenience and hedonic benefits. They also look for product attributes such as convenient packaging for fulfilling their purchase motives. Thus dairy companies introducing new products attempt to incorporate these benefits in their product attributes [14]. Some of the product attributes expected by consumers of dairy products are 'refreshing', 'flavour suit my personal taste', 'good beverage', 'satisfies hunger', and 'healthy' [21].

Gupta [22] studied the factors affecting consumer behaviour for food products in India. Kumar and Babu [23] found that the key factors predicting the purchase of dairy products among consumers are their perception of quality, dairy product availability, its pricing, and the variety available in the outlets, its brand image and advertisement. Tuan et al. [24] have established that the important factors predicting the purchase of powdered milk are the product's brand, its advertisement, the country of origin, age of customers and their income. Adam and Ali [25] in their study on impact of visual elements of packaging of packed milk on consumer buying behaviour have found that the key package factors determining purchase of packed milk are packaging cap, packaging design, convenience of handling the package, package colour (green, blue and red) and package size (SKU). There is a positive link between well-designed package and the consumers' perception about the product being high quality [26]. Rita et al. [27] studied the impact of package elements on consumer purchase decision. They have found that packaging material is the most important visual element appealing to customers for purchasing milk products.

Krešić et al. [28] in their study at Kvarner region (Croatia) on the motives, behaviour and purchasing habits of consumers which will affect the selection of dairy beverages found that education and gender were crucial factors. Regarding the factor gender, men purchased milk beverages on those brands on which they were highly loyal and women purchased dairy beverages with low fat content. Considering education as a factor, increased interest on purchase of dairy beverages were observed by the educated lot. Moreover, taste followed by health benefits was considered as the important motivating factors for purchase and consumption of dairy beverages. Alwis et al. [29] studied the influence and impact of product related factors such as appearance, relative taste, relative nutrition quality, nutrition value, taste, brand, packaging, convenience and availability on consumers' attitude towards the consumption of fresh milk in Srilanka.

Success of marketing strategies and programs among consumers depends on the organisational ability to clearly understand consumer's needs and expectations. Thus it is important to properly identify the stimuli influencing consumers while purchasing any product to satisfy their needs. Due to increasing popularity of flavoured milk products, studying the consumer behaviour and investigating the impact of various antecedents affecting consumers when purchasing the same is essential.

3. METHODOLOGY

To determine the influence of various factors influencing the overall opinion of consumers on flavoured milk (consumer

motive), data was collected from flavoured milk consumers. Data was collected from 382 consumers of flavoured milk in Madurai, Theni, and Virudhunagar districts of Tamil Nadu, India through a survey conducted with a structured questionnaire during July-September 2018. Since the research was confined to the above-mentioned districts, it does not necessarily show a pattern applicable to the entire country. This research study was descriptive and the data used for this research was both primary and secondary in nature. The various items relevant to the research were identified and included in the questionnaire and were compiled from the previous research done on flavoured milk and on consumer satisfaction through review of literature. The antecedents considered for measuring the consumer satisfaction on flavoured milk are listed below in Table1 along with the coding used for each antecedent which is followed in further analysis. The questionnaire contained five-point Likert scale questions whose responses ranged from Highly Satisfied to Highly Dissatisfied. The consumer differences in their opinion between the genders and between their different locations were determined. To this end, relevant demographic questions were included in questionnaire.

Table.1. Antecedents for overall satisfaction on flavoured milk and their Coding

Factor	Code
I prefer a flavoured milk for its **Brand** name	Brand
I like the **Packaging** of flavoured milk and thus buy it	Package
I prefer flavoured milk for a **Reasonable price**	Price
I prefer flavoured milk for the **Quality** of the product	Quality
I prefer flavoured milk because I get it in **appropriate Quantity**	Quantity
I prefer flavoured milk because it **refreshes** me	Refresh
I prefer flavoured milk because I think it is **healthy**	Healthy
I buy flavoured milk for its **Variety of Flavours**.	Flavours
I like the **Taste** of flavoured milk	Taste
I prefer flavoured milk as it is always **Available near me**	Availability
I prefer flavoured milk due to its **Attractive Advertisement**	Ads
Friends Influence me to purchase specific brand of flavoured milk	Friends

To describe the responses and to gain insights into the general purchase behaviour of flavoured milk consumers, chi square test for cross tabulation was done. In order to find the impact of the various antecedents individually on the consumers' feeling of overall satisfaction on the flavoured milk of their choice, linear regression was conducted. Also, to find the impact of all the antecedents together on the overall opinion, multiple linear regression was carried out. In the regression model, the coefficients of correlation (R) and determination (R^2) provide relative measures of the degree of linear association between variables; the error mean square is an estimate of the absolute amount of uncertainty left [30]. The benefits of using regression analysis are that (a) it indicates the significant relationships between dependent variable and independent variable and (b) it

indicates the strength of impact of multiple independent variables on a dependent variable.

Further, independent sample t-test was done to determine whether there is statistical differences between the means of two unrelated groups of respondents on the same continuous, dependent variable namely, the gender difference on the preference of flavoured milk and the locational influence on the preference of flavoured milk. All the above analyses were carried out using IBM® SPSS Statistics®.

4. DESCRIPTION OF DATA

Data collected from the consumers of flavoured milk in the districts mentioned above and their demographics are presented in Table.2. The information collected narrates the factors such as the gender of the consumers, their location namely urban or suburban, frequency of purchasing flavoured milk, consumers' reason for buying flavoured milk and the places were the research study was carried out. It can be seen from Table.2 that the sample contains almost the same proportion of male and female. This was consciously maintained in order to find if there is any significant difference between the genders in their opinion on flavoured milk. It can also be seen from the Table.2 that most of the consumers buy flavoured milk at least once in a month and almost 25% of the consumers but it weekly and fortnightly. Thus it can be observed that the consumers included in the sample consume flavoured milk regularly even it means it is monthly consumption. While observing the responses on the reason for purchasing flavoured milk, a large chunk of respondents (52%) buy flavoured milk to get instant energy and another chunk do so for refreshment. A few of them buy flavoured milk for pleasure and fun.

Table.2. Description of Respondents Buying Flavoured Milk

Factors	Particulars	Respondents
Gender	Male	190
	Female	192
Location	Urban	244
	Suburban	138
Gender Distribution in Different Locations	Urban Male	130
	Suburban Male	60
	Urban Female	114
	Suburban Female	78
Consumption frequency	Monthly	177
	Fortnight	99
	Weekly	100
	Rarely	6
Reason for purchase	Energy	198
	Pleasure	58
	Fun	6
	Refresh	120
Place	Madurai	164
	Theni	144
	Virudhunagar	74

The factors affecting the overall opinion of consumers on flavoured milk is compiled and presented in Table.3(a) and Table.3(b). Here, the agreement of respondents to a particular factor expressed on the Likert scale is considered to be of high opinion on that particular factor, while the disagreement to a particular factor is considered to be of low opinion. The neutral opinion is expressed as medium perception on flavoured milk.

Table.3(a). Opinion of consumer on various factors affecting their satisfaction on flavoured milk

Factors Metrics		Brand			Package		
		High	Medium	Low	High	Medium	Low
Female	Count	142	42	8	106	84	2
	% within Gender	74.0%	21.9%	4.2%	55.2%	43.8%	1.0%
	% within Factor	50.5%	51.2%	42.1%	52.7%	47.5%	50.0%
	% of Total	37.2%	11.0%	2.1%	27.7%	22.0%	0.5%
Male	Count	139	40	11	95	93	2
	% within Gender	73.2%	21.1%	5.8%	50.0%	48.9%	1.1%
	% within Factor	49.5%	48.8%	57.9%	47.3%	52.5%	50.0%
	% of Total	36.4%	10.5%	2.9%	24.9%	24.3%	0.5%
Total	Count	281	82	19	201	177	4
	% within Gender	73.6%	21.5%	5.0%	52.6%	46.3%	1.0%

Table.3(b). Opinion of consumer on various factors affecting their satisfaction on flavoured milk

Factors Metrics		Price			Quality		
		High	Medium	Low	High	Medium	Low
Female	Count	141	43	8	152	32	8
	% within Gender	73.4%	22.4%	4.2%	79.2%	16.7%	4.2%
	% within Factor	50.5%	47.3%	66.7%	51.5%	42.7%	66.7%
	% of Total	36.9%	11.3%	2.1%	39.8%	8.4%	2.1%
Male	Count	138	48	4	143	43	4
	% within Gender	72.6%	25.3%	2.1%	75.3%	22.6%	2.1%
	% within Factor	49.5%	52.7%	33.3%	48.5%	57.3%	33.3%
	% of Total	36.1%	12.6%	1.0%	37.4%	11.3%	1.0%
Total	Count	279	91	12	295	75	12
	% within Gender	73.0%	23.8%	3.1%	77.2%	19.6%	3.1%

Table.3(c). Opinion of consumer on various factors affecting their satisfaction on flavoured milk

Factors Metrics		Quantity			Refresh		
		High	Medium	Low	High	Medium	Low
Female	Count	163	16	13	137	35	20
	% within Gender	84.9%	8.3%	6.8%	71.4%	18.2%	10.4%
	% within Factor	49.7%	44.4%	72.2%	50.0%	46.7%	60.6%
	% of Total	42.7%	4.2%	3.4%	35.9%	9.2%	5.2%
Male	Count	165	20	5	137	40	13
	% within Gender	86.8%	10.5%	2.6%	72.1%	21.1%	6.8%
	% within Factor	50.3%	55.6%	27.8%	50.0%	53.3%	39.4%
	% of Total	43.2%	5.2%	1.3%	35.9%	10.5%	3.4%
Total	Count	328	36	18	274	75	33
	% within Gender	85.9%	9.4%	4.7%	71.7%	19.6%	8.6%

Table.3(d). Opinion of consumer on various factors affecting their satisfaction on flavoured milk (cont…)

Factors Metrics		Healthy			Flavours		
		High	Medium	Low	High	Medium	Low
Female	Count	123	39	30	131	41	20
	% within Gender	64.1%	20.3%	15.6%	68.2%	21.4%	10.4%
	% within Factor	51.0%	46.4%	52.6%	51.2%	56.9%	37.0%
	% of Total	32.2%	10.2%	7.9%	34.3%	10.7%	5.2%
Male	Count	118	45	27	125	31	34
	% within Gender	62.1%	23.7%	14.2%	65.8%	16.3%	17.9%
	% within Factor	49.0%	53.6%	47.4%	48.8%	43.1%	63.0%
	% of Total	30.9%	11.8%	7.1%	32.7%	8.1%	8.9%
Total	Count	241	84	57	256	72	54
	% within Gender	63.1%	22.0%	14.9%	67.0%	18.8%	14.1%

Table.3(e). Opinion of consumer on various factors affecting their satisfaction on flavoured milk (cont…)

Factors Metrics		Taste		Availability		
		High	Medium	High	Medium	Low
Female	Count	146	46	122	41	29
	% within Gender	76.0%	24.0%	63.5%	21.4%	15.1%
	% within Factor	50.0%	51.1%	54.0%	45.1%	44.6%
	% of Total	38.2%	12.0%	31.9%	10.7%	7.6%
Male	Count	146	44	104	50	36
	% within Gender	76.8%	23.2%	54.7%	26.3%	18.9%
	% within Factor	50.0%	48.9%	46.0%	54.9%	55.4%

	% of Total	38.2%	11.5%	27.2%	13.1%	9.4%
Total	Count	292	90	226	91	65
	% within Gender	76.4%	23.6%	59.2%	23.8%	17.0%

Table.3(f). Opinion of consumer on various factors affecting their satisfaction on flavoured milk (cont…)

Factors Metrics		Ads			Friends		
		High	Medium	Low	High	Medium	Low
Female	Count	66	40	86	92	67	33
	% within Gender	34.4%	20.8%	44.8%	47.9%	34.9%	17.2%
	% within Factor	61.1%	41.2%	48.6%	53.8%	44.4%	55.0%
	% of Total	17.3%	10.5%	22.5%	24.1%	17.5%	8.6%
Male	Count	42	57	91	79	84	27
	% within Gender	22.1%	30.0%	47.9%	41.6%	44.2%	14.2%
	% within Factor	38.9%	58.8%	51.4%	46.2%	55.6%	45.0%
	% of Total	11.0%	14.9%	23.8%	20.7%	22.0%	7.1%
Total	Count	108	97	177	171	151	60
	% within Gender	28.3%	25.4%	46.3%	44.8%	39.5%	15.7%

It can be seen from Table.3(a)-Table.3(e) that Quantity is given the highest priority while purchasing flavoured milk by both the genders. For the factor Quality, females have given more priority than the males but both the genders put together it has second highest priority. The same phenomenon is seen with the factors taste, brand and price where these factors have third, fourth and fifth importance respectively.

Further to determine if there is any significant difference on the preference of flavoured milk between the different gender of respondents and between the different location of the respondents, a chi-square test for the cross tabulation was done and the results are tabulated in Table.4 and Table.5. The cross tabulation presented in Table.4 shows the overall satisfaction on the flavoured milk by the consumers. It can be seen from the metrics that both male (64.2%) and female (71.35%) consumers show high level of satisfaction when both urban and semi urban locations are considered together. It is evident from Table.4, very few consumers have given an adverse opinion on their satisfaction on flavoured milk they have consumed and all the opinion are above medium to high. Further, it can be seen that 75.64% of sub urban female consumers have high satisfaction and 68.42% of urban females have high satisfaction. Similarly 60% of sub urban males and 66.15% of urban males show high satisfaction. Also, in case of females, a medium level of satisfaction is expressed by 21.8% and 31.58% in the suburban and urban areas respectively, and in case of male consumers, the same opinion is expressed by 36.67% and 32.31% in the suburban and urban areas respectively.

Table.4. Cross tabulation between Location and Gender with overall satisfaction

Gender Location		Female	Male	Total
Overall satisfaction High	Sub Urban	59	36	95
	Urban	78	86	164
	Total	137	122	259
Overall satisfaction Medium	Sub Urban	17	22	39
	Urban	36	42	78
	Total	53	64	117
Overall satisfaction Low	Sub Urban	2	2	4
	Urban	0	2	2
	Total	2	4	6
Total	Sub Urban	78	60	138
	Urban	114	130	244
	Total	192	190	382

Results in Table.4 show that there could be a difference in the overall satisfaction between gender and location of consumers. A null hypothesis that there is no significant difference in the overall satisfaction between gender and location of consumers is considered. To test if there is actually a significant difference on the overall satisfaction between different consumers, Chi Square test (χ^2) test is applied. The results of the χ^2 test and the associated statistics are presented in Table.5.

Table.5. Chi-Square Test for Overall Satisfaction

Overall Satisfaction		Value	Degrees of freedom	Asymp. Sig. (2-sided)
High	Pearson Chi-Square	5.107[a]	1	.024
	Likelihood Ratio	5.145	1	.023
	N of Valid Cases	259	-	-
Medium	Pearson Chi-Square	.069[b]	1	.793
	Likelihood Ratio	.069	1	.793
	N of Valid Cases	117	-	-
Low	Pearson Chi-Square	1.500[c]	1	.221
	Likelihood Ratio	2.093	1	.148
	N of Valid Cases	6	-	-
Total	Pearson Chi-Square	3.387[d]	1	.066
	Likelihood Ratio	3.394	1	.065
	N of Valid Cases	382	-	-

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 44.75.

b. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 17.67.

c. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 2.67.

d. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 68.64.

Observing the results from the Chi Square test exhibited in Table.5, the asymptotic significance for high satisfaction is less than 0.05 ($p<0.05$). Thus the null hypothesis is rejected, the alternative is accepted and it is concluded that in fact there is a significant difference in the consumers' opinion among those with

high satisfaction. Further, in case of medium and low satisfaction, the asymptotic significance is greater than 0.05 ($p>0.05$). Hence the null hypothesis that there is no significant difference in the overall satisfaction between consumers is accepted and is concluded as such. This phenomenon is further investigated in the following discussion using independent samples t-test.

5. ANALYSIS

The analysis is separated into two parts. In the first part, the impact of various factors such as Brand, Package, Price, Quality etc., mentioned in Table.1, on the respondents' opinion on their overall satisfaction on flavoured milk is analysed. In the second part, the differences on the flavoured milk preference based on the gender and the location of the respondents are considered.

5.1 IMPACT OF VARIOUS FACTORS ON THE PREFERENCE OF FLAVOURED MILK

The impact of various factors such as Brand, Package, Price, Quality etc., mentioned in Table.1, on the respondents' opinion on their overall satisfaction on flavoured milk is analysed. To find the impact of the various antecedents individually on the overall satisfaction of the respondents, simple linear regressions were done separately with the individual factors and opinion on overall satisfaction and the outcomes were consolidated in a the Table.6 and Table.6(a). For this analysis all the respondents were considered together without separating the genders. The regression equations for each factor will be in the form of $y = \alpha + \beta x$, where y is the overall satisfaction of the respondents on flavoured milk and β is the regression coefficient of the respective antecedent and x is the antecedent of satisfaction on flavoured milk.

Table.6. Results of Linear Regressions between Overall satisfaction on flavoured milk (y) and factors affecting satisfaction (cont….)

Factors	R	Adj R^2	Change Statistics		
			R^2	F	Sig.
Brand	.297	.086	.088	36.854	.000
Package	.219	.046	.048	19.230	.000
Price	.259	.064	.067	27.246	.000
Quality	.388	.067	.151	67.486	.000
Quantity	.317	.098	.100	42.316	.000
Refresh	.273	.072	.074	30.496	.000
Healthy	.419	.173	.176	80.923	.000
Flavours	.240	.055	.058	23.230	.000
Taste	.373	.137	.139	61.586	.000
Availability	.208	.041	.043	17.239	.000
Ads	.294	.084	.086	35.877	.000
Friends	.179	.029	.032	12.569	.000

Table.6(a). Results of Linear Regressions between overall satisfaction on flavoured milk (y) and factors affecting satisfaction (cont….)

Factors	Constant	Coefficient
Brand	2.828	.259
Package	3.174	.178
Price	2.950	.224
Quality	2.441	.343
Quantity	2.570	.327
Refresh	2.888	.260
Healthy	2.804	.282
Flavours	3.152	.191
Taste	2.418	.337
Availability	3.369	.143
Ads	3.359	.183
Friends	3.417	.125

The results of the regression indicate that all the antecedents of satisfaction have a significant impact on the overall satisfaction of all the respondents at $p \leq 0.01$. The Pearson correlation coefficient (R) of perception of flavoured milk as healthy alone is above 0.4 while all other the factors have a lesser correlation coefficient. Even though the correlation coefficients are quite low they are considered to be having a significant value. The R^2 values are also very low. This indicates that these factors are not so important for explaining the overall satisfaction on flavoured milk of the respondents. The regression equations of the individual regressions are presented below.

$$y = 2.828 + 0.259 \times \text{Brand} \qquad (1)$$

$$y = 3.174 + 0.178 \times \text{Package} \qquad (2)$$

$$y = 2.950 + 0.224 \times \text{Price} \qquad (3)$$

$$y = 2.441 + 0.343 \times \text{Quality} \qquad (4)$$

$$y = 2.570 + 0.327 \times \text{Quantity} \qquad (5)$$

$$y = 2.888 + 0.260 \times \text{Refresh} \qquad (6)$$

$$y = 2.804 + 0.282 \times \text{Healthy} \qquad (7)$$

$$y = 3.152 + 0.191 \times \text{Flavours} \qquad (8)$$

$$y = 2.418 + 0.337 \times \text{Taste} \qquad (9)$$

$$y = 3.369 + 0.143 \times \text{Availability} \qquad (10)$$

$$y = 3.359 + 0.183 \times \text{Ads} \qquad (11)$$

$$y = 3.417 + 0.125 \times \text{Friends influence} \qquad (12)$$

Observing the regression equations it can be seen that the factors Quality, Taste and Quantity have the highest impact on the overall satisfaction on flavoured milk of the respondents, while friends influence has the least impact. Albeit this, all the factors have a positive impact overall satisfaction. This means that, when the influence of these factors increases, the overall satisfaction also increases.

To analyse the effect of all the predictors together on the outcome variable, multiple regression was used, where all the independent variables were entered together in SPSS. The model summary of the multiple regression is presented in Table.7 and the associated coefficients of the various factors is presented in Table.8. The significant F change in the model summary table indicates that the regression model is valid and the results thereof can be interpreted.

Table.7. Model summary of Multiple Linear Regression

Model	R	Adj R²	Std. Error of the Estimate	Change Statistics				
				R²	F	df₁	df₂	Sig.
1	.525ᵃ	.253	.643	.276	11.731	12	369	.000

The Pearson correlation value in the Table.7 shows that there is a positive and relatively strong relationship between the variables taken for analysis. The value is also quite significant. The standard error of estimate is a measure of the accuracy of predictions and is the standard deviation of the error term. A smaller value of a standard error of estimate is better since it means that the values of variables plotted are closer to the regression line. If the standard error is zero, then there is no variation corresponding to the computed line and the correlation will be perfect.

Table.8. Coefficients of Multiple linear regression

Model	Coefficients	t	Sig.
(Constant)	1.555	4.871	.000
Brand	-.079	-.802	.423
Package	.053	.548	.584
Price	-.166	-1.665	.097
Quality	.267	2.082	.038
Quantity	.029	.319	.750
Refreshing	.030	.392	.695
Healthy	.042	.466	.641
Flavour	.211	3.784	.000
Taste	.322	3.041	.003
Availability	.008	.115	.908
Ads	.199	1.951	.052
Friends	-.218	-1.803	.072

$$y = 1.555 + 0.267\,Quality + 0.211\,Flavour + 0.322\,Taste \quad (13)$$

Observing the multiple regression Eq.(13), when all the factors are considered together, it can be seen that only quality, flavour and taste have significant impact (at $p \leq 0.05$) on the overall satisfaction of flavoured milk. This is in contrast to the factors considered individually. When the factors were considered individually, quality, taste and quantity had a high and positive impact.

4.1 DIFFERENCES IN GENDER AND LOCATION ON THE PREFERENCE OF FLAVOURED MILK

To find if there is a difference on the preference of flavoured milk between the male and female consumers and the also to find out if there is a difference based on the location of the respondents, independent sample t-test was conducted separately for the two and the results are tabulated in Table.9 and Table.10.

The group statistics of the independent sample t-test for the difference in gender and location of respondents is presented in Table.9. The average overall satisfaction on flavoured milk for both male and female respondents is found to be near four in a five point scale which indicates higher satisfaction. Also the difference in the means between male and female respondents is found to be small (diff = 0.09). Similarly the overall satisfaction on flavoured milk based on the location of the respondents are found to be nearer to four on the five point scale which indicates higher satisfaction, and here too the difference in the means is small (diff = 0.06). Further in both the cases (gender and location), the standard deviations is lesser. Standard Error Mean is the estimated standard deviation of the sample mean taken from a population. Smaller standard error indicates that the sample is more representative of the overall population. Observing the standard error values in Table.9, it can be seen that the values are quite small which indicates a better representation of the population by the sample.

Table.9. Group Statistics for Independent Samples t-test for gender and location of respondents and their overall satisfaction

Statistic Factors		N	Mean	Std. Deviation	Std. Error Mean
Gender	Male	190	3.82	.765	.055
	Female	192	3.91	.722	.052
Location	Urban	244	3.84	.715	.046
	Sub Urb	138	3.90	.795	.068

The metrics of the independent sample t-test is presented in Table.10(a), Table.10(b) and Table.10(c). As before, the gender and location of the respondents are compared separately and the results are compiled in one table. Before the interpretation of the results from the t-test, the significance for the Levene's test is first checked and upon which a decision is made weather to proceed further with the interpretation of the results of the t-test. Levene's test [31] examines the null hypothesis that the error variance of the dependent variable is equal across groups, which should be accepted since the analysis assumes that the variances are equal across groups or samples.

From the Levene's test of equality of error variances (Table.10) for both gender and location of respondents, it can be seen that the underlying assumption of homogeneity of variances for the independent sample t-test has been met as evidenced by $F(380) = 3.167$, $p = 0.076$, that is $p(0.076) > \alpha(0.01)$ and $F(380) = 0.978$, $p(0.323) > \alpha(0.01)$. Since the Levene's test is statistically significant we can proceed with the interpretation of the t-test.

Table.10(a). Independent Samples t-test for overall satisfaction among gender and location

Tests factor		Levene's Test for Equality of Variances	
		F	Sig.
Overall Satisfaction - Gender	Equal variances assumed	3.167	.076
	Equal variances not assumed		
Overall Satisfaction - Location	Equal variances assumed	.978	.323
	Equal variances not assumed		

Table.10(b). Independent Samples t-test for overall satisfaction among gender and location

Tests Factor		t-test for Equality of Means			
		t	df	Sig. (2-tailed)	Mean Difference
Overall Satisfaction - Gender	Equal variances assumed	-1.257	380	.209	-.096
	Equal variances not assumed	-1.257	378.232	.209	-.096
Overall Satisfaction - Location	Equal variances assumed	-.685	380	.494	-.054
	Equal variances not assumed	-.665	260.189	.507	-.054

Table.10(c). Independent Samples t-test for overall satisfaction among gender and location

Tests Factor		t-test for Equality of Means		
		Std. Error Difference	95% Confidence Interval of the Difference	
			Lower	Upper
Overall Satisfaction - Gender	Equal variances assumed	.076	-.245	.054
	Equal variances not assumed	.076	-.245	.054
Overall Satisfaction - Location	Equal variances assumed	.079	-.210	.102
	Equal variances not assumed	.082	-.215	.107

The null hypothesis for the *t*-test is that there is no significant difference in the means between the two groups being compared; in this case, it is between the genders (male and female) and between the locations (urban and sub-urban) of the respondents. The significance value as seen in Table.10 for gender and location is greater than the alpha ($t = -1.257$; $p = 0.209$ at $\alpha \leq 0.01$, and $t = -0.685$; $p = 0.494$ at $\alpha \leq 0.01$) indicating that there is no significant

difference in the means between the groups being compared. The mean difference values also show that there is very little difference in the overall satisfaction between the genders (0.096) and between locations of the respondents (0.054). Also the variation in difference in means at 95% confidence interval shows that the mean could vary between 0.245 and 0.054 in case of gender indicating that the respondents could have both higher and lower satisfaction at different instances and that is why it can be said that there is no significant difference in satisfaction. The same is the case with the location of respondents where the variation in difference of mean is between 0.210 and 0.102.

5. RESULTS AND DISCUSSIONS

This research was carried out to address the requirement of Flavoured Milk (FM) marketers to design location and gender specific marketing strategies. In order to study the above factors, equal representation of the genders was ensured. The study demonstrates that, FM consumption is no longer considered as a novelty. This is apparent from the fact that almost 98% of the respondents consume FM at least once a month. Also, people have accepted FM as a part of their regular diet and have shed the inhibitions they had in their mind regarding packaged health drinks. This is also evident from the fact that majority of the respondents consume FM to gain energy and to refresh themselves, apart from upholding that the FM they consume is of good quality and of appropriate quantity.

The regression results show that all the antecedents considered in influencing the overall satisfaction on FM play a significant role which illustrates that, consumers exhibit higher levels of satisfaction towards the FM they consume. However the degree of influence varies from factor to factor. Here again, a similar trend can be noticed as it was seen in the cross tabulation already (Table.3(a)-Table.3(f)). Further it is also observed from the regression that, the major factors influencing overall consumers' satisfaction on FM is its quality, taste and quantity. It is also inferred that, consumer perceived FM to be healthy. It can be safely concluded here that consumers consider their FM drink not only healthy, but also a value for money product. This explains why consumers prefer FM.

There is usual feeling that packaged drinks are unhealthy [10] [32]. But the present study shows that as far as FM is considered, consumers feel that it is quite healthy to consume and the stigma attached with other packaged drinking is not attached with FM. Similarly consumers also feel that they are satisfied with the quantity of flavoured milk they get for the price which they pay. Does the value for money proposition is reinforced here. The results of the multiple regression also exhibit the same phenomena as observed earlier.

An independent sample t-test was done to find the difference in gender on patronizing flavoured milk and it was found that there is no difference in the preference and satisfaction among male and female respondents included in the study. Observing Table.9, it can be seen that the mean score for overall satisfaction on FM is nearing 4 on a 5 point scale, which means that the male and female respondents residing in urban and sub urban locations are highly satisfied on the FM they consume. To compare if there is a significant difference on satisfaction between the gender and location of respondents the null hypothesis considered was that

there is no significant difference in the means between the two groups being compared. The results show that the null hypothesis is accepted.

6. CONCLUSIONS AND SUGGESTIONS

Not many studies have been done in India focusing on the consumption of FM. This study focuses on the various antecedents influencing the satisfaction of customers consuming FM such as brand name, packaging, reasonable price of the product, quality of the product, getting adequate quantity, refreshing, health perception, variety of flavours, taste, availability, attractive advertisement and friends influence. The outcome of the analysis shows that impact of quality, taste and quantity respectively are the primary factors that influence the overall satisfaction on FM apart from other factors. The difference in gender on patronizing flavoured milk was studied and it was found that there is no difference in the preference and satisfaction among male and female respondents included in the study. This means that the FM marketers need not position their product distinctly for men and women consumers. Also all other marketing factors such as packaging, brand name, price, quality, quantity, variety of flavours, taste, availability etc., can be common for both the genders. Thus a gender neutral approach could be sufficient to reach both the genders, which could save a lot of promotional monies, as the products need not be positioned separately.

Also it is seen that the respondents from different locations such as urban and sub urban exhibit same preference as there are no significant location specific differences between their satisfactions. This means that companies could follow the same distribution and promotional strategies for the different locations. Both the findings regarding difference in gender and location is significant because this knowledge will reduce a lot of monies spent on differentiating and promoting the product for the gender and location.

This study focused on gender and locational differences on the satisfaction of FM. Further research could include a deeper probing on individualized impact of the various antecedents on the gender and location separately.

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