An Empirical Study On Factors Influencing Consumer Behavior Towards Dairy Products

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Abstract - **Indian dairy cultivating has been portrayed by co-agents including a large number of people. Indian extraordinary items have been comprehensively in the classifications of dairy and poultry items, vegetables and organic products, flavors, oats, oil seeds, consumable oils and certain prepared items. The Indian government's first monetary study expressed that India represents 17 percent of world generation of drain. The normal year-on-year development rate of drain at 4.04 percent versus the world normal of 2.2 percent demonstrates continued development in accessibility of drain and drain items for the developing populace. Keeping this in view the study has been directed to factors influencing the selection of store for purchasing of dairy products. The investigation has been conveyed by controlling an organized poll to gather the information from the respondents and anslysed it by utilizing SPSS 20.0. The examination uncovered that the main considerations impacting the buy choice are accessibility of items, close to home, credit office and the respondents are minimum made a big deal about the inside condition of the store.**

Keywords - *Dairy Products, Consumer Behavior, Store choice, utilization design.*

I. INTRODUCTION

Growing wellbeing cognizance and mindfulness for solid nourishment have expanded purchaser interest for sustenance's of predominant wellbeing quality. Infection aversion and wellbeing improvement have been connected with sustenance segments by medicinal and nourishing analysts. Today, showcase manifolds of significant worth included sustenance's have extended as a result of enthusiasm for customers' mindfulness and sound nourishment and nourishment system in accomplishing medical advantages from sustenance's past their fundamental nutrition. In the present situation, buyers are bound to have nourishments that are intended for thriving as their wholesome mediation in their wellbeing and infection prevention. The dairy items are wealthy in the strength of dynamic fixings and can be viewed as potential novel sustenance's for wellbeing advancement in a couple of years. Be that as it may, the dimension of wellbeing guarantee with ideal tactile and textural properties of such nourishments still can't seem to be researched. As per the 2011 evaluation, India is principally a horticultural economy nation with a populace of 1.2220,200,000 (1.22 billion). Most of the general population living in rustic zones rely upon farming and creature cultivation and associated exercises for the job. Dairy area contributes altogether in creating work to the landless workers of rustic India. In 2012-13, 132.43 million tons of drain was created in India, as indicated by the Budget Pre-Economic Survey, turning into the world's best drain maker. As indicated by the National Diary Development Board (NDDB), drain generation in the year 2011-12 was 127.9 million tons. As per ASSOCHAM (Associated Chamber of Commerce and Industry of India) drain generation in India is probably going to achieve 190 million tons before the finish of 2015 and the yearly turnover will be Rs.5 lakh crores. With the Planning Commission focusing on 4.5 to 5 percent development for creature farming in the twelfth Plan, the World Bank has financed Rs. 1584 crores for National Dairy plan and the division is relied upon to observe a sound development in the years to come around Rs.17,300 crores from the National Dairy Plan by National Dairy Development Board (NDDB) for the following 15 years. India has the credit of being the biggest maker and in addition the greatest buyer of drain on the planet. It additionally has the world's biggest dairy group (contained cows and wild oxen). In 2010-11, animals produced yield was worth INR 2,075 billion (at 2004-05 costs) which contained 4 percent of the GDP and 26 percent of the horticultural GDP. Being the world's biggest maker and

buyer of dairy items, India speaks to one of most rewarding dairy markets. The International Market Analysis Research and Consulting Group (IMARC), one of the world's driving exploration and warning firms, finds that the offers of dairy items in India will about twofold its size from INR 2.6 Trillion (US$ 60 Billion) in 2011 to around INR 5.1 Trillion (US$ 115 Billion) in 2016. According to the most recent Statistics of National Dairy Development Board (NDDB), the dairy agreeable system in the nation incorporates 177 drain associations covering 346 locale and more than 1, 33,000 town level social orders with an aggregate enrollment of about 14 million agriculturists. India's generation of drain has exceptionally expanded after some time with critical specialized, strategy and institutional help. This has prompted huge changes in the Indian dairy area. Indeed, the Indian dairy part has experienced noteworthy basic changes after some time and some fascinating examples are unfurling along the drain esteem chain. With the expansion in pay and urbanization, the interest for drain will increment further. The household request of drain could be 209 million tons in 2026-2027, up from 127.3 million tons in 2011-2012. Because of the current development rate of drain generation amid the most recent decade, India will act naturally adequate in drain by 2026-2027.

II. LITERATURE REVIEW

Venkateswaran et al. (2011) expressed that buyers favor a specific brand dependent on what benefits that brand can offer to them. They saw that in framing the propensity of client to favor a specific brand, the promoting factors like publicizing, nature of the item, mark name and brand picture plays a basic role. Yayar (2012) demonstrated that better taught family unit heads, higher salary and bigger families, and families with youngsters under seven years old devoured more stuffed drain than others. A comparative outcome was found for unloaded drain utilization, aside from a negative impact of training, working spouse and pay. Nidhyananth (2013) inferred that Aavin drain has a decent notoriety among the clients so it tends to be broadened providing item towards the client interest for and accessibility in business sectors must kept up for the purchaser to remain in the equivalent Aavin brand. They inferred that Aavin is the market pioneer in milk industry. Ananda and Babu (2014) saw that Product Quality, Availability and Pricing have been viewed as significant reasons (top 3 reasons) for inclination of dairy brands. Further a Considerable measure of Brand Switching conduct is seen among the respondents if there should arise an occurrence of non-accessibility of their most loved brands in their stores and furthermore a Retailer job in impacting brand decision is Considerable

at this dimension. Elangovan and Gomatheeswaran (2015) concentrated on shopper behavior towards different brands of milk and milk items. Purchasers' ways of life are impacted by number of elements. Like culture, subculture, values, statistic factors, societal position, reference gatherings, family unit and furthermore the inward cosmetics of the customer, which are feelings, identity thought processes of purchasing, observation and learning. The investigation was looking at the distinctions in purchaser's conduct with socio and financial attributes towards brand selection. Kalpana and Sowmiya (2016) gives the means to enhance the deals in future and achieve the most noteworthy development level in the market in testing region. Omfed milk in odisha has a good reputation among the customers so it can be extended supplying product towards the customer demand for and availability in markets must maintained for the consumer to stay in the same omfed brand. Hassan and Shayan (2017) demonstrated that utilitarian qualities, social esteem, enthusiastic esteem and epistemic esteem positively affect picking dairy items and restrictive esteem didn't have a positive effect. It was inferred that the principle persuasive elements for customers' decision conduct toward dairy items included shoppers encounter positive feeling (e.g. happiness, delight, solace and feeling loose) and practical esteem wellbeing. This examination likewise underlined the best possible valuing of dairy items by makers and dealers.

III. OBJECTIVES OF THE STUDY

- To analyze the socio-economic profile and consumption pattern of consumers.

- To study the association between packaging, pricing, store selection with Income and occupation of consumers.

Hypothesis of the study

- There is no significant association between respondents' opinion on the packaging of products with occupation and income of the respondent.

- There is no significant association between respondents' opinion on pricing strategies being adopted for dairy product with occupation and income of the respondent.

- There is no significant association between factors for selecting a store and occupation, income and name of the dairy of the respondent.

IV. METHODOLOGY

In pursuance of the above mentioned objectives and the hypotheses, the following methodology was adopted for conducting the study. The study is an empirical one based on both primary and secondary data.

Data Collection

The primary data for the study is collected by using a questionnaire for consumers. The aspects on which the data are sought to be collected from the sample respondents include socio-economic status of the respondents, preferences and satisfaction about attributes, price and promotion for the dairy products in Bhubaneswar. The secondary data has been drawn from various publications and also from personal discussions with the officials in milk dairies, Dairy India etc.

Sampling

Customers in Visakhapatnam city has been taken into consideration for the present study. The sample is drawn from the consumers which are spread over in Bhubaneswa city. A total 500 sample respondents have been chosen by using convenience random sampling technique. The sample comprises of 50 respondents from each area.

Statistical Tools Used

The primary data have been interpreted with the help of simple statistical tools such as percentages, Chi-square test of significance and F-test are administered.

V. ANALYSIS

Table-1: Socio-Economic profile

Total no. of respondents = 500				
Age group	Below 20	20-29	30-39	40-49	50 above
	8%	15.8%	46.6%	19%	8%
Education	Below SSC	SSC and equivalent	Under graduate	graduate	PG and Above
	4%	11.8%	22.8%	36.2%	25.2%
Occupation	Private organization	Government organization	Business	others	Student
	38.4%	16.6%	19.4%	17.8%	7.8%
Income	Below 10,000	10,001-20,000	20,001-30,000	30,001-40,000	40,000-above
	21.8%	24%	27.2%	15%	12%
Marital status	Married	Unmarried	widow	Divorced	
	76.6%	13.6%	6.6%	3.2%	
Family Member	1-3	4-6	7-9		
	23.4%	67%	10%		
Family Status	Nuclear	Joint			
	65.6%	34.4%			
Gender	male	Female			
	67.2%	32.8%			

It is observed that out of the 500 total sample respondents most of the respondents (46.6 percent)are between 30-39 years of age group, Majority67.2 percent of the respondents are male, majority of the respondents (i.e., 76.6 percent) are married, highest group of the respondents are graduates (36.2 percent), followed by25.2 per cent of the respondents are postgraduates, majority 38.4 percent of the respondents are working in the private organizations, majority 65.6 percent of the respondents are relating to nuclear family, majority 27.2 percent of the respondents' income is in between Rs.20,001-30,000 using milk products.

Table-2: Consumption Pattern

Total no. of respondents = 500					
Purchase product	Dairy	Milk vendor	Both sources			
	66.2%	3.6%	30.2%			
Awareness through	advertisements	Word of mouth	Milk booth agent	Other sources		
	53%	32.4%	8.5%	6.2%		
Purchase from	Retail shop	Milk booths	Super market	Other sources		
	54.4%	28.2%	10.4%	7.1%		
Milk using	omfed	pragati	Milk moo	others		
	57.1%	33%	6%	3.9%		
Reason for brand selection	Quality	Regular supply	Dealer relationship	Easy availability	price	packaging
	28%	24.3%	16%	15.8%	10.6%	5.4%
Experience with Brand	1 year	2 year	3 year	4 year and above		
	16.2%	15.4%	18.7%	50%		
Milk consume regularly	200 ml	500 ml	1litre	1litre Above		
	14%%	42.7%	31.3%	12%		
Opinion	Average	Good	Satisfactory	Excellent	poor	
	30.5%	18.5%	28.8%	6.4	15.8	

Out of the total 500 sample respondents major group of the respondents (i.e., 66.2 per cent) are purchasing dairy products, Nearly 53 percent of the respondents are getting awareness through advertisements, more than half of the respondents (i.e., 54.4 percent) are purchasing the dairy products from retail shops, majority of the respondents (i.e., 57.1 percent) are using Omfed dairy products, 28 percent of the respondents opined quality is the main factor for brand selection, about 50 per cent of the respondents are having four years and above experience, 42.7 percent of the respondents purchased 500 ml regularly, 30.5 percent of the respondents opinion is average for milk products.

Table-3:F-test results of respondents' opinion on the packaging of products.

		student	Govt. emplo	Pvt. emplo	business	others	F-value	P-value	Sig.
Occupation	mean	3.03	2.65	2.79	2.64	2.45	2.272	0.061	Insig.
	S.D.	1.181	1.110	1.140	1.241	0.945			
income		<10,000	10,001-20,000	20,001-30,000	30,001-40,000	Above 40,000	958.554	0.000*	Sig.
	mean	1.25	2.03	2.98	3.85	4.42			
	S.D.	0.434	0.276	0.263	0.488	0.498			

*Significant @ 1% level

The table 3 portrays the F-test results of respondents' opinion on the packaging of products and income of the respondents. According to the above table, the f-value for occupation of the respondent is 2.272. It is found insignificant, because the p-value (0.061) is greater than 0.05. According to the above table, the f-value for income of the respondent is 958.554. It is found significant at 1% level of

significance, because the p-value (0.000) is less than 0.01.

It can be concluded from the above table, income of the respondent is found significant at 1% level of significance. Thus, the null hypothesis is rejected. Therefore, there is a significant difference between the respondents' opinion on the packaging products and income of the respondent. And the remaining variable i.e., occupation of the respondent is found insignificant. Hence, the null hypothesis is accepted. Therefore, there is no significant difference between respondents' opinion on the packaging of products and occupation of the respondent.

Table - 4: F-test results of respondents' opinion on pricing strategies being adopted for dairy product

Variables	F-value	P-Value	Significance
Occupation	1.774	0.133	Insignificant
Income	730.704	0.000*	Significant

* Significant @ 1% level

The table 4 depicts the F-test results of respondents' opinion on the pricing strategies being adopted for dairy product and Income of the respondents. Regarding occupation of the respondent the f-value for occupation of the respondent is 1.774. It is found insignificant, because the p-value (0.133) is greater than 0.05. Regarding income of the respondent f-value for income of the respondent is 730.704. It is found significant at 1% level of significance, because the p-value (0.000) is less than 0.01.It is concluded from the above table, income of the respondent is found significant at 1% level of significance. Thus, the null hypothesis is rejected. Therefore there is a significant difference between the respondents' opinion on pricing strategies being adopted for dairy products and income of the respondent. And the remaining variable occupation of the respondent is found insignificant. Hence, the null hypothesis is accepted. Therefore, there is no significant difference between respondents' opinion on pricing strategies being adopted for dairy product and occupation of the respondents.

Table -5: F-test results of factors for selecting a store and occupation of the respondent

Variable	F-value	P-value	Significance
Availability of quality products	0.638	0.636	Insignificant
Reliable in dealings	0.989	0.413	Insignificant
Reasonable/competitive prices	2.208	0.067	Insignificant
Wide range of products /brands available	1.017	0.398	Insignificant
Nearer to residence	0.450	0.773	Insignificant
Credit facility	0.792	0.531	Insignificant
Good/Friendly salesmanship	1.097	0.357	Insignificant
Good environment inside the store	2.877	0.022#	significant
Store belongs to known people	0.778	0.540	Insignificant
Availability of door delivery facility	0.404	0.806	Insignificant

\# Significant @ 5% level

Table 5 describes the F-test results of factors for selecting a store and occupation of the respondent. Regarding availability of the quality products f-value for availability of the quality products is 0.638 (p-value 0.636). For reliability in dealings the f-value for reliability in dealings is 0.989 (p-value 0.413). Regarding reasonable/competitive prices the f-value for reasonable/ competitive prices is 2.208 (p-value 0.067). Regarding wide range of products /brands available the f-value for Wide range of products /brands available is 1.017 (p-value 0.398). Regarding nearer to residence, the f-value for near to residence is 0.450 (p-value 0.773). Regarding credit facility, the f-value for credit facility is 0.792 (p-value 0.531). Regarding good/Friendly salesmanship, the f-value for good/friendly salesmanship is 1.097(p-value 0.357). Regarding good environment inside the store, the f-value for good environment inside the store is 2.877 (p-value 0.022). Regarding store belongs to known people the f-value for store belongs to known people is 0.778. It is found insignificant, because the p-value (0.540) is greater than 0.05. Regarding availability of door delivery facility, the f-value for availability of door delivery facility is 0.404. It is found insignificant, because the p-value (0.806) is greater than 0.05. It is concluded from the above table, there is a significant difference between good environment inside the store and occupation of the respondents because it is significant at 5% level of significance. Hence, the null hypothesis is rejected. And the remaining variables such as availability of quality products, reliable in dealings, reasonable/competitive prices, wide range of products /brands available, near to residence, credit facility, good/friendly salesmanship, store belongs to known

people and availability of door delivery facility are found insignificant. Hence, the null hypotheses are accepted. Therefore, there is no significant difference between the above variables and respondents' occupation.

Table-6 :F-test results of factors for selecting a store and income of the respondent

Variable	F-value	P-value	Significance
Availability of quality products	76.264	0.000*	significant
Reliable in dealings	68.698	0.000*	significant
Reasonable/comp etitive prices	66.289	0.000*	significant
Wide range of products /brands available	54.757	0.000*	significant
Nearer to residence	3.246	0.012#	significant
Credit facility	58.425	0.000*	significant
Good/ Friendly salesmanship	58.035	0.000*	significant
Good environment inside the store	6.599	0.000*	significant
Store belongs to known people	97.785	0.000*	significant
Availability of door delivery facility	93.184	0.806*	significant

* Significant @ 1% level, # Significant @ 5% level

Table 6 shows the F-test results of factors for selecting a store and income of the respondent. Regarding availability of quality products the f-value for availability of quality products is 76.264 (p-value 0.000). Regarding reliability in dealings, the f-value for reliability in dealings is 68.698(p-value 0.000). Regarding reasonable/competitive prices, f-value for Reasonable/competitive prices is 66.289 (p-value 0.000). Regarding wide range of products/brands available, the f-value for wide range of products/brands available is 54.757 (p-value 0.000). Regarding near to residence the f-value for near to residence is 3.264 (p-value0.012). Regarding credit facility, the f-value for credit facility is 58.425 (p-value 0.000). Regarding good/friendly salesmanship, the f-value for Good/Friendly salesmanship is 58.035 (p-value 0.000). Regarding good environment inside the store, f-value for good environment inside the store is 6.599 (p-value 0.000). Regarding store belongs to known people, the f-value for store belongs to known people is 97.785 (p-value 0.000). Regarding availability of door delivery

facility, the f-value for availability of door delivery facility is 93.184(p-value 0.000). It infers from the above table, availability of quality products, reliable in dealings, reasonable/competitive prices, wide range of products/brands available, credit facility, good/friendly salesmanship, good environment inside the store, store belongs to known people and availability of door delivery facility are found significant at 1% level of significance. Hence, the null hypotheses are rejected. And the remaining variable i.e., near to residence is found significant at 5% level of significance. Hence, the hypothesis is rejected. Therefore, there is a significant difference between the above variables and respondent's income.

Table-7:F-test results of factors for selecting a store and name of the dairy

Variable	F-value	P-value	Significance
Availability of quality products	21.939	0.000*	significant
Reliable in dealings	22.868	0.000*	significant
Reasonable/compe titive prices	21.015	0.000*	significant
Wide range of products /brands available	28.255	0.000*	significant
Nearer to residence	2.989	0.031#	significant
Credit facility	23.267	0.000*	significant
Good/Friendly salesmanship	16.693	0.000*	significant
Good environment inside the store	2.815	0.039#	significant
Store belongs to known people	46.132	0.000*	significant
Availability of door delivery facility	54.635	0.000*	significant

* Significant @ 1% level, # Significant @ 5% level

Table- 7 describes the F-test results of factors for selecting a store and name of the dairy. Regarding availability of quality products, the f-value for availability of quality products is 21.939 (p-value 0.000). Regarding reliability in dealings, the f-value for reliability in dealings is 22.868 (p-value 0.000). Regarding reasonable/competitive prices, the f-value for reasonable/competitive prices is 21.015 (p-value 0.000). Regarding wide range of products/brands available, the f-value for wide range of products/brands available is 28.255 (p-value 0.000). Regarding near to residence, the f-value for near to residence is 2.989 (p-value 0.031). Regarding credit facility, the f-value for credit facility is

23.267 (p-value 0.000). Regarding good/friendly salesmanship, the f-value for good/friendly salesmanship is 16.693 (p-value 0.000). Regarding good environment inside the store the f-value for good environment inside the store is 2.815 (p-value 0.039). Regarding store belongs to known people the f-value for store belongs to known people is 46.132 (p-value 0.000). Regarding availability of door delivery the f-value for availability of door delivery facility is 54.635 (p-value 0.000). It infers from the above table, availability of quality products, reliable in dealings, reasonable/competitive prices, wide range of products/brands available, credit facility, good/friendly salesmanship, store belongs to known people and availability of door delivery facility are found significant at 1% level of significance. The remaining variables i.e., near to residence and good environment inside the store are found significant at 5% level of significance. Hence, the null hypotheses are rejected. Therefore, there is a significant difference between the above variables and name of the diary.

Table-8:Chi-square results of respondents' opinion on factors for selecting store to purchase dairy products and name of the dairy

Factors	Chi-square value	P-value	significance
Availability of quality products	91.432	0.000*	significant
Reliable in dealings	86.521	0.000*	significant
Reasonable/competitive prices	118.322	0.000*	significant
Wide range of products /brands available	95.932	0.000*	significant
Nearer to residence	19.064	0.087	Insignificant
Credit facility	77.427	0.000*	significant
Good/Friendly salesmanship	92.086	0.000*	significant
Good environment inside the store	24.507	0.017#	significant
Store belongs to known people	141.430	0.000*	significant
Availability of door delivery facility	170.022	0.806	significant

* Significant @ 1% level, # Significant @ 5% level

Table- 8 reveals the chi-square results of respondents' opinion on factors for selecting store to purchase dairy products and name of the dairy. The calculated chi-square value for availability of quality products is 91.432 and corresponding P-value is 0.000, reliable in dealings is 86.521 and corresponding P-value is 0.000, reasonable/competitive prices is 18.322 and corresponding P-value is 0.000, wide range of products/brands available is 95.932 and corresponding P-value is 0.000, credit facility is 77.427 and corresponding P-value is 0.000, good/friendly salesmanship is 92.086 and corresponding P-value is 0.000, store belongs to known people is 141.430 and corresponding P-value is 0.000 and availability of door delivery facility is 170.022 and corresponding P-value is 0.000 are found significant at 1% level of significance and good environment inside the store is 24.507 and corresponding P-value is 0.017 is found significant at 5% level of significance, Thus, the null hypotheses are rejected and the above variables are dependent on each other. Hence, there is a significant relation between respondents' opinion on factors for selecting a store to purchase dairy products and name of the dairy. The remaining variable i.e., near to residence is 19.064 and corresponding P-value is 0.087 is found insignificant, thus, the null hypothesis is accepted and the above variables are not dependent on each other. Hence, there is no significant relation between respondents' opinion on factors for selecting store to purchase dairy products and name of the dairy.

VI. CONCLUSION

Regarding factors consider for judge the quality of products, now a days according to consumers taste is the main factor to judge the quality of the products, followed by thickness, content, freshness and other factors. Many consumers normally read the instructions given on the topic. Quality of the product plays a vital role in switching the brand. They even not change their present brand and they are very loyal to the brand. Consumers feel dairy products prices are reasonable and if their preferred products price is increased they are ready to buy the products with increased priced. so dairy companies have to be more conscious while deciding factors like pricing, packaging, quality of product and distribution channel for having more customer satisfaction.

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