



CONSUMERS' ATTITUDE TOWARDS NEERA: AN INNOVATIVE HEALTH DRINK FROM COCONUT

Deepa Chandran* Dr. Philo Francis**

*Research Scholar, Research & PG Department of Commerce, St. Joseph's College, Irinjalakuda, Thrissur, Kerala.

**Research Guide, Research & PG Department of Commerce, St. Joseph's College, Irinjalakuda, Thrissur, Kerala.

Abstract

The Indian food and beverage industry has witnessed drastic changes in recent years. These are in response to changing market dynamics and consumer trends. Neera, an unfermented sweet sap from coconut flowers, is turning out to be the new organic health drink trend in Kerala. The present study attempts to determine consumers' attitude towards Neera and the criteria chose by consumers to prefer Neera based on demographic factors. Systematic random sampling was employed to collect data from 60 respondents. The study analyzed the consumption habit, intrinsic and extrinsic cues influencing the purchase decision. Also the study identified the various personal information sources and non personal/ promotional cues affecting the purchase decision of Neera. For testing hypothesis, Chi square, Friedman test and paired t test were employed. Conclusions were drawn based on the findings of the study. The study will be useful to the Neera manufacturers for framing appropriate marketing strategies based on consumers' attitude.

Keywords: Attitude, Extrinsic Cues, Intrinsic Cues, Neera, Personal Cues, Non-Personal / Promotional Cues & Purchase Decision.

Introduction

There is an ever increasing demand for nutritional and energy supplements in the modern world. Health drinks provide nutrition and energy for both adolescents and adults. There are many brands and choices of energy drinks available today in the market. These carbonated or non-carbonated drinks generally contain large amounts of sugar or sugar substitutes, artificial sweeteners, caffeine and a number of stimulants. Energy drinks are endorsed by and marketed for their stimulant effects and unsubstantiated claims offering an array of advantages including enhanced physical and mental attention, performance and weight loss.

The Indian food and beverage industry has witnessed drastic changes in recent years. These are in response to changing market dynamics and consumer trends. While all segments of the beverage market are evolving, the growth seems to be directed more towards healthy, light and low-calorie drinks. The desire for health and concern for ill-health has driven consumers towards these drinks. Healthier product alternatives, including drinks specifically designed to provide energy, nutrition and health to the human body, are among becoming top priority. In support of these contemporary developments, Neera, the non-alcoholic and nutritious drink from the immature inflorescence of coconut can be promoted due to its potential for value addition, employment generation and better returns to the coconut farmers.

Neera or Sweet Toddy is a sap extracted from spathe of Coconut trees. Neera is a natural and non alcoholic beverage, high in nutritional value and an instant thirst quencher. It is sweet, oyster white and translucent obtained by slicing the spathes of the Coconut trees. The vascular sap collected from immature unopened coconut inflorescence is popularly known as "Neera" in fresh form. It is a sugar containing juice, a delicious health drink and a rich source of sugars, minerals and vitamins. It is sweet and oyster white in colour and translucent. It is tapped from the coconut inflorescence filtered, pasteurized, and bio preservatives added to preserve the product. .

Neera is rich in carbohydrates, mostly sucrose (table sugar) and has a nearly neutral pH. It has a specific gravity raging from 1.058 to 1.077. Neera can be promoted as a soft drink. If Neera could be filtered properly using a simple scientific method and if some preservatives added immediately after extraction, Neera could be bottled or canned and stored for 45 days. Chilled Neera is a nutritious drink. It contains a number of minerals and salts; acids like ascorbic acid, nicotinic acid and riboflavin, and also proteins and vitamin C. It has less calorific value apart from being sweet and delicious. It has been medically proved that Neera is better than mineral water. Once the shelf life of Neera is increased properly stored and packed, the drink could be transported to longer distances. Neera could become a nutritious drink offering a healthy alternative to aerated beverages.

Research Problem

Due to the trend of health-consciousness of consumers, currently the Indian noncarbonated beverage segment has become one of the fastest growing businesses. Since, India's per capita consumption of beverages is very low compared to other



countries, there is huge untapped potential. During this context, the State Governments in major coconut growing states in India in association with started to produce and market a delicious health drink from coconut, called Neera. The Kerala State Government is taking measures to promote 'Neera' extracted from coconut palms as an energy drink with medicinal value as well as sweet beverage. As the nutritious non alcoholic drink, Neera has enormous market potential. Therefore the present study tries to determine the Kerala Consumers' consumption pattern and preference towards Neera health drink and the criteria used by consumers to choose Neera drink.

Research Objectives

1. To analyse the consumption pattern of Neera health drink.
2. To examine the relationship between socio demographic variables and the frequency of purchase of Neera.
3. To assess the role of extrinsic cues and intrinsic cues while purchasing Neera drink.
4. To measure the importance of personal references and non-personal/ promotional cues used in the purchase decision of Neera drink.

Hypothesis of the Study

- H0₁: There is no association between demographic variables and frequency of purchase.
H0₂: There is no significant difference among mean rank with regard to the intrinsic cues of preference while purchasing Neera.
H0₃: There is no significant difference among mean rank with regard to the extrinsic cues of preference while purchasing Neera.
H0₄: There is significant difference among mean rank with regard to the personal reference cues of preference while purchasing Neera.
H0₅: There is significant difference among mean rank with regard to the non-personal/ promotional cues of preference while purchasing Neera.
H0₆: There is no significant difference in mean score of extrinsic cues and intrinsic cues.
H0₇: There is no significant difference in mean score of personal cues and promotional cues.

Research Methodology

To complete this study primary as well as secondary source of information is used. A structured questionnaire was used to collect data from 60 respondents from Thrissur district. The sampling technique employed for the research purpose was convenience sampling. For the calculation and analysis of data statistical tools and techniques like Percentage, Mean, Standard deviation, Chi square test Friedman test and Paired t test were used with the help of SPSS.19.

Data Analysis & Interpretations

Table 1: Descriptive Statistics of Demographic Factors

		Frequency	Percent
Gender	Male	45	75.0
	Female	15	25.0
	Total	60	100.0
Age	Below 20 yrs	3	5.0
	21-40 yrs	41	68.3
	41-60 yrs	16	26.7
	Total	60	100.0
Education	Plus Two	4	6.7
	UG	15	25.0
	PG	23	38.3
	Professional	18	30.0
	Total	60	100.0
Occupation	Student	4	6.7
	Self-Employed	4	6.7
	Govt. Service	14	23.3
	Pvt. Service	35	58.3
	Business	3	5.0
	Total	60	100.0
Monthly Income	10000-20000	8	13.3



	20000-30000	27	45.0
	30000-40000	16	26.7
	< 40000	9	15.0
	Total	60	100.0

Source: Primary Data

The above table shows descriptive statistics of all the demographic variables considered for the study. As per the gender of the respondents, 75% belong to male and only 25% belong to female. As per the age wise distribution, 68.3% of the respondents are of 21-40 years of age and 26.7 % of them are of 41- 60 years of age. According to the table, majority of the respondents ie 38.3% are post graduates and 30% are professionals. It is followed by 25% of graduates and 6.7% of having plus two. Among the respondents, majority i. e. 58.3% belongs to private service sector, followed by 23.3% in the government service and the rest in other sectors. Monthly income wise classification shows that 45% belongs to 20000-30000 income group, 26.7% belongs to 30000- 40000 income group, 15% belongs to above 40000 group followed by 13.3% in 10000-20000 group.

Table 2: Descriptive statistics of Consumption Pattern Variables

		Frequency	Percent
Perception regarding Neera	Non alcoholic drink	7	11.7
	Just Flavoured /taste drink	15	25.0
	Nutritious energy drink	29	48.3
	alternative to toddy	9	15.0
	Total	60	100.0
Frequency of purchase	1-3 times	29	48.3
	4-6 times	19	31.7
	10 or more times	12	20.0
	Total	60	100.0
Source of purchase	Retail Outlets	23	38.3
	Special stores	18	30.0
	Exhibition stalls	14	23.3
	Super markets	1	1.7
	Others	4	6.7
	Total	60	100.0

Source: Primary Data

The table 2 shows the descriptive statistics of variables relating to consumption pattern of sample respondents. With regard to the perception of consumers regarding Neera, 48.3% respondents considered Neera as nutritious energy drink and 25% considered it as flavoured taste drink. As it is a new product, 48.3% consumers purchased it for 1 to 3 times, followed by 31.7% for 4-6 times and only 20% for 10 or more times. Source of purchase of Neera is concentrated to 3 sources. Among these, 38.3% opted retail outlets for purchasing Neera while 30% opted special stores and 23.3% opted exhibition stalls for the purchase.

H0: There is no association between demographic variables and frequency of purchase

Table 3: Test Statistics

	Chi square Value	df	p value
Gender	21.847	2	<0.001**
Age	19.614	4	<0.001**
Qualification	49.585	6	<0.001**
Occupation	32.141	8	<0.001**
Monthly income	37.124	6	<0.001**

** denotes significant at 1% level

Source: Primary Data

From the table, it is clear that since p value is less than 0.01 with regard to all demographic factors, the null hypothesis is rejected at 1% significance level. Hence it can be concluded that the frequency of purchase of Neera associated with the demographic factors of the respondents.



H0₂: There is no significant difference among mean rank with regard to the intrinsic cues of preference while purchasing Neera.

Table 4: Test statistics of Friedman Test

Intrinsic Cues	Mean Rank	Std. Deviation	Chi square value	p value
Quality	1.62	.804	166.107	<0.001**
Nutritional content	2.45	1.032		
Deliciousness/Taste	2.18	.833		
Colour & Flavor	4.02	.701		
Quantity	4.73	.482		

** denotes significant at 1% level

Source: Primary Data

Since p value is less than 0.01, the null hypothesis is rejected at 1% level of significance. Hence we conclude that there is significant difference among the mean rank of intrinsic cues considered for purchasing Neera drink. Based on mean rank, Quality is the most important intrinsic factor with lowest mean rank of 1.62 followed by Deliciousness/Taste with mean rank of 2.18 and Nutritional content with mean rank of 2.45. As Neera is a new Drink in the market, the consumers have inadequate awareness regarding its contents and health benefits. Therefore, they were giving more importance to the quality and nutritional contents of Neera before purchasing it.

H0₃: There is no significant difference among mean rank with regard to the extrinsic cues of preference while purchasing Neera.

Table 5: Test statistics of Friedman Test

Extrinsic Cues	Mean Rank	Std. Deviation	Chi square value	p value
Price	3.75	1.271	115.653	<0.001**
Brand Name	1.35	0.481		
Packing	3.72	0.904		
Shelf presence/availability	2.38	1.059		
Seal of approval	3.80	1.219		

** denotes significant at 1% level

Source: Primary Data

Since p value is less than 0.01, the null hypothesis is rejected at 1% level of significance. Hence we conclude that there is significant difference among the mean rank of extrinsic cues considered for purchasing Neera drink. Based on mean rank, Brand name is the most important extrinsic factor with lowest mean rank of 1.35 followed by Shelf presence/ availability with mean rank of 2.38 and Packing with mean rank of 3.72. In Kerala limited number of companies under CDB has got approval for marketing Neera, consumers were highly concerned about the brands name in order to cope up with the adulterated low quality Neera. Since Neera once fermented, turned out to be toddy, the consumers were careful about the packing of Neera before purchasing it.

H0₄: There is significant difference among mean rank with regard to the personal reference cues of preference while purchasing Neera.

Table 6: Test statistics of Friedman Test

Personal reference cues	Mean Rank	Std. Deviation	Chi square value	p value
Co-worker's/Friend's Recommendation	1.67	.795	115.280	<0.001**
Doctor's Recommendation	4.00	.000		
Past experience	2.30	.720		
Buyer's Impulsiveness	2.03	.823		

** denotes significant at 1% level

Source: Primary Data



Since p value is less than 0.01, the null hypothesis is rejected at 1% level of significance. Hence we conclude that there is significant difference among the mean rank of personal reference cues considered for purchasing Neera drink. Based on mean rank, Co-worker's/Friend's Recommendation is the most important personal reference factor with lowest mean rank of 1.67 followed by Buyer's Impulsiveness with mean rank of 2.03 and Past experience with mean rank of 2.30. Apart from a health drink, Neera is also a delicious soft drink; friends' recommendation and buyers' own urge were the most important cues for purchasing Neera.

H0₅: There is significant difference among mean rank with regard to the non-personal/ promotional cues of preference while purchasing Neera.

Table 7: Test statistics of Friedman Test

Non-personal/ Promotional cues	Mean Rank	Std. Deviation	Chi square value	p value
Health Magazines	2.57	1.307	51.220	<0.001**
Retailer	2.48	.948		
Store Displays	1.63	.637		
Sales promotion measures	3.32	.792		

** denotes significant at 1% level

Source: Primary Data

Since p value is less than 0.01, the null hypothesis is rejected at 1% level of significance. Hence we conclude that there is significant difference among the mean rank of non-personal/ promotional cues considered for purchasing Neera drink. Based on mean rank, Store Displays is the most important non-personal/ promotional factor with lowest mean rank of 1.63 followed by Retailer with mean rank of 2.48. Sales promotion measures is the least considered factor with a mean rank of 3.32, as there were narrow commercial advertisements on Neera in the television or other popular medias.

H0₆: There is no significant difference in mean score of extrinsic cues and intrinsic cues

Table 8: Paired sample test statistics

	Mean	Standard Deviation	t value	p value
extrinsic cues	38.7333	3.73198	2.547	0.013*
intrinsic cues	37.2000	1.54919		

* denotes significant at 5% level

Source: Primary Data

Since p value is less than 0.05, the null hypothesis is rejected at 5% significant level. Hence conclude that there is significant difference between mean score of extrinsic cues and intrinsic cues. Based on mean score, the extrinsic cues (38.73) are vital than intrinsic cues (37.2).

H0₇: There is no significant difference in mean score of personal cues and non-personal/ promotional cues

Table 9: Paired sample test statistics

	Mean	Standard Deviation	t value	p value
Personal cues	21.3667	1.27514	4.787	<0.001**
Promotional cues	22.4333	1.62988		

** denotes significant at 1% level

Source: Primary Data

Since p value is less than 0.01, the null hypothesis is rejected at 1% significant level. Hence conclude that there is significant difference between mean score of personal cues and promotional cues. Based on mean score, the non-personal/promotional cues (22.43) are crucial than personal cues (21.37).

Findings

- 48.3% respondents considered Neera as nutritious energy drink and 25% considered it as flavoured taste drink.
- As it is a new product, 48.3% consumers purchased it for 1 to 3 times, followed by 31.7% for 4-6 times and only 20% for 10 or more times which is associated with demographic factors of the respondents. Source of purchase of Neera is limited to 3 sources.
- Quality is the most important intrinsic factor followed by Deliciousness/Taste and Nutritional content.
- Brand name is the most important extrinsic factor followed by Shelf presence/ Availability and Packing.
- Co-worker's/Friend's Recommendation is the most important personal reference factor followed by Buyer's Impulsiveness and Past experience.



6. Store Displays is the most important promotional factor followed by Retailer .Sales promotion measures is the least considered factor.
7. There is significant difference between of extrinsic cues and intrinsic cues and the extrinsic cues are vital than intrinsic cues.
8. There is significant difference between mean score of personal cues and promotional cues. And the non-personal/promotional cues are crucial than personal cues.

Suggestions

With the changing lifestyle, people have started becoming more health conscious. Therefore, the Government should use appropriate marketing techniques for Neera to compete with the substitute health and energy drinks. Since promotions play a big role in purchase decision making; the government or CDB should try to provide more advertisements in public Medias with celebrity endorsement.

Limitations of the Study

- The study was confined to some areas of Thrissur only according to convenience.
- The study does not take into account the awareness and satisfaction of Neera consumers.
- Chances of some biasness could not be eliminated.
- A small sample size of 60 has been used due to time constraint.

Future Research Implications

This is an effort to study the consumption pattern and factors influencing the purchase of coconut oil. It is a narrow view of the certain aspects. Further research can be conducted on Neera consumption while taking more variables into consideration.

Also the present study does not taken in to consideration the Satisfaction level of the Neera consumers which will further help to trace out the areas need improvements in production and market segment of Neera in Kerala. There is a relevant scope for further studies in that area.

Conclusion

The study concluded that demographic factors play an important role in the frequency of purchase of Neera. Also the consumers are giving more importance to extrinsic and promotional cues while purchasing Neera. As there is a lot of ignorance and wrong perceptions regarding Neera energy drink among consumers, the results suggest the need to create awareness regarding the benefits of Neera and correct some wrong perceptions that consumers have. Hence, it is recommended that the Neera marketers could concentrate on improving the quality and brand image of the Neera and at the same time they should concentrate seriously on the sales promotional activities.

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