

## CONSUMER PREFERENCES OF TEA AND BUBBLE TEA IN BENGALURU (URBAN)

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**Received: 27 May 2021**

**Accepted: 29 May 2021**

**Published: 01 Jun 2021**

### ABSTRACT

Recent years has seen an upsurge of varieties of tea - Bubble tea being one among them. It consists either of milk or other tea base, or both including flavours and syrups along with tapioca pearls or jelly. The aim of the study was to determine the preference of the consumers towards tea and bubble tea. A sample of 323 tea consumers was identified with 200 being consumers of bubble tea using a questionnaire to elicit information on the consumption pattern and preferences. Majority of tea and bubble tea consumers belonged to 15-18 years age group (41.5 % and 40 %), were students (57.9 % and 36.5 %) and were females (65.9 % and 68.5 %). Significant association was seen between the marital status and gender with cups of tea consumed per week at 5 % level of significance, [ $\chi^2(0.05, 1df) = 3.841$ ]. Significant association with gender was seen with taste and customization of the drink ( $p=5.991$ ,  $p<0.05$ ), convenience and availability of bubble tea ( $p=3.841$ ,  $p <0.05$ ). Hence, gender and marital status are the major determinants for the preference of tea whereas gender, convenience and availability are the major determinants for the preference of Bubble tea.

**KEYWORDS:** Perception, Preferences, Customization

### INTRODUCTION

Tea is one of the most popular beverages gaining prominence worldwide. It is no longer restricted to a humble homemade tea but has been gaining popularity with various trends and customization of tea like Bubble tea. Tea is brewed from the leaves of Camellia sinensis leaves. There are different types of tea like oolong, green, black and Ilex tea. The type of tea depends on the processing and various methods of preparation.

Bubble Tea is a type of tea which is also known as Pearl milk tea or Boba tea. The "bubble" alludes to the froth made by shaking the tea, which is additionally called pàomò tea, which means foamy or frothy tea. Bubble tea got well-known during the 1990s at some stage in Asia and has increased its fame within the United States and in Europe since 2000.

Bubble Tea could be a black tea, oolong tea or green tea based with milk, powdered milk or condensed milk having fresh fruit, chewy tapioca balls, fruit jelly, grass jelly or agar jelly on the top. Bubble or Pearl refers to the tapioca balls. Tapioca is a starch that is extracted from cassava root. Boba balls are made of tapioca, which are boiled to deliver a round chewy ball that is then added to hot as well as cool drinks. Colourful tapioca balls are created by adding some water, sugar and food colours. The ice-mixed renditions of bubble tea are generally blended in with juice or syrup to form a slushy consistency.

Nowadays, people are consuming Bubble Tea because of the taste, texture, variety and customization of the beverage all over the world. As of now, there is a paucity of published research to archive the nutritional quality of these refreshments. This study will give an in-depth idea about the current scenario by giving an insight about the association of socio-demographic characteristics with consumer preferences towards Tea and Bubble Tea. It will also give an idea about the consumption pattern of Tea and Bubble tea. Though the consumers are aware of bubble tea in urban areas, there are chances that they have less knowledge on the customization of the drink and also about the different variants available in the market as Indians have different taste palette and the taste of tapioca balls are bland for most of the them if not customized properly. This study will provide an insight on the current market scenario of Tea and Bubble Tea and how the acceptance of Bubble Tea is different from other teas available in the market. This study can also be served as a base for new product development by knowing about the acceptance of different flavors and customization pattern according to the Indian taste palette.

## METHODOLOGY

### Study Design and Setting

The study was a cross-sectional study. The study design was purposive random convenience sampling. The study was conducted over a period of 4 months i.e. from November 2019 till February 2020 at selected cafés in Bengaluru. A total of 323 sample size of tea consumers were selected to identify 200 consumers of Bubble tea. The subjects were selected on the basis of Inclusion and Exclusion criteria. Subjects taken consisted of the age group 15-50 years from both middle-income and high-income group. Subjects were selected from selected cafés of Bengaluru based upon convenience.

### Study Tool

A detailed questionnaire was developed to elicit information from the consumers of tea specially bubble tea. The different aspects of the questionnaire were – General information, Awareness, Perception and Preference of Tea consumers and Bubble Tea consumers.

### Procedure

The study was conducted in 3 phases.

- **Phase I:** In this phase, market survey was conducted to obtain information about the different varieties of tea consumed in Bengaluru and also to gain insight information about the different types of tea especially Bubble tea available in the market.
- **Phase II:** In this phase, a well-structured questionnaire was developed and a pilot study was conducted to validate the questionnaire. The questionnaire was used to screen the bubble tea consumers and to elicit information about their preferences towards tea and bubble tea. Ten different tea shops/ café were identified selling bubble tea for data collection.
- **Phase III:** In this phase, the data was entered in the MS- Excel and then the tables and graphs were generated. On the basis of the tables, different types of test were performed like Average mean test, Standard deviations, Chi-square test and Preference test.

## Data Collection

The data collected for this study was primary data i.e. the data collected by the researcher oneself for the study. The method of data collection was purposive random convenience sampling. The questionnaire was made in MS- Word and then printed copies were given to the respondents to fill on the spot. The data was then entered in the excel sheet for further statistical analysis.

## Statistical Analysis

The data collected was compiled in the Microsoft excel and the tables were generated from the formulated data. The statistical analysis performed were Average mean test, Chi-square test, Standard deviations and Preference test. Data representation was done in the form of tables, charts, bar graphs and column graphs.

## RESULTS AND DISCUSSIONS

### Baseline Information

Socio demographic characteristics of tea consumers were shown in Table 1. It was depicted that majority (41.5 %) of the respondents belonged to the age group 15-18 years followed by 28-33 years (31 %) and 19-27 years (27.5 %). Most of the respondents were female (65.9 %). Majority of the respondents were unmarried (61 %). The educational level of the respondents was Undergraduate (70.7 %). Majority (57.9 %) of the respondents were students. The respondents majorly (63.2 %) belonged to nuclear family having an income of more than INR 3, 00,000 per year.

Socio demographic Characteristics of Bubble Tea Consumers was shown in Table 2. It was depicted that majority (40 %) of the respondents belong to 15-18 years of the age group and 68.5 % of them were females, 95 % were unmarried, 36.5 % of the respondents were student and 58.5% were undergraduate. Most of the respondents (62.0 %) belonged to nuclear family and 40 % of the respondents had a family income of more than INR 3, 00,000 per month.

**Table 1: Socio Demographic Characteristics of Tea Consumers (N=323)**

Characteristics	Category	Respondents	
		Number	Percent
Age group (years)	15-18	134	41.5
	19-27	89	27.5
	28-33	100	31.0
Gender	Female	213	65.9
	Male	110	34.1
Marital status	Unmarried	197	61.0
	Married	126	39.0
Educational level	Undergraduate	228	70.7
	Post-graduate	98	29.3
Occupation	Student	187	57.9
	Private	65	20.1
	Government	32	9.9
	Homemaker	20	6.2
	Self-employed/Business	19	5.9
Type of family	Nuclear	204	63.2
	Joint	119	36.8
Family income/year	>INR 3,00,000	138	42.7
	INR 2,50,001-3,00,000	114	35.3
	< INR 2,50,000	71	22.0

**Table 2: Socio Demographic Characteristics of Bubble Tea Consumers (n=200)**

Characteristics	Category	Respondents	
		Number	Percent
Age group (years)	15-18	80	40.0
	19-27	57	28.5
	28-33	63	31.5
Gender	Female	137	68.5
	Male	63	31.5
Marital status	Unmarried	190	95.0
	Married	10	5.0
Educational level	Undergraduate	117	58.5
	Post-graduate	83	41.5
Occupation	Student	73	36.5
	Private	64	32.0
	Government	31	15.5
	Homemaker	16	8.0
	Self-employed/Business	16	8.0
Type of family	Nuclear	124	62.0
	Joint	76	38.0
Family income / year	>INR 3,00,000	80	40.0
	INR 2,50,001-3,00,000	68	34.0
	< INR 2,50,000	52	26.0

### Preferences of Consumers

Table 3 shows the overall preference on the broad types of tea consumed. It was seen that most of the respondents (72.5 %) consume Traditional tea followed by Tisane (20.1 %). Only 7.4 % of the respondents consumed both types of tea.

Also, from Figure 1, It was elicited that majority (66 %) of the respondents consider drinking special tea as a trend.

Table 4 depicted the preferred flavour of bubble tea at multiple responses. It was observed that the most preferred flavour was green tea (55.5 %) followed by Taro (38 %) and Strawberry flavor (35 %).

Figure 2 & 3 depicted the preference of place for the consumption of tea and bubble tea. It was seen that all of the consumers(100 %) preferred drinking bubble tea at café whereas majority of the tea consumers preferred consuming tea anywhere (37.8%) followed by specially at home (32.5 %) then at work (19.5 %) and the least preferred consuming tea at café (10.2 %).

**Table 3: Preferences on the Type of Tea (N=323)**

Preference of Tea	Respondents	
	Number	Percent
Traditional (Camelia sinensis)	234	72.5
Tisane (Herbal)	65	20.1
Both	24	7.4

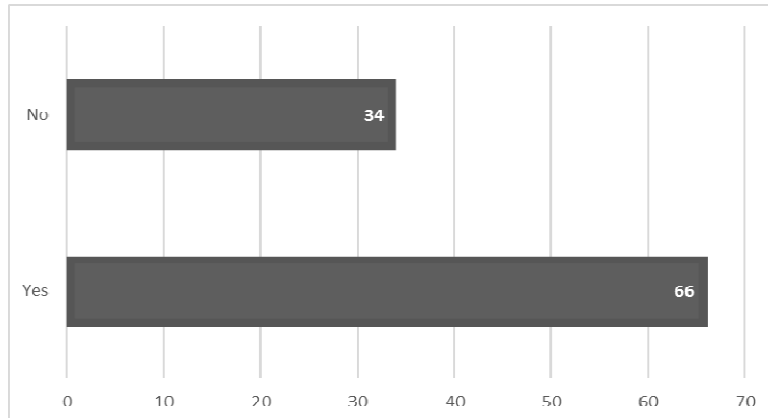


Figure 1: Consider Drinking Special Tea as a Trend.

Table 4: Preference of Bubble Tea Flavour (n=200)

Bubble Tea Flavour @	Respondents	
	Number	Percent
Green tea	111	55.5
Taro	76	38.0
Strawberry	70	35.0
Chocolate	47	23.5
Green apple	40	20.0
Black tea	23	11.5

@ Multiple Response

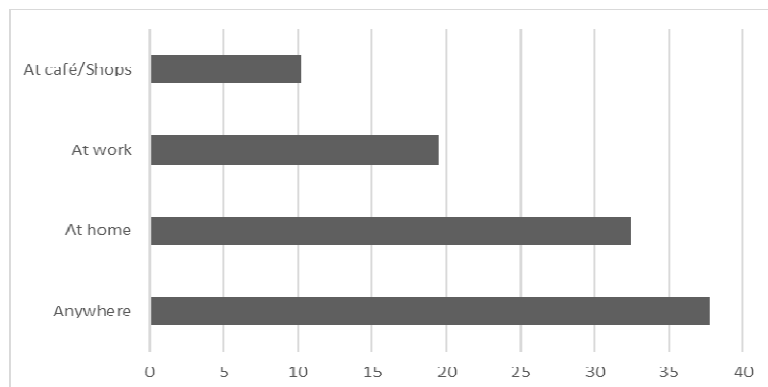


Figure 2: Preference of Place for the Consumption of Tea.

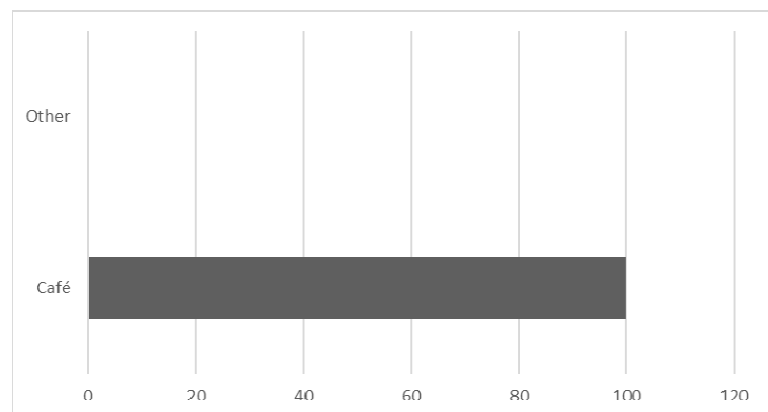


Figure 3: Preference of Place for the Consumption of Bubble Tea.

### Factors Influencing the Consumption

Table 5 shows the influence of the age group on cups of tea consumed per week. It was observed that there is a significant association between the age group and cups of tea consumed per week at 5% level of significance, [ $\chi^2(0.05, 2df) = 5.991$ ]. It was noted that 15-18 years old consumed tea more than the other age groups.

Table 6 shows the influence of gender on the cups of tea consumed per week. It was observed that there is a significant association between the gender and cups of tea consumed per week at 5% level of significance, [ $\chi^2(0.05, 1df) = 3.841$ ]. As reflected, 70.4% of the females consumed less than 5 cups of tea and the remaining 29.6% of females consumed 5-10 cups of tea whereas 57.3% of the male consumed less than 5 cups of tea and the remaining 42.7% of males consumed 5-10 cups of tea.

Table 7 shows the association between the marital status and cups of tea consumed per week. Interestingly, 70.6% of the married respondents consumed less than 5 cups of tea and the remaining 29.4% consumed 5-10 cups of tea whereas 58.7% of the unmarried respondents consumed less than 5 cups of tea and 41.3% consumed 5-10 cups of tea. It was observed that there is a significant association between the marital status and cups of tea consumed per week at 5% level of significance, [ $\chi^2(0.05, 1df) = 3.841$ ]

Table 8 shows the association of the consumption of bubble tea with taste, customization of drink and gender. It was seen that 46.8% of males were not sure if they liked the taste of bubble tea but 80% of females liked the taste very much. Majority of males (47.8%) were not sure about their liking towards the customization of drink as compared to 73.6% of females liked to customize their beverage a little. A significant association between the taste and gender ( $P < 0.05$ ,  $P = 5.991$ ), customization of the drink and gender on bubble tea was seen ( $P < 0.05$ ,  $P = 5.991$ ).

Table 9 shows the association of the gender with price, convenience and availability. As reflected, 35.7% of the male population slightly liked the price but 45.1% liked the convenience and availability factor of bubble tea. 78.4% of females were not sure if they liked the price of bubble tea. The results were in contrast to female population who were uncertain of price (78.4%) and convenience and availability (73.2%). There was no significant association between gender and the price of bubble tea ( $P > 0.05$ ,  $P = 5.991$ ) but a significant association between gender and convenience and availability of bubble tea ( $P < 0.05$ ,  $P = 3.841$ ) was noted.

**Table 5: Association between Age Group and Cups of Tea Consumed (N=323)**

Age Group (Years)	Sample	Tea Consumed				$\chi^2$ Value
		below 5 Cups		5-10 Cups		
		N	%	N	%	
15-18	134	80	59.7	54	40.3	9.11*
19-27	89	70	78.7	19	21.3	
28-33	100	63	63.0	37	37.0	

\* Significant at 5% Level,  $\chi^2(0.05, 2df) = 5.991$

**Table 6: Association between Gender and Cups of Tea Consumed (N=323)**

Gender	Sample	Tea Consumed				$\chi^2$ Value
		below 5 Cups		5-10 Cups		
		N	%	N	%	
Male	110	63	57.3	47	42.7	5.59*
Female	213	150	70.4	63	29.6	

\* Significant at 5% Level,  $\chi^2(0.05, 1df) = 3.841$

**Table 7: Association between Marital Status and Cups of Tea Consumed (N=323)**

Marital Status	Sample	Tea Consumed				$\chi^2$ Value
		below 5 Cups		5-10 Cups		
		N	%	N	%	
Unmarried	126	74	58.7	52	41.3	4.79*
Married	197	139	70.6	58	29.4	

\* Significant at 5% Level,  $\chi^2(0.05,1df) = 3.841$

**Table 8: Association of Gender with Taste and Customization of Bubble Tea (n=200)**

Variables	Category	Sample	Gender				$\chi^2$ Value	p Value
			Male		Female			
			n	%	n	%		
Taste	Not sure	47	22	46.8	25	53.2	10.26*	P<0.05 (5.991)
	Like a little	73	25	34.2	48	65.8		
	Like very much	80	16	20.0	64	80.0		
Customization of the drinks	Not sure	46	22	47.8	24	52.2	7.44 *	P<0.05 (5.991)
	Like a little	144	38	26.4	106	73.6		
	Like very much	10	3	30.0	7	70.0		

\* Significant at 5% Level, NS: Non-significant

**Note:** Figures in the parenthesis indicate Table value

**Table 9: Association of Gender with Price, Convenience and Availability of Bubble Tea (n=200)**

Variables	Category	Sample	Gender				$\chi^2$ Value	p Value
			Male		Female			
			n	%	n	%		
Price	Dislike a little	135	45	33.3	90	66.7	2.11 NS	P>0.05 (5.991)
	Not sure	37	8	21.6	29	78.4		
	Like a little	28	10	35.7	18	64.3		
Convenience and Availability	Not sure	149	40	26.8	109	73.2	5.87*	P<0.05 (3.841)
	Like a little	51	23	45.1	28	54.9		

\* Significant at 5% Level, NS: Non-significant

**Note:** Figures in the parenthesis indicate Table value

### Reasons behind the Consumption

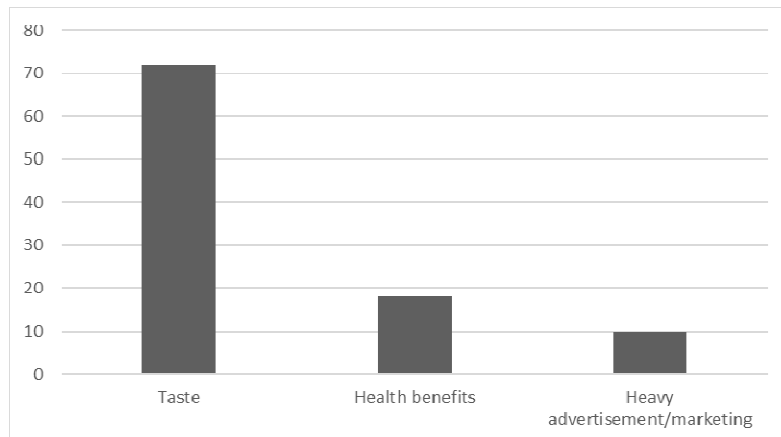
Table 10 shows the major reasons behind the consumption of tea. It was seen that all of the respondents (100 %) assumed that tea was healthier than other drinks. Equal responses were seen by the respondents for consumption of tea as a family tradition (47.1 %) and for taste (47.1 %).

Figure 4 shows that the main reason for consumption of bubble tea as stated by majority of the respondents was taste (72 %) followed by health benefits (18 %) and heavy advertisements/marketing (10 %).

**Table 10: Reason Behind the Consumption of Tea (N=323)**

Reasons @	Respondents	
	Number	Percent
Family tradition	152	47.1
Taste	152	47.1
Healthier than other drinks	<b>323</b>	<b>100.0</b>

@ Multiple Response

**Figure 4: Reasons behind Consumption of Bubble Tea.**

## CONCLUSIONS

This study demonstrated that consumer preferences towards tea and bubble tea were different. Furthermore, there were many contributing factors which influenced the consumer perception towards the consumption of tea and bubble tea.

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