

The Trend to Use Beverages Based on Age, Gender, Job, Income and Location of Consumers

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Abstract. Quantity survey sample included 4196 male (57.51%) and 3100 female (42.49%) in Ho Chi Minh City area. Both male and female have a large amount of the officer and workers (> 45%). Age-group of 18-45 years old has accounted for a large proportion of surveyors. This study focused on consumption habits of residents in Ho Chi Minh City for energy drinks, juices, mineral water, milk, coffee, carbonated drinks, tea, corn juices and others. Male consumed most beverage types including soft drinks (92.2%), corn juices (88.9%) and energy drinks (88.7%). Female consume more carbonated drinks (93.4%), fruit juices (86.2%) and energy drinks (93.8%) than others. In this study, male officers use energy drinks, tea, juice more than others. However, male workers often choose coffee and soft drinks. For female, the choice of beverages has a difference to the male. Both female officers and workers chose carbonated drinks as the beverages to enjoy. The female officers prefer juice to carbonated drinks, but the female workers prior to energy drinks as the beverages to supply more energy. Income has a major impact for the selection of beverages. Those whose income is less than 100 USD usually choose coffee, carbonated drinks and tea. However, the people who have income from USD 250-350 typically use mineral water, coffee and corn juices. People who live in District 1 tend to choose juices, milk, corn juice and mineral water to drink. Energy drinks were much consumed in district 5, district 10 and district 12. Carbonated drinks and tea were much used in Go Vap and Binh Thanh District.

Keywords: Beverage market, consumption, Ho Chi Minh City, Vietnam, beverage trend.

1. Introduction

Beverage market (BM) in Vietnam has developed very fast pace in recent years. Indeed, according to data from the Ministry of Industry and Trade (2010), the market of non-alcoholic beverages in Vietnam was reached to 2 billion liters. That means the amount of non-alcoholic beverage consumed per person about 23 liters per year. The growth rate of beverage has been continued to increase rapidly from 2010 until now. Total output of beverage industry reached 4,1 billion liters in 2014 increased 3.97% compared to that of 2013. It is predicted that beverage consumption will be continuously enhanced with the increase of income [1]-[3].

Based to a recent report of the Competition Management Department, the BM of Vietnam has about 300 kinds of beverage with many features: febrifuge, beautiful skin, weight loss, health promotion. It can be classified under 3 beverage groups such as carbonated soft drinks, soft drinks and mineral water. Global beverage market has been dominated by a group of eight countries including Canada, France, Germany, Italy, Japan, Russia, UK and USA. The BM revenues of this group reached 310 billion dollars in 2015. [1], [4], [5]

2. Data and Method

The data used in this analysis were collected by a face-to-face survey in the Ho Chi Minh City of Vietnam. Ho Chi Minh City is the biggest and busiest city in Vietnam. The City is recognized as the political,

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economic, financial, cultural, educational, and transportation center of the South of Vietnam. The surveyors were random with different ages, sex, job, salary, but mostly over 18 years old. In this study, 7296 consumers were surveyed from 19 districts in Ho Chi Minh City of Vietnam in randomly selected places.

The surveyed areas were in 19 districts of Ho Chi Minh City, such as: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, Tan binh, Tan Phu, Binh Thanh, Thu Duc, Phu Nhuan, Binh Tan and Go Vap.

Raosoft software was used to calculate the right sample amount for survey in each district with the acceptable of error rate lower than 5%, the confidence level from 95%.

The secondary data was collected from statistical Center of Ho Chi Minh City. The primary data was collected by a face-to-face survey with consumers

3. Results and Discussion

3.1. Size of Sample (Table 1)

Table 1: Sample distribution

Man		Jobs								
Age	Total	Officer	Worker	Farmer	Retailer	Teacher	Architect	Engineer	House-keeper	Other
<18	61	0	0	0	0	0	0	0	0	61
18-24	793	155	174	11	36	26	19	103	0	269
25-35	1389	358	450	9	116	52	30	167	5	202
36-45	1240	274	361	7	208	47	26	138	14	165
46-55	545	39	126	11	66	28	19	24	13	219
56-65	126	4	9	4	19	4	2	1	0	83
>65	42	1	0	0	2	0	0	1	0	38
Sum	4196	831	1120	42	447	157	96	434	32	1037
Female		Jobs								
Age	Total	Officer	Worker	Farmer	Retailer	Teacher	Architect	Engineer	House-keeper	Other
<18	59	0	1	0	0	0	0	0	0	58
18-24	947	258	216	5	84	44	3	18	33	286
25-35	984	302	278	12	168	55	2	35	85	47
36-45	712	161	143	9	141	48	2	27	143	38
46-55	320	35	26	1	103	27	0	5	101	22
56-65	55	1	2	0	11	1	0	0	27	13
>65	23	0	0	1	3	0	0	0	2	17
SUM	3100	757	666	28	510	175	7	85	391	481

The total population of Vietnam was 90.7 million people (2014) including 46% female and 44.7% male. That population is in the 3rd place of ASEAN countries, and 13th of the World. The age-group of 0 – 14, 15 – 64, > 65 years old was about 25.5%, 69.5% and 7.1% respectively [6]. The most numerous people is in the age group 15- 64 years old. That age-group have the highest working energy. Most of them are working in agricultural, forestry and aquatically area (46.6%), less people are working in industrial and constructing area (21.4%), and service area (32%) [7].

The total population of Ho Chi Minh City at the end of 2014 was 7,981,900 people including 52.03% female and 47.97% male. The sample was collected in this study obtained 0.09% in compare with total population of Ho Chi Minh City. It may be noticed that the proportion of male and female in this study is 57.51% and 42.49%, respectively. From 18 to 45 years, the workforce have been occupied a large proportion. It can be seen that the officer, worker and engineer were dominated jobs in the age-group of 18 to 45 year old (over 90% for each in comparison with other groups). Surveyors were mostly at the age under 18, 18-25, 46-55, 56-65, and over 65 years old (more than 27%). The lowest amount of surveyors was at 26-35 and 36-45 years old (less than 11%).

3.2. The Relationship between Age-group, Gender and the Beverage Selection (Table 2)

Generally, male from 25-35 years old uses the highest all kinds of beverages (energy drinks, juices, mineral water, milk, coffee, carbonated drinks, tea, corn juice...) and female from 18-35 years old consumes beverages in significant higher than other age – groups. Energy drinks contain a lot of caffeine (200mg/can) and sugar. These beverages would be provided energy for our body quickly. These have been the best chosen by the male from 18-45 years old (96% surveyor). However, female have chosen the energy drinks is 13.9% less than the male in the same age-groups. Most women do not like to use a lot of energy drinks because their good shape.

Table 2: The non-alcohol beverage selection of each age – group and gender

Gender	Ages-group	Total	Energy Drinks	Juices	Mineral Water	Milk	Coffee	Carbonated Drinks	Tea	Corn juice	Others
Male	<18	1.5%	6.3%	8.7%	1.4%	5.2%	0.7%	1.7%	0.4%	5.6%	0.0%
	18-24	18.9%	31.2%	30.4%	23.8%	24.7%	14.2%	37.5%	27.2%	5.6%	29.8%
	25-35	33.1%	35.7%	32.2%	33.5%	42.3%	32.0%	31.9%	40.6%	50.0%	33.3%
	36-45	29.6%	21.7%	19.1%	19.7%	17.5%	34.0%	22.8%	19.2%	33.3%	15.5%
	46-55	13.0%	4.5%	7.0%	14.9%	7.2%	14.8%	5.6%	8.0%	5.6%	16.7%
	56-65	3.0%	0.5%	2.6%	4.3%	0.0%	3.4%	0.4%	2.7%	0.0%	3.6%
>65	1.0%	0.0%	0.0%	2.4%	3.1%	0.9%	0.0%	1.8%	0.0%	1.2%	
Female	<18	1.9%	0.4%	1.5%	4.2%	6.3%	2.9%	1.3%	6.5%	0.6%	3.7%
	18-24	30.5%	25.8%	36.3%	32.7%	37.5%	40.3%	35.5%	44.1%	18.1%	44.9%
	25-35	31.7%	33.3%	26.7%	33.3%	43.8%	29.2%	31.6%	29.9%	31.0%	36.0%
	36-45	23.0%	29.1%	20.3%	17.0%	12.5%	16.7%	16.2%	12.0%	33.8%	12.5%
	46-55	10.3%	9.9%	14.0%	8.3%	0.0%	8.8%	9.0%	5.6%	14.8%	2.9%
	56-65	1.8%	1.3%	0.8%	3.1%	0.0%	1.8%	4.1%	1.5%	1.1%	0.0%
>65	0.7%	0.4%	0.4%	1.5%	0.0%	0.2%	2.3%	0.3%	0.6%	0.0%	

3.3. Statistic Analysis between the Jobs and the Drinks (Table 3)

Table 3: The non-alcohol beverage selection of each job – group and gender

Gender	Jobs	Energy Drinks	Juices	Mineral Water	Milk	Coffee	Carbonated Drinks	Tea	Corn juice	Others	Sum
Male	Officer	31.7%	24.3%	17.0%	11.3%	19.8%	12.1%	24.6%	0.0%	17.9%	19.8%
	Worker	17.2%	13.9%	25.1%	27.8%	28.3%	31.9%	26.3%	22.2%	9.5%	26.7%
	Farmer	2.3%	0.0%	2.7%	0.0%	0.7%	0.9%	1.8%	5.6%	0.0%	1.0%
	Retailer	9.5%	6.1%	11.4%	7.2%	11.3%	9.1%	7.1%	11.1%	14.3%	10.7%
	Teacher	3.6%	4.3%	7.6%	4.1%	3.3%	0.9%	4.5%	0.0%	7.1%	3.7%
	Architect	0.0%	3.5%	2.7%	1.0%	2.2%	3.9%	2.7%	5.6%	2.4%	2.3%
	Engineer	11.3%	11.3%	8.6%	16.5%	10.2%	13.4%	8.9%	0.0%	10.7%	10.3%
	House-keeper	0.5%	0.0%	0.0%	0.0%	1.1%	0.0%	0.0%	0.0%	0.0%	0.8%
	Other	24.0%	36.5%	24.9%	32.0%	23.2%	28.0%	24.1%	55.6%	38.1%	24.7%
Female	Officer	15.6%	32.4%	21.4%	19.1%	23.6%	30.1%	28.3%	20.0%	21.6%	24.4%
	Worker	35.9%	10.0%	17.2%	28.1%	23.6%	30.1%	26.0%	10.0%	17.6%	21.5%
	Farmer	3.1%	1.1%	0.9%	0.3%	1.0%	0.0%	0.8%	0.0%	0.0%	0.9%
	Retailer	14.1%	16.5%	19.6%	15.1%	15.2%	9.6%	21.3%	26.7%	11.8%	16.5%
	Teacher	4.7%	5.9%	6.5%	7.7%	5.3%	1.5%	4.7%	13.3%	2.0%	5.6%
	Architect	1.6%	0.5%	0.2%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.2%
	Engineer	3.1%	0.7%	3.9%	0.9%	3.8%	2.2%	0.8%	0.0%	5.9%	2.7%
	House-keeper	1.6%	11.3%	11.8%	5.9%	18.2%	2.2%	7.1%	6.7%	11.8%	12.6%
	Other	20.3%	21.7%	18.5%	22.8%	9.0%	24.3%	11.0%	23.3%	29.4%	15.5%

We survey in 9 groups including officers, workers, farmers, retailers, teachers, architects, engineers, house-keepers and others. It can be noticed that the male workers and officer are the groups consuming a lot of beverages such as energy drinks (48.9%), juices (38.3%), mineral water (42.2%), milk (39.2%), coffee (48.0%), carbonated drinks (44%) and tea (50.9%). Surprisingly, male workers and retailers are the groups who use the most corn juices (33.3%). The similar trends were recognized in the female. Accordingly, we find that female workers and female officers are the main source for consumption of energy drinks (51.6%), juices (42.3%), mineral water (38.6%), milk (47.2%), coffee (47.2%), carbonated drinks (60.3%), tea (54.3%) and corn juices (30%). It should be noted that the people who consume the beverages as mention above from the other groups is very much significant. Therefore, we found the groups outside the surveyed ones could be the potential customers in the future.

3.4. Statistic Analysis between the Income and the Drinks (Table 4)

Table 4: The non-alcohol beverage selection of each income – group

Income (USD)	Energy Drinks	Juices	Mineral Water	Milk	Coffee	Carbonated Drinks	Tea	Corn juice	Others
Family fund	15.1%	19.7%	16.2%	19.2%	8.2%	17.4%	9.4%	16.7%	17.0%
< 100	6.7%	2.9%	4.1%	4.3%	1.7%	5.4%	2.9%	4.2%	5.2%
100 - 250	35.1%	36.6%	36.7%	39.2%	42.2%	47.6%	45.4%	31.3%	33.3%
250 - 350	28.8%	27.6%	30.7%	24.0%	37.1%	21.5%	31.6%	37.5%	27.4%
> 350	14.4%	13.1%	12.3%	13.3%	10.9%	8.2%	10.7%	10.4%	17.0%

The groups of surveyors whose income is less than 100 USD consume the least beverages. The group with income of 100-250 USD consumed the most beverages such as energy drinks, juices, mineral water, milk, coffee, carbonated drinks. Through statistical results we found that the group with income of 100-200USD are mostly students. They have a need to communicate with friends. That is a reason why they often use these drinks in the cafeteria and in the canteen. This leads to the consumption of beverages quickly increased in this group. It can be seen that three types of beverages are consumed the most is coffee (79.3%), carbonated drinks (69%) and tea (77%) with survey-income groups from 100-350 USD. Three types of beverages (coffee, carbonated drinks, tea) have high usability. That is a reason why they are widely used. Group with income larger than 350 USD is the least used beverages.

3.5. Statistic Analysis between the Area in the Ho Chi Minh City and the Drinks (Table 5.)

Table 5: The non-alcohol beverage selection of each area – group

District	Energy Drinks	Juices	Mineral Water	Milk	Coffee	Carbonated Drinks	Tea	Corn juice	Others	Sum
Dist. 1	6.0%	8.6%	8.3%	7.8%	4.0%	3.8%	4.4%	12.5%	2.2%	5.2%
Dist. 2	4.2%	3.2%	4.1%	5.5%	6.5%	4.6%	2.7%	0.0%	2.2%	5.3%
Dist. 3	6.0%	8.3%	6.8%	6.4%	4.2%	6.5%	4.4%	10.4%	4.4%	5.2%
Dist. 4	5.6%	5.6%	6.5%	6.9%	4.7%	3.3%	4.8%	12.5%	11.1%	5.2%
Dist. 5	8.4%	4.5%	8.0%	4.0%	4.9%	4.9%	4.4%	0.0%	5.2%	5.3%
Dist. 6	3.5%	7.2%	3.6%	4.3%	5.5%	8.7%	5.0%	0.0%	3.0%	5.3%
Dist. 7	3.2%	3.9%	2.6%	5.2%	6.2%	6.3%	5.6%	4.2%	2.2%	5.3%
Dist. 8	3.5%	3.2%	2.6%	4.8%	6.7%	2.7%	5.2%	2.1%	1.5%	5.2%
Dist. 9	3.5%	3.9%	7.6%	5.5%	5.4%	3.8%	3.8%	0.0%	3.7%	5.2%
Dist. 10	8.1%	3.9%	4.7%	5.7%	5.2%	5.2%	6.7%	10.4%	0.7%	5.3%
Dist. 11	3.2%	3.8%	2.2%	2.6%	6.9%	3.8%	4.4%	4.2%	3.7%	5.3%
Dist. 12	8.1%	6.5%	3.3%	5.9%	5.3%	4.1%	5.4%	16.7%	2.2%	5.3%
Tan Binh	6.7%	6.8%	6.5%	5.0%	4.3%	6.0%	7.7%	2.1%	6.7%	5.3%
Tan Phu	3.9%	6.8%	7.2%	5.7%	4.2%	3.0%	9.0%	2.1%	12.6%	5.3%
Binh Thanh	4.2%	6.3%	6.1%	5.2%	4.3%	8.7%	7.7%	0.0%	9.6%	5.3%
Thu Duc	8.1%	2.5%	2.2%	7.1%	5.9%	8.4%	4.2%	4.2%	1.5%	5.3%
Phu Nhuan	2.1%	4.1%	4.2%	3.1%	6.4%	4.6%	3.8%	2.1%	5.9%	5.3%
Binh Tan	4.2%	3.8%	4.6%	3.3%	6.4%	2.4%	3.1%	4.2%	6.7%	5.3%
Go Vap	7.7%	7.0%	9.0%	5.9%	2.9%	9.2%	7.5%	12.5%	14.8%	5.2%

Energy drinks are widely used by the residents of district 5 (8.4%), district 10 (8.1%), district 12 (8.1%) and Thu Duc district (8.1%). Of these, the residents of district 5 consume the most energy drinks. It noted that the surveyors in district 5 are small business in Cho Lon market and other markets in here. Juices are significantly used by residents in district 1 (8.6%) and district 3 (8.3%). Mineral water is consumed a lot by the people who live in district 1 (8.3%), district 5 (8.0%) and Go Vap district (9.0%). The residents in district 1 and Thu Duc district prefer milk to those of other districts. The coffee use primarily focuses on district 2, district 8 and district 11. Carbonated drinks have been consumed the most by the people who live in district 6, Go Vap and Binh Thanh district. Using tea is preferred by the residents of Tan Binh, Tan Phu and Binh Thanh district. Corn juices are consumed the most by the customers in district 12, district 1 and district 4.

4. Conclusions

This study shows that the residents in Ho Chi Minh City are consumed so much for energy drinks, juices, mineral water, milk, coffee, carbonated drinks, tea, corn juices. Male and female in the age-group of 25-35 years old consumed most beverage types including carbonated drinks, corn juices and energy drinks. In this study, male and female officers and workers consumed the most beverages. Income has a major impact for the selection of beverages. The people who have income from 250-350 USD use the most beverages including mineral water, coffee and corn juices. The residents in district 1 consumed the most of various types of beverages including juices, milk, corn juice and mineral water to drink.

5. References

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