

DEMOGRAPHIC PSYCHOLOGICAL FACTORS AND BOTTLED WATER BUYING BEHAVIOR OF CONSUMERS: A CASE STUDY OF LAHORE

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Introduction

Bottled water is viewed as a basic food commodity, its demand has increased globally and is increasing at high pace it has created a lot off market share. According to a report published by Transparency Market Research bottled water market was valued at USD 157.27 billion in 2013, which is expected to reach USD 279.65 billion by 2020, growing at a CAGR of 8.7% from 2014 to 2020. In 2013 Asia pacific led the global market with a market share of 33%. It is expected that growing population, increase in exposable income, launch of newer and more attractive packaging initiatives, rising health and wellness concerns will increase its demand. It is expected to attain a higher CAGR of 10.5% till 2020.

Bottled Water

Water is the most important component of our body. Most of human beings have access to the safe and clean drinking water at a very minimal price but in most part of the world people are deprived of safe and clean water, due to this factor and some others there is a constant increase in bottled water market

Definition

The bottled water can be defined as:

"Bottled water shall mean any product, including natural spring or well water taken from municipal or private utility systems or other water, distilled water, deionized water or any of the foregoing to which chemicals may be added, which are put into sealed bottles, packages or other containers, to be sold for domestic consumption or culinary use, involving a likelihood of such water being ingested by human beings."

(Department Of Health, Newyork State)

Pakistans's Bottled Water Market

In Pakistan NESTLE was the first company which launched mineral water in December 1998 with brand name of Nestle pure life. Nestle is the pioneer and still lead away in this industry created awareness about bottled water and highlights the disadvantages of tap water.

Multinational companies of beverages are also joined this industry Pepsi and Coca Cola produced “Aqua fina” &”Kinley. In local Sufi is the big name in bottled water in Pakistan.

Lahore’s Bottled Water Market

The bottled water market in Lahore have a great potential. During some previous years, after the launch of some local new brands of bottled water in market like Gourmet, Doce, the market is growing at high pace giving hard time to existing multi national brands. Competitive pricing, brand loyalty and availability are the basic factors influencing stable and strong competitive market. Some main brands floating in the market are:

- **Gourmet Water** (Gourmet Foods)
- **Sufi** (Hadayat Foods Stuffs Industries Pvt Ltd)
- **Springley** (Qarshi Industries Pvt Ltd)
- **Doce** (Doce bakers and sweets)
- **Kinley** (Coca-Cola Beverages Pakistan Ltd)
- **Aquafina** (Pepsi Cola International)

Literature Review

From the last few years several institutes and writers express their opinion about bottled water to be known after the market turned into a global phenomenon.

Bottled Water

Several studies have been conducted to measure the factors which are influencing the consumer buying behavior of bottled water. Doria (2006) indicated in his article *Bottled water versus Tap water: understanding Consumers’ Preferences* that number of studies have shown the two main factors that drive consumer buying behavior in USA, Canada and France. The two key driving factors are: *organoleptic* (characteristics of water that affect the senses of taste, odour and sight) and health and risk concerns. Doria stated that people in developed countries are not mollified with the quality of the tap water. Furthermore, the consumption of bottled water is increasing in those communities who have serious problem with their tap water. This condition provides more opportunities to the producer and marketers to market their product ‘pure’, ‘safe’ and ‘healthy’. He argued that consumers’ buying decision are influenced by marketing, advertising and also packaging of the product.

Rodwan (2009) agrees with Doria (2006) to some extent. Rodwan agrees in his report *Confronting Challenges* that bottled water industry is exploiting people consciousness towards well-being and growing health concerns. Moreover, he discussed another main reason of consumers in the developed countries like USA, Canada. People perceive bottled water as a good alternative of juices, carbonated soft drinks to satisfy their thirst and to keep them hydrated but they somehow also perceive bottled water as healthy. Contrary to Doria (2006), Rodwan (2009) argues that due to the unsafe water in the developing countries bottled water serves as an alternative.

In contrast with both Doria (2006) and Rodwan (2009), Shandling (2008) did not restrict her to a regional conclusion in her report *Global bottled water consumption on the rise*. She claimed another main global key driver: Increased awareness of people for the need and benefits of hydration for body and mind. Furthermore, the accessibility of bottled water is increasing in growing economies such as Latin America and Eastern Europe, she argued. Phend (2009) took the study of driving factors in bottled water consumption further. She states that previous studies pointed out the perceived purity, safety and taste as the main drivers for consumers to use bottled water. However, on the basis of a survey conducted in England, she argued that *health* is not a driving factor in bottled water consumption. It is *convenience* and *taste* which drive the use of bottled water.

The reason for consumption of bottled water vary from consumer to consumer and country to country. Different consumers have different needs, wants, perceptions and perceived image of the product. The main conclusion is that consumers perceive bottled water to be a “safe”, “healthy”, “tasty” or “convenient” product that is why they value bottled water and willing to pay more.

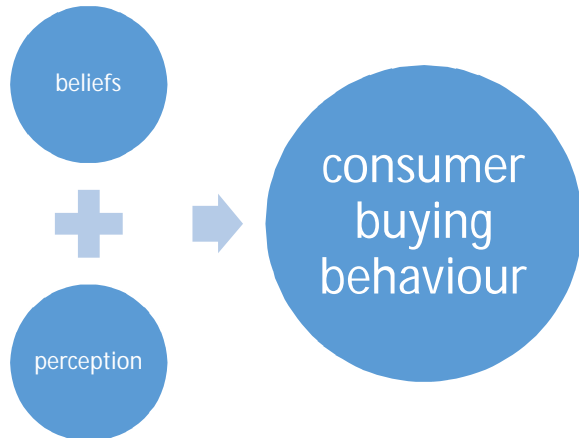
Consumer Buying Behaviour

Consumer buying behavior refers to the buying behavior of final consumers- individuals and households who buy goods and services for personal consumption(Kotler, Armstrong, Wong, Saunders, 2008).

Consumer Decision Making Process

According to Kotler *et al.* (2008), before purchasing something consumer pass through a series of processes. They stated that buying process starts before the occurrence of actual sale and continues even after the sale. Therefore, whole buying process requires a complete focus rather than just a purchase decision. The decision making process starts when a customer recognizes the need. The customer then search for the information related to the product after acquiring relevant information, the buyer evaluate the alternatives and after evaluation buyer buys the product. After actual purchase based on satisfaction and dissatisfaction, post purchase phase starts.

Theoretical Framework



Research Method

For this research proposal a survey was conducted to understand the Consumers' Buying Behavior of bottled. Primary data collection was carried out in order to answer the research questions. Secondary data was used only for literature review and theoretical framework. It was found from different online websites and data bases. Mostly popular databases like DiVA, Emerald, Inderscience, Wiley Online Library, Academic and Researchers books, and other marketing and business related journals were used for finding secondary data. For this study, descriptive quantitative method was applied. Quantitative research method involved the use of structured questions which are designed to obtain response to some particular aspects of the respondent's behavior, attitudes and demographic characteristics, which can be presented with accurate and quantifiable estimations (Ghauri & Cateora, 2010). To study the social issue, quantitative approach is suitable (Bryman & Bell 2007). Therefore, in order to answer the research question about the factors involved in customers' buying behavior of bottled water, the "quantitative" research methods have been chosen for the research. Quantitative process involves number and is statistical in nature. The research method is useful, as it is easy to collect a large sample size. Moreover, the result can be easily compared as well.

Data Analysis

Description and Discussion

The survey was conducted within the premises of university, as it was difficult to carry out this survey outside as respondents was reluctant to respond the questions.

Sample size

Total 100 questioner were conducted while the 3 questioner was rejected due to no response to the most of the questions. Because gender is an independent variable therefore both gender were choose on equivalent babes but still the responses from female were high as 52 female responded to survey.

gender

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid male	45	46.4	46.4	46.4
female	52	53.6	53.6	100.0
Total	97	100.0	100.0	

Age of the Respondent

Because the survey was conducted in university therefore the respondents are mostly young and educated and their awareness regarding the use of safe drinking water is higher than any segment of the society.

age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	16-25 years	86	88.7	88.7	88.7
	26-34 years	7	7.2	7.2	95.9
	35-44 years	3	3.1	3.1	99.0
	45+ years	1	1.0	1.0	100.0
	Total	97	100.0	100.0	

Income

Mostly people were up to the 10,000 income, which can't be considered as a low income because it is a pocket money and they only use this income for their daily needs, even excluding the bigger educational expenses and even household expenses are not meant to be borne by this income.

income

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	<10000	62	63.9	63.9	63.9
	10000-19999	22	22.7	22.7	86.6
	20000-39999	9	9.3	9.3	95.9
	40000 or more	4	4.1	4.1	100.0
	Total	97	100.0	100.0	

Cross Tabulation Analysis

Cross tabulation is a tool that allows you compare the relationship between two variables. Actually, Cross tabulation is a statistical tool that is used to analyze categorical data. Categorical data is data or variables that are separated into different categories that are mutually exclusive from one another.

Cross Tabulation between Gender and Beliefs

In this tabulation the comparison of gender and beliefs is performed and the result of this comparison is interpreted and discussed below. When the respondents asked the question "bottled water has higher quality standards than tap water" the large number of respondents strongly agreed to this question.

gender * bottled water has higher quality standards Crosstabulation

Count		bottled water has higher quality standards				Total
		strongly agree	agree	disagree	strongly disagree	
gender	male	22	16	5	2	45
	female	21	26	5	0	52
Total		43	42	10	2	97

When the respondents asked that, “Bottled water is safer than tap water in Lahore”. A great number of respondents agreed to this question mostly females agreed to this question.

gender * safer then tap water Crosstabulation

Count		safer then tap water				Total
		strongly agree	agree	disagre	strongly disagree	
gender	male	14	28	2	1	45
	female	17	29	6	0	52
Total		31	57	8	1	97

When the respondents asked that, “Bottled water is healthier than tap water in Lahore”. Almost equal number of male and female agreed to this question but the number of females that strongly agreed to this question is much more than that of males.

gender * healthier then tap water Crosstabulation

Count		healthier then tap water				Total
		strongly agree	agree	disagree	strongly disagree	
gender	male	13	28	3	1	45
	female	14	28	9	1	52
Total		27	56	12	2	97

When the respondents asked that, “Bottled water is healthier than fruit juices”. More males agreed to this questions than that of females.

gender * healthier than fruit juices Crosstabulation

Count		healthier than fruit juices				Total
		strongly agree	agree	disagree	strongly disagree	
gender	male	10	14	14	7	45
	female	7	19	19	7	52
Total		17	33	33	14	97

The respondents were asked that, “Bottled water is healthier than carbonated drinks (soft drinks)”. Both gender agreed on this question almost equally.

gender * healthier than carbonated drinks Crosstabulation

Count		healthier than carbonated drinks				Total
		strongly agree	agree	disagree	strongly disagree	
gender	male	21	18	2	4	45
	female	20	21	5	6	52
Total		41	39	7	10	97

The respondents were asked that, “The quality of bottled water in Lahore is reliable”. More male strongly agreed to this question than females but also a large number of females agreed to this question.

gender * quality of bottled water in lahore is reliable Crosstabulation

Count		quality of bottled water in lahore is reliable				Total
		strongly agree	agree	disagree	strongly disagree	
gender	male	12	24	7	2	45
	female	7	33	10	2	52
Total		19	57	17	4	97

When the respondents were asked that, “The quality of tap water in Lahore is reliable”. A small number of both gender agreed to this questions but the large number of males strongly disagreed to this question.

gender * quality of tap water in lahore is reliable Crosstabulation

Count		quality of tap water in lahore is reliable				Total
		strongly agree	agree	disagree	strongly disagree	
gender	male	6	10	18	11	45
	female	6	19	21	6	52
Total		12	29	39	17	97

The respondents were asked that, “Tap water in Lahore is safe”. A large number of both gender disagree to this question while the number of females that disagreed to this question is more than that of male.

gender * tap water in lahore is safe Crosstabulation

Count		tap water in lahore is safe				Total
		strongly agree	agree	disagree	strongly disagree	
gender	male	3	13	21	8	45
	female	3	17	23	9	52
Total		6	30	44	17	97

The respondents were asked that, “I am satisfied with the taste of tap water in Lahore”. More males strongly disagreed to this question.

gender * taste of tap water in lahore Crosstabulation

Count		taste of tap water in lahore				Total
		strongly agree	agree	disagree	strongly disagree	
gender	male	6	12	16	11	45
	female	6	20	19	7	52
Total		12	32	35	18	97

The respondents were asked that, “There is no considerable difference between bottled and tap water in Lahore”. More males disagree to this question while a large number of females strongly disagreed to this question.

gender * diff bew bottled water and tap water Crosstabulation

Count		diff bew bottled water and tap water				Total
		strongly agree	agree	disagree	strongly disagree	
gender	male	6	9	24	6	45
	female	6	11	22	13	52
Total		12	20	46	19	97

Cross Tabulation between Income and Buying Behavior

In this tabulation the comparison of income and buying behavior is performed and the result of this comparison is interpreted and discussed below. When the respondents asked to answer that, “How often do you drink bottled water?” the six respondents said that they never drink bottled water and their income level was below 10,000 while at the same time a great number of respondents said that they drink bottled water once a week or more, and these respondents have income level <10,000.

income * how often do you drink bottled water Crosstabulation

Count		how often do you drink bottled water				Total
		once a week or more	less than once a week	less than once a month	never	
income	<10000	26	12	11	6	55
	10000-19999	15	1	6	0	22
	20000-39999	4	1	1	0	6
	40000 or more	3	1	0	0	4
Total		48	15	18	6	87

The respondents asked that, “Where do you buy bottled water mostly?” the respondents from income level 10,000 said that they buy it mostly from retail shop/bakery near their houses and 18 of them said they buy bottled water from cafeteria. While the mostly respondents from income level also said that they use to buy bottled water from retail store/bakery near their houses.

income * quality influence buying behaviour Crosstabulation

Count		quality influence buying behaviour				Total
		high influence	any influence	no influence	4	
income	<10000	32	9	6	1	48
	10000-19999	11	9	1	0	21
	20000-39999	5	1	0	0	6
	40000 or more	3	1	0	0	4
Total		51	20	7	1	79

The respondents asked that, “What is your main reason to use bottled water?” the great number of respondents from each income group responded that it is healthier/safer than other drinks. While the large number of respondents from income level 10,000 thinks that it is thirst quenching.

income * where do you buy bottled water mostly? Crosstabulation

Count		where do you buy bottled water mostly?				Total
		cafeteria	retail shop/bakery near your house	restaurants	others	
income	<10000	18	25	5	1	49
	10000-19999	5	16	0	1	22
	20000-39999	3	3	0	0	6
	40000 or more	3	1	0	0	4
Total		29	45	5	2	81

Among the factors influence quality and availability are the main reasons for buying bottled water. The respondents from every income group showed the great response towards this question and said that quality highly influence their buying decision of bottled water.

income * what is your main reason to use bottled water Crosstabulation

Count		what is your main reason to use bottled water				Total
		it taste better than other drinks	it is healthier/safer than other drinks	it is thirst quenching	it is convenient and easy to consume	
income	<10000	7	22	16	4	49
	10000-19999	3	11	5	3	22
	20000-39999	2	2	2	0	6
	40000 or more	1	2	0	1	4
Total		13	37	23	8	81

The availability of bottled water also has a great impact on buying decision as shown in table below. A great number of respondents said that availability highly influence their buying decision.

income * availability influence buying behaviour Crosstabulation

Count		availability influence buying behaviour			Total
		high influence	any influence	no influence	
income	<10000	30	14	5	49
	10000-19999	9	6	5	20
	20000-39999	5	0	1	6
	40000 or more	3	1	0	4
Total		47	21	11	79

Regression

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.132 ^a	.017	-.007	.65470

a. Predictors: (Constant), beliefs, perception

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.622	2	.311	.725	.487 ^a
	Residual	35.148	82	.429		
	Total	35.770	84			

a. Predictors: (Constant), beliefs, perception

b. Dependent Variable: buying behavior

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.361	.516		2.637	.010
	perception	.006	.196	.003	.029	.977
	beliefs	.235	.208	.131	1.132	.261

a. Dependent Variable: buying behavior

Alpha	Items
0.543	3

Reliability Statistics

Conclusion

The aim of this chapter is to answer proposed research question.

1. “How do demographic factors affect bottled water buying behavior”
2. “How do psychological factors affect bottled water buying behavior?”

As mentioned before a majority of 100 respondents chosen for this research work from University of Punjab, so the findings of this study may not be generalized for whole city or country. However, the results do give an indication of consumer behavior of bottled water. The result of findings and analysis showed that customer belief and perception plays an important role in determining the buying behavior of customer.

Recommendation

There should be control on bottled water producers. The control has to be carried out by a separate institute, which controls and monitors all actions of this business. By doing so, the quality, safety and reliability of bottled water can be guaranteed. Hence, marketers of bottled water will also be controlled on what they claim. Misleading advertising must be prevented in this way.

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