



The Influence of Social, Marketing and Personal Factors on Bottled Water Drinking Behaviour in Eritrea

Fitsum Ghebregiorgis*

Department of Business Management and Marketing College of Business and Economics, Eritrea

Habteab Tekie Mehreteab

Department of Economics College of Business and Economics, Eritrea

Abstract

The consumption of bottled water has been increasing consistently across the globe. The main objective of this study is to investigate the social, marketing and personal factors affecting bottled water consumer behavior in Eritrea. This study examines the factors influencing bottled water consumption behaviour in Eritrea. The survey research design was employed using questionnaire as the data collection instrument. The items measuring the constructs were adapted from the extant literature. Data was analyzed using regression and correlation test. The Statistical Package for Social Sciences Software was used to analyze the data. Survey results based on a sample of 540 respondents indicate that some of the social, marketing and personal factors have a significant impact on frequency of drink and reason for purchase of bottled water (buying behaviour of consumers).

Keywords: Bottled water; Social; Marketing; Personal; Developing country; Eritrea.

1. Introduction

Research regarding consumer attitude and behavior are generally a common approach in order to understand buying behaviors of individuals as it is central to marketing management. As Kotler (2008) stated it just as marketing ends with consumption, so marketing management must begin with understanding customers. Furthermore, the authors argued that understanding consumer behavior and “knowing customers” is not simple. Customers may say one thing but do another. They can get influenced and change their mind the last minute. Or their needs or wants change from time to time. Consumer buying behavior refers to the buying behavior of final consumers—individuals and households who buy goods and services for personal consumption.

According to Ferre (2009), bottled water consumption has been growing exponentially since the past decade. Bottled water requires thorough research regarding consumer buying behavior to guide present and future marketing activities. This is especially so, given the circumstances that the bottled water market is considered as one of the fastest growing markets in the beverage category. Although many are probably assuming that bottled water is a luxury product, the increasing trend of the business is also seen in developing countries such as Eritrea.

The Eritrean bottled water market is increasing, although there is no documented concrete reliable data regarding market share of each water company. However, at the national level in a tiny country Eritrea, there are about 30 bottled water companies.

Consumers choose to drink bottled water for several reasons. In many cases, it is because the consumers think bottled water tastes better than tap water, which they think is a sign for better quality. Many consumers tend to agree that bottled water is better in several aspects. The demand for bottled water has been increasing, even in places where tap water is safe to drink (Emily and Janet, 2006). However, some authors Ferrier (2001) argue that this is not always the case. The increasing usage of bottled water represents a change in ways of life, for example, the increasing urbanization deteriorates the quality of tap water, but at the same time, the increasing standard of living enables people to drive far and bring home heavy and expensive bottled water (Ferrier, 2001).

There are various factors which determine the choice for bottled water; among which include dissatisfaction with tap water (especially taste) and health/risk concerns (Doria, 2006). A study by Johnson (2003) found that the beliefs that there are serious environmental health problems in the places where respondents live and there is low personal control over their own health risks play an important role in personal concern about drinking water risks. Prior personal experience can have a strong effect on perceptions of water quality and risk, because people tend to prefer what they are used to, therefore, the acceptability of water with identical physicochemical compositions can vary geographically (Doria, 2010).

Besides personal experience, impersonal and interpersonal experience can also influence perception and behavior (Doria, 2010). Although the importance of particular information sources varies geographically and is influenced by demographics, mass media coverage is the main impersonal source of information that publicize uncommon events such as water risks, which then influences people’s beliefs on tap water quality. However, the overall impact of the media on public perception is generally very limited, whereas the influence of interpersonal sources on perceptions and behavior seems to be stronger than that of mass-mediated sources (Doria, 2010). This is because people do not draw personal implications from their general views of society (Park et al., 2001).

*Corresponding Author

Previous studies have investigated to some extent the behavior of bottled water consumers and the factors that shape their behavior. Most of the earlier studies were focused on factors such as organoleptics and risk/health concerns, with only limited amount of studies that focus on factors such as interpersonal information and demographics and cultural background. In order to understand what factors are influencing people's beliefs and behavior, it is necessary to further investigate the influence of one's environmental background, such as demographics, education ...etc.

Taking the above views, the issue here is: what factors determine the buying behavior of consumers toward bottled water in Eritrea? Kotler (2008) argue that consumer purchases are influenced strongly by cultural, social, personal and psychological factors. However, consumers' social and personal including marketing variables and buying behavior of bottled water in Eritrea is not researched. To this end, this study attempts to identify factors influencing the behavior of consumers towards bottled water in Eritrea.

The main objective of this study is to investigate the social, marketing and personal factors affecting bottled water consumer behavior in Eritrea. The specific objective of this study is to answer the following questions: *What are the factors that influence individual's buying behaviour? Is there a relationship between social, marketing and personal factors and bottled water buying behaviour?*

2. Background and Hypotheses

In Eritrea over the past decade there has been a remarkable increase in the bottled water market. New bottled water companies are evolving at a higher rate. There are several types of bottled water companies in Eritrea; among which include: Pure Aqua, Hiyab, Kahta, GMA, Crystal, Mai-leham, Dadu, Gash, Ruwyet, Mai-wina, Blue Leaf, Selihom, Gahtelay, Barka, Men-kem Hiyab...etc.

The demand for bottled water has increased worldwide and has generated an impressive market share. Drake (2010), indicated that the bottled water market has shown an increase of 4% in 2009, compared to 2008. In marketing of goods and services, the concept of consumer behaviour is critical because, companies deal with customers who are different in nature. To help identify what is important to the consumer, understanding of consumer behaviour is key. This will help suggest the important influences on consumers' decision making, enabling marketers to provide goods and services that meet the needs of their target market.

Loudon and Della (1994) define consumer behaviour as "the physical activity and decision process individuals engage in when evaluating, acquiring, using or disposing of goods and services." Consumer buying behaviour refers to the buying behaviour of final consumers, individuals and households who buy goods and services for personal consumption (Kotler *et al.*, 2008). The study of consumer behaviour focuses on how individuals make decisions to spend their available resources (time, money, effort) on consumption related items (Schiffman and Lazar, 2004).

Several factors are examined to find out what can affect people decision on buying bottled drinking water related to the innovation used by the companies. Deliya and Parmar (2012) were two researchers who have done similar research in India. Their research has proven that packaging influences people in buying the products. Meanwhile, in Czech, Foret and Procházka (2006) were also conducting a research on what factors which influence people buying decision on beverage. The findings of those researches have shown the relationship between brand, quality and packaging towards people buying decision.

One of the factors that influence people buying decision is product brand, which defined by Kotler and Armstrong (2010) as "A name, term, sign, symbol, design, or a combination of these that identifies the products or services of one seller or group of sellers and differentiates them from those of competitors". Related to the buyer decision process, it will appear mostly in "information search" and "alternative evaluation". At those stages, customers are trying to find and criticize the information about the product they need whether it is bottled drinking water or any other product or service.

In other study regarding Ghanaian consumers' purchasing decision of bottled water, Quansah *et al.* (2015), found that consumers describe bottled water as safe, healthy, reliable, convenient, good and available, refreshing, socially accepted and a good alternative to other drinks. In comparison to sachet water, the respondents perceive bottled water as healthier, safer and of higher quality. Considering the fact that there is no absolute proof yet that bottled water is better than sachet water in any aspect(s), the beliefs and perception variables of bottled water may be the result of heavy and even at times misleading advertising. Therefore, it is attractive for consumers to use. As consumers are more sensitive to this information, the bottled water business keeps growing. Thus, they conclude that there is a relationship between psychological factors and bottled water buying behaviour.

Research shows that there are various reasons why people consume bottled water. People buy bottled water if it is convenient, low cost, and has better taste (Ward *et al.*, 2009). Bottled water can be carried from one place to another place and is useable at any time when it is necessary. Sometimes, bottled water is less costly compared to other soft drinks. Taste also might be different when water is bottled after purification and by using chemicals. In a study conducted on the producers of drinking water in India, it was found that the demand of the bottled water depends on water purity, easy availability the time and place, and consumers' attitude towards the whole aspects of branded bottled water (Devasenathipathi *et al.*, 2008). Good quality water, purer water, healthier water is the demand of the bottled water drinkers (Doria, 2006). In Bangladesh, status, taste, reasonable price, and attractive advertisement are the most important factors for buying bottled water in Bangladesh (Habib *et al.*, 2009).

Therefore, based on the above reviews and discussions we propose the following hypotheses:

Hypothesis 1: Quality of bottled water positively influences consumers' frequency of drinking, reason for purchase, and purchase location.

Hypothesis 2: Brand name of bottled water positively influences consumers' frequency of drinking, reason for purchase, and purchase location.

Hypothesis 3: The price of bottled water negatively influences consumers' frequency of drinking, reason for purchase, and purchase location.

Hypothesis 4: Packaging of bottled water positively influences consumers' frequency of drinking, reason for purchase, and purchase location.

Hypothesis 5: Promotion positively influences consumers' frequency of drinking, reason for purchase, and purchase location.

Hypothesis 6: Availability of bottled water positively influences consumers' frequency of drinking, reason for purchase, and purchase location.

Hypothesis 7: Reputation of bottled water positively influences consumers' frequency of drinking, reason for purchase, and purchase location.

Hypothesis 8: Lifestyle positively influences consumers' frequency of drinking, reason for purchase, and purchase location.

Hypothesis 9: Circle of friends positively influences consumers' frequency of drinking, reason for purchase, and purchase location.

3. Methodology

3.1. Sample and Procedures

This study examines the influence of marketing, social and personal factors on bottled water drinking behavior. In conducting this study, primary and secondary data have been used. Primary data were collected from individual respondents using survey questionnaire. The data were gathered from a sample of randomly selected 575 respondents between November 2017 and February 2018. The questionnaires were distributed in person. Eight senior students of Business Management studies participated in data collection. Of the total distributed questionnaire, we obtained 540 correctly completed usable questionnaires, which is 94% response rate. Individuals were requested to give information related to their consumption of bottled water. Secondary data have been extracted from various sources such as academic journals, books, other internet sources...etc.

3.1.1. Dependent Variables

In this study, the dependent variable is bottled water buying behaviour. The dependent variable is explained through—how often they drink bottled water, purchase location, and reason for purchase.

3.1.2. Independent Variables

Several social (circle of friends), marketing (quality, brand name, price, package, promotion, availability, reputation), and personal (life style) factors which might influence bottled water drinking behaviour have been included as independent variables in the regression model. We asked respondents to choose a number between 1 and 3, where 1 = “high influence”, 2 = “any influence”, and 3 = “no influence”.

4. Results

Table 1 presents descriptive statistics and bivariate Pearson correlations for all the research variables used in the regression equations. The results indicate that quality ($r = .109$, $p < .05$ and $r = .136$, $p < .01$ 2-tailed value) related to ‘how often they drink bottled water’ and ‘reasons for purchase’, respectively. Similarly, availability ($r = .123$, $p < .01$) is related to ‘how often they drink bottled water’. Although it indicates that there is a relationship among the independent variables, there are no collinearity problems as checked in the regression models.

Table-1. Means, standard deviation and correlations for all variables

	Mean	Std. Dev.	1	2	3	4	5	6	7	8	9	10	11
Often drink	1.69	.995	1										
Purchase location	1.54	1.014	.059	1									
Reason for purchase	2.15	.700	.023	.102*	1								
Quality	1.42	.723	.109*	.059	.136**	1							
Brand name	2.14	.842	.078	-.037	.047	.177**	1						
Price	1.70	.827	-.047	-.011	-.033	.145**	.046	1					
Package	2.02	.856	.068	.016	-.033	.165**	.215**	.037	1				
Promotion	2.29	.786	-.079	-.030	.058	.183**	.153**	.111*	.227**	1			
Availability	1.70	.800	.123**	.012	-.014	.173**	.078	.185**	.177**	.195**	1		
Reputation	2.14	.828	.068	-.026	.011	.158**	.314**	.167**	.232**	.332**	.294**	1	
Circle of friends	2.51	.722	-.060	-.056	-.016	.075	.220**	.119**	.133**	.178**	.188**	.295**	1
Lifestyle	2.17	.881	-.016	.016	.037	.047	.059	.113**	.003	.139**	.159**	.192**	.257**

Regression analysis was used to test how the marketing, social and personal variables significantly affect bottled water drinking behaviour. Table 2 shows the results of our regression across the three bottled water buying behaviour measures of frequency of drinking bottled water, purchase location, and reasons for purchase. Hypothesis

1 states that quality of bottled water positively influences consumers' frequency of drinking, reason for purchase, and purchase location. The regression outcome shows that quality was positively and significantly related to frequency of drink ($\beta = .182, p < .05$) and reason for purchase ($\beta = .147, p < .05$). Nevertheless, no support was found for purchase location. This result indicates the bottled water sold whether in cafes, shops, or hotels are of the same quality since the different bottled water companies through their own channel of distribution market their products to similar wholesalers and retailers.

We hypothesise that brand name (hypothesis 2), price (hypothesis 3), and packaging (hypothesis 4) of bottled water positively influences consumers' frequency of drinking, reason for purchase, and purchase location. However, no support was found for buying behaviour.

Hypothesis 5 states that promotion positively influences consumers' frequency of drinking, reason for purchase, and purchase location. As Table 2 reveals promotion is negatively and significantly related only to frequency of drink ($\beta = -.178, p < .05$), but not related either to reason for purchase or purchase location. Thus, these results suggest that amount of money invested in promotion doesn't affect the consumption of bottled water. Rather, consumers use bottled water because they want to regardless of whether a product is highly promoted or not. In fact, this result could be attributed to the fact that companies in Eritrea rarely advertise their products.

Moreover, hypothesis 6 states that availability of bottled water positively influences consumers' frequency of drinking, reason for purchase, and purchase location. As can be seen from Table 2,

availability was significantly and positively related to frequency of bottled water drinking behaviour ($\beta = .183, p < .05$), but not related either to reason for purchase or purchase location. Thus, we can say that consumers purchase bottled water not because it is available for sale, but to quench their thirst or may be because of health concern or other issues. However, no support was found for purchase location.

It was also hypothesised that reputation (hypothesis 7) and life style (hypothesis 8) positively influences consumers' frequency of drinking, reason for purchase, and purchase location. Nonetheless, no support was found for buying behaviour to support the hypotheses.

Finally, we hypothesize that circle of friends (hypothesis 9) positively influences consumers' frequency of drinking, reason for purchase, and purchase location. The results of our regression shows that circle of friends is negatively and significantly related only to frequency of drink ($\beta = -.159, p < .05$), but not related either to reason for purchase or purchase location. Again peer influence or social hanging of friends is not influencing the interest of individuals. Instead it is a personal choice of bottled water buying behaviour.

Table-2. Regression results for dependent variables

Variable	Frequency of drink		Purchase location		Reason for purchase	
	R ² change	β	R ² change	β	R ² change	β
Quality	.074	.182*	.009	.076	.035	.147*
Brand name		.041		-.035		.034
Price		-.098		-.025		-.062
Package		.064		.027		-.051
Promotion		-.178*		-.029		.058
Availability		.183*		.028		-.027
Reputation		.091		-.026		-.010
Circle of friends		-.159*		-.067		-.027
Lifestyle		.007		.054		.020
N		540		540		540
F- value	4.672*		.525		2.125*	

Note: * $p < .05$

5. Conclusions and Implications

This paper contributes to our understanding of the influence of social, marketing and personal factors on bottled water drinking behaviour. To the best of our knowledge, ours is the first extensive study of bottled water consumer behavior in Eritrea. The results of this study, in general, offered empirical support for the existence of a relationship between bottled water drinking behaviour and some personal, social and marketing factors. However, the positive relationships between personal, social and marketing factors and bottled water consumption behaviour didn't hold true across all factors.

Although some of the personal, marketing or social variables have stronger effects than others; generally, our results offer considerable empirical support to the assertion that personal, marketing and social factors influence consumers bottled water drinking behaviour. We argue so because we attempted further analysis using descriptive statistics to see it from a different analytical technique perspective. The results suggest that brand name, price, package, promotion, availability, reputation, and lifestyle have moderate influence on bottled water drinking behaviour. Surprisingly, circle of friends have high influence, while quality has low influence. Our results concur with the findings of other studies in other countries, for instance, in Ghana where good and availability influence buying behavior (Quansah *et al.*, 2015); in Nigeria brand name (Ogbuji *et al.*, 2011); in Bangladesh attractive advertisement (Habib *et al.*, 2009); and in India easy availability (Devasenathipathi *et al.*, 2008).

The most noticeable result of this analysis was that price is not related at all to bottled water drinking behaviour. In a country where the standard of living of the population is low and the price of bottled water is expensive still

consumers are using it. The price of 10 litter packed and 1.5 litter packed (which is convenient to carry it elsewhere) is the same, which is about 1.33 US dollars. Normally, one would expect that an increase or decrease in price to affect the consumption of bottled water. Rather, consumers use bottled water when they want to regardless of its price.

To sum up, the findings of the present study raise some interesting questions that merit further study. Why price have no effect on bottled water buying behaviour? Why quality was the only variable to influence frequency of drink and reason for purchase? How come in a country where businesses hardly advertise their products that promotion have some influence.

The work reported in this paper examines the relationship between social, marketing and personal factors and bottled water drinking behaviour. The results presented are mixed where some have certain influence, while others do not influence buying behaviour as expected. The findings of the present study offer important academic implications.

The empirical results of the analyses in this study suggest that the impact of social, marketing and personal factors on bottled water drinking behaviour needs further study. Future research would benefit from including demographic variables to understand how they affect consumers' bottled water consumption behaviour. Our results further imply that research is clearly needed to investigate peoples' beliefs and perceptions on bottled water. To sum up, our results may lack the power for thorough significance testing and there may also be some limitations on the generalisability of the findings.

However, within the above-mentioned limitations, this paper makes considerable contributions. First, it is the first of its kind to the study of consumer behaviour in Eritrea. Second, this study provides a reasonable picture of the relationship between social, marketing and personal factors and bottled water drinking behaviour. This study is clearly only a first step and additional research is needed to better understand the generalisability of these findings.

References

- Deliya, M. M. and Parmar, B. J. (2012). Role of packaging on consumer buying behavior– patan district. *Global Journal of Management and Business Research*, 12(10): 48-67.
- Devasenathipathi, T., Saleendran, P. T. and Jeevaraj, J. T. M. (2008). A study on consumers' approach towards bottled water. *The ICFAI Journal of Consumer Behavior*, 3(4): 24-33.
- Doria, M. F. (2006). Bottled water versus Tap water, Understanding consumers' preferences. *Journal of Water and Health*, 4(2): 271-76.
- Doria, M. F. (2010). Factors influencing public perception of drinking water quality. *Water Policy*: 1-19.
- Drake, I. (2010). Asia boosts global bottled water market. Available: <http://www.ausfoodnews.com.au/2010/01/15/asia-boosts-global-bottled-water-market.html>
- Emily, A. and Janet, L. (2006). Plan b updates, Earth policy institute. Available: http://www.earth-policy.org/index.php?plan_b_updates/2006/update51
- Ferre, D. (2009). Bottled water industry under pressure but drinks growth to be robust. Available: <http://www.ausfoodnews.com.au/2009/03/19/bottled-water-industry-under-pressure-but-drinks-growth-to-be-robust.html>
- Ferrier, C. (2001). Bottled water, Understanding a social phenomenon. Available: http://assets.panda.org/downloads/bottled_water.pdf
- Foret, M. and Procházka, P. (2006). Behaviour and decision making of Czech consumers when buying beverages. *Agriculture Economic*, 52(7): 341-46.
- Habib, M., Wahidul, I. A. and Ahmed, S. (2009). *Factors motivating consumers buying behavior towards bottled water in Bangladesh, A multivariate analysis, 10th south asian management forum*. Thimpu, Bhutan. 9-10.
- Johnson, B. B. (2003). Do reports on drinking water quality affect customers' concerns? Experiments in report content, Risk analysis. 985-98.
- Kotler, P. (2008). A Study on influencing factors of the consumer buying decision process of demographic (personal) and psychological factors. *Journal of the American Water Resources Association*, 35(2): 524-33.
- Kotler, P. and Armstrong, G. (2010). *Principles of Marketing*. Pearson Education, Inc.: New Jersey.
- Kotler, P., Armstrong, G., Wong, V. and Saunders, J. (2008). *Principles of Marketing*. 5th edn: Pearson Education Limited: England.
- Loudon, D. and Della, B. A. (1994). *Consumer behavior application*. 4th edn: McGraw Hill: New York.
- Ogbuji, C. N., Anyanwu, A. V. and Onah, J. O. (2011). An empirical study of the impact of branding on consumer choice for regulated bottled water in southeast, Nigeria. *International Journal of Business and Management*, 6(6): 150-66.
- Park, E., Scherer, C. W. and Glynn, C. J. (2001). Community involvement and risk perception at personal and societal levels. *Health, Risk and Society*, 3(3): 281-92.
- Quansah, F., Okoe, A. and Angenu, B. (2015). Factors affecting ghanaian consumers' purchasing decision of bottled water. *International Journal of Marketing Studies*, 7(5): 76-87.
- Schiffman, L. G. and Lazar, K. L. (2004). *Consumer Behavior*. 8th edn: Prentice-Hall: Englewood Cliffs, NJ.
- Ward, L. A., Cain, O. L., Mullally, R. A., Holliday, K. S., Wernham, B. P. D. and Greenfield, S. M. (2009). Health beliefs about bottled water, A qualitative study. *BMC Public Health*, 19(9): 196.