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Article

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Health Awareness and Price Sensitivity as Predictors of Consumers' Purchase Attitude towards Soft Drinks

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This study investigates the association of both health hazards awareness and price sensitivity of soft drinks with consumer's purchase attitude in Saudi Arabian market. The study also investigates whether there is a moderating role for each of consumer's gender, age, education, and monthly income on the two studied relationships. The study has been conducted on 865 respondents of soft drinks consumers in Saudi Arabia and an online self-administered survey has been used to collect primary data from the participants. The study findings revealed a statistically significant negative associations of both soft drinks' health hazards awareness and price sensitivity with consumer's purchase attitude. Heath hazards awareness is higher than the price sensitivity in predicting the consumer's purchase attitude. Hence, the consumer's attitude is more responsive to health hazards awareness than the price sensitivity. The study also found that consumer's gender, age, education, and income do not significantly moderate the relationships between either of health hazards awareness or price sensitivity and the purchase attitude of soft drinks. Thus, the study recommends marketers to adopt social orientation in doing marketing activities and do best to develop healthier soft drinks. Furthermore, marketers should be careful when setting soft drinks' prices because of consumer sensitivity. Optimization of soft drinks' cost structure can help in respect to price sensitivity. Finally, the undifferentiated marketing strategy is suitable for targeting in the Saudi market concerning gender, age, education, and income.

Keywords: *soft drinks, awareness, sensitivity, purchase attitude, empirical research, consumer behavior, purchase decision*

JEL Classification: *M30*

1. Introduction

Consumer behaviors and attitudes are affected by several factors. The consumer's final decision to purchase a product comes after an interaction of different factors. With the current changing and diverse market

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conditions, it is essential for any business to understand the nature and behavior of their customers. As Armstrong and Kotler (2007) highlighted, there are four main factors which significantly influence the overall consumer behaviors: psychological, social, physical, and cultural factors. Also, the economic situation of a consumer plays a critical role in determining the consumer's purchasing attitudes. Elements such as one's income level and the overall price of products are crucial when it comes to a purchase decision. However, as Virvilaite et al. (2009) noted, consumer attitudes and behaviors vary based on several factors, including age, gender, income and others. Healthy food has become a major topic in public discourse on food and drink (Grunert, 2007). Consumption of soft drinks has risen substantially over the past 25 years. However, soft drinks consumption is associated with many health issues such as dental problems and weight gain especially in children (Vartanian et al., 2007; Gibson, 2008; Brownell and Frieden, 2009). Consequently, many governments try to control the consumption of soft drinks by imposing targeted taxes. One study found that tax (price increase) on sugary beverages has an effective impact on the public health (Etilé and Sharma, 2015, Jacobson and Brownell, 2000). Recently, the Saudi government has imposed a 50% tax on soft drinks in a step aimed to change the attitude of citizens towards soft drinks. However, despite the importance of this topic for consumer's health and soft drink business in the Saudi market, no study has been conducted in Saudi Arabia.

Accordingly, this research is examining the association of soft drinks' consumers' health hazards awareness and price sensitivity with consumer attitude towards purchasing soft drinks in the Saudi market. Also, the research is aiming to investigate the moderating role of gender, age, education, and income, first, on the relationship between health hazards awareness and purchase attitude, and second, on the relationship between price sensitivity and purchase attitude. Saaksjarvi et al. (2009) found gender, education, income, and age serve as antecedents to consumers' knowledge of healthy foods, which in turn affect attitudes towards health and, consequently, buying behavior. However, the results of the current study are aimed to make marketers more aware of the factors to be taken into account when doing market segmentation, targeting, positioning, and marketing strategies of soft drinks in Saudi Arabia.

2. Literature Review and Study Hypotheses

2.1. Health Awareness and Purchase Attitude

Previous studies demonstrated that nutrition-media campaigns can successfully increase consumer's awareness and attitude (Orr et al., 2010; Wakefield et al., 2010). Information about the healthiness of a product increases the consumer awareness and produces the attitude towards that product (Bech-Larsen et al., 2001; Kozup et al., 2003). Mass media campaigns can directly or indirectly produce positive changes in health related behaviors across large populations (Wakefield et al., 2010). For products such as tobacco and soft drinks, high awareness of hazards on health is an important factor in shaping negatively the consumer's purchase attitude and consumption. Correspondingly, Nazir and Almas (2017) found that Saudi school children with high awareness of smoking effects on health were having less probability of smoking. Healthiness is a major quality dimension when consumers evaluate food products (Grunert. 2007). Soft drinks are associated with obesity and weight gain especially in children (Vartanian et al., 2007; Gibson, 2008; Brownell and Frieden, 2009). Soft drinks are also associated with Type 2 Diabetes, Mellitus, and Cardiovascular Disease Risk (Malik et al, 2010). Focusing on soft drinks, a study found that lack of awareness of the hazards of soft drinks is a reason of children's frequent consumption (Gour et al., 2010). Another a study found that 51% of the respondents would reduce the amount of consumption of soda or sugary drinks as a result of watching the risk awareness campaigns, and that 78% of consumers who were aware of health problems of soda and sugary drinks intended to reduce the amounts of these drinks they offer to their children (Boles et al., 2014). In the same line, Barragan et al. (2014) found that 60% of respondents reported that they are likely or very likely to reduce their daily consumption of soda and sugary beverages as a result of watching these products' risk awareness campaigns. Accordingly, the following hypothesis is proposed to be tested in the current study:

H1*: There is a statistically significant negative relationship between health hazards awareness and purchase attitude.*

2.2. Price Sensitivity and Purchase Attitude

Price is the primary factor which impacts consumer behaviors and attitudes. According to Moore (2006), the price has a direct influence on consumer's purchasing attitudes. A shopper might storm into a store with an intention to buy a product, but changes his mind upon finding the price is higher than he expected. On the other hand, low rates, price cuts, and discounts encourage customers, sometimes impulsively, to buy. Consequently, pricing acts as an environmental factor and plays a major role towards consumer's decision to purchase goods or services. The consumers' final decision to buy a product or not is associated with

consumers' price sensitivity of that product. Sensitivity to prices occurs, as Kacen and Lee (2002) highlighted, when a slight increase in prices directly and negatively affects consumers' attitudes towards purchase.

Pricing is an important element of marketing mix in businesses. As Berman and Evans (2010) explained, every business needs to have a customer value in mind while setting up prices for their products or services. Prakash and Pathak (2014) concluded that price of soft drinks is among other factors that influence the purchase or brand switching decisions. Moore (2006) found a strong interrelation between prices, consumer's attitudes, and consumer perceptions. As a result of this interrelationship, a slight change in price whether positive or negative proportionally affects consumer's attitudes and perceptions due to the nature of consumer sensitivity towards prices. Ashok and Rakesh (2016) found that Prices influence consumers to prefer domestic soft drinks brand to global brands. Bloc et al. (2010) revealed that sales of regular soft drinks declined by 26% during the price increase phase. Guerrero-López et al. (2017) found that a price increase of 10% is associated with a reduction in caloric beverages consumption of 13.7%. Thus, prices are associated with consumer's attitude towards purchasing soft drinks. Accordingly, the following hypothesis is proposed to be tested in the current study:

***H2**: There is a statistically significant negative relationship between price sensitivity and purchase attitude*

2.3. Health Hazards Awareness and Purchase Attitude: Gender as a Moderator

As a whole, Wardle et al. (2004) concluded that men exhibit riskier and healthier behaviors than women, and give lower priority to health in food choices. According to Boles et al. (2014), women were nearly four times as likely as men to reduce soda and sugary drinks offered to children after being aware of the health problems of these product through campaign ads. In this regard, Nakmongkol (2009) revealed that female consumers are at the highest level of interest in low sugar soft drink compared to male consumers. Correspondingly, an Australian nutrition survey showed that until the age of 12 years, the amounts of soft drinks consumption for both males and females were same. But after 12 years, the soft drinks consumption of males would double that of females. The reason behind this difference was partly because females would have a negative attitude towards soft drinks as a cause of weight (Hector et al 2009). Schafer et al. (1993) concluded that women are more concerned about food security than men. Accordingly, the following hypothesis is proposed to be tested in the current study:

***H3:** Consumer's gender moderates the relationship between health awareness and purchase attitude*

2.4. Price Sensitivity and Purchase Attitude: Gender as a Moderator

Some studies revealed a significant difference in perception between male and female on the price of products. Goi (2011) found that female's perception is higher than male regarding the importance of price in marketing mix. In their study, Steptoe et al. (1995) found that the importance of low price is varied according to gender. Sari (2011) revealed that men were more positive (less sensitive to prices) towards high food prices and less positive towards low food prices compared to women. On the other hand, Ridler and Ridler (2011) emphasized that women are more willing to pay a high price for food if it fulfills the desired characteristics (organic, for example). Accordingly, the following hypothesis is proposed to be tested in the current study:

***H4:** Consumer's gender moderates the relationship between price sensitivity and purchase attitude*

2.5. Health Awareness and Purchase Attitude: Age as a Moderator

Soft drinks had a drastic rise in consumption especially in children of 12 to 17 years (World Health Organization, 2004). Boles et al. (2014) found that respondents who aged 45 and older were less likely than who aged 18-44 to reduce soda or sugary drinks after being aware of the health problems of these product through campaign ads. Nakmongkol (2009) concluded that soft drinks consumers in Thailand are young, aged 15-30 years old. Another study found that young adults (17-30 years) was the group with most positive attitude and consume more soft drinks (Pacific and Hoefkins, 2014). A school-based nutrition education program for children aged 7 through 11 years achieved a modest reduction in carbonated beverage consumption (James et al., 2004). Dobrenova et al. (2015) and Marina et al. (2014) found that young consumers tend to use healthy foods more than older consumers, whereas Vella et al. (2014) and Bhaskaran and Hardley (2002) found that consumption of healthy foods is higher among older adults. Accordingly, the following hypothesis is proposed to be tested in the current study:

***H5:** Consumer's age moderates the relationship between health awareness and purchase attitude*

2.6. Price Sensitivity and Purchase Attitude: Age as a Moderator

As explained by Kacen and Lee (2002), age is one of the significant factors that affect the level at which change in prices affect consumer behaviors. Young people are less affected by changes in prices and

would at times purchase a product they are in love with no matter the price increment (Kacen and Lee, 2002). The higher the age of consumers, the more positivity towards low food prices (Sari, 2011). Young people are more prone to impulse buying and are less concerned about the prices if they can afford a product (Kacen and Lee, 2002). Nielsen Global Health and Wellness Report (2015) states that the willingness to pay a premium price for health attributes in food products decreases with age. Nakmongkol (2009) concluded that soft drinks consumers in Thailand are young, aged 15-30 years old, and they are sensitive to prices. Accordingly, the following hypothesis is proposed to be tested in the current study:

H6: *Consumer's age moderates the relationship between price sensitivity and purchase attitude*

2.7. Health Awareness and Purchase Attitude: Education as a Moderator

Some studies have investigated the role of education levels on consumption of unhealthy food. A study found that maternal education, was associated with the availability of sugary drinks at home; a higher proportion of adolescents of low maternal education reported that soft drinks, sports and energy drinks were always or usually available at home (MacFarlane et al. 2007). Siro et al. (2008) indicated that consumers with higher education levels are the main consumers of healthy foods in The U.S.A. and Europe. Kaur and Singh (2017) found that high education is associated with positive consumer behavior towards healthy foods. Saaksjarvi et al. (2009) found that consumers with university education obtain better results in knowledge of healthy foods than those of a lower level of education. For soft drinks, Boles et al. (2014) found that consumers with higher educational attainment were over twice as likely to speak to others after the awareness campaign about hazards of soda and sugary drinks. Soft drink consumption in 18-month-old children in the UK was associated with lower educational level of mothers (Northstone et al. 2002). The Food Standards Australia New Zealand (2003) found that among young adults, the highest consumers of sugar-sweetened soft drinks were those with no tertiary level education (Food Standards Australia New Zealand, 2003). This gives an indication that consumers who had more education can change their attitude towards soft drinks when being aware of their risks. Accordingly, the following hypothesis is proposed to be tested in the current study:

H7*: Customer's education moderates the relationship between health awareness and purchase attitude.*

2.8. Price Sensitivity and Purchase Attitude: Education as a Moderator

Sari (2011) found that consumers with only basic education level, compared with who have higher education level, were the most positive towards low food prices. However, despite the high price elasticity of demand for soft drinks, Andreyeva et al. (2010) did not find differences in responsiveness to prices according to some factors including education. Correspondingly, Powell et al. (2009) demonstrated no relationship between variation in sugar-sweetened beverages prices and respondents' consumption for any parental education group. On the contrary, Blackholer et al. (2016) found a difference between high school graduate and college graduate in consumption of sugar-sweetened beverage in responsiveness to price increase. The reduction in consumption was significantly higher in college graduate level of education compared to the high school level. Accordingly, the following hypothesis is proposed to be tested in the current study:

H8: *Consumer's education moderates the relationship between price sensitivity and purchase attitude.*

2.9. Health Awareness and Purchase Attitude: Income as a Moderator

Siro et al. (2008) indicated that consumers with higher income levels are the main consumers of healthy foods in The U.S.A. and Europe. Saaksjarvi et al. (2009) argued that people earning less than 10,000 euros a year have little knowledge about healthy foods, while knowledge of consumers earning more than 60,000 euros are higher. Higher socioeconomic group has a greater willingness or ability to pay a high price, as well to be aware of the benefits of the healthy foods (Hilliam, 1996; Siro et al., 2008; Saaksjarvi et al. 2009; IFT Institute of Food Technologist, 2014). The WHO collaborative cross-national study of health behaviors among school-aged children 2001–2002 showed a relationship between lower social-economic status, as determined by family income, and higher soft drink consumption across many European countries (Vereecken et al., 2005). High income is associated with positive consumer behavior towards healthy foods (Kaur and Singh, 2017). This means that high-income consumers have more interest in healthy food information (health awareness) that is reflected in their consumption. Accordingly, the following hypothesis is proposed to be tested in the current study:

H9*: Customer's income moderates the relationship between health awareness and purchase attitude.*

2.10. Price Sensitivity and Purchase Attitude: Income as a Moderator

According to Ndubisi and Moi (2006), the ability to purchase is a result of a consumer's income level, which influences their ability to buy goods and services. This means that better income implies higher chances

of purchasing. It also means that price increment affects low and middle-income earners more than high-income earners. Steptoe et al. (1995) found that the importance of low price is varied according to income. Thus, the price of a product or service has a direct impact on the consumer behaviors and attitudes. With price increment, consumers can either buy or reject a product (Armstrong and Kotler, 2010). A slight change in price causes great impact on low-income earners and would, therefore, mean decrease in their purchasing power. A price cut, on the contrary, leads to positive consumer behaviors for low-income earners (Arnould et al., 2002). Hilliam (1996) concluded that higher socioeconomic group has a greater willingness or ability to pay a high price, as well as a better knowledge of the benefits of the healthy foods. Guerrero-López et al. (2017) found that price elasticity of soft drinks differs with different income levels. Elasticity was higher with lower-income consumers compared to higher-income consumers. High-income consumers are less sensitive to changes in prices, and continue buying soft drinks. Other two studies by Colchero et al. (2015) and by Paraje (2016) revealed that population in lower income groups are more responsive to changes in price. Accordingly, the following hypothesis is proposed to be tested in the current study:

H10*: Customer income moderates the relationship between price sensitivity and purchase attitude.*

3. Sampling and Data Collection

Primary data was collected using a structured self-administered questionnaire made available through Google Forms format to be available on-line. Snowball sampling method was used. This method made the questionnaire's distribution very simple and fast. Hence, 865 completely valid filled questionnaires were received and eventually taken into statistical analysis. Table 1 shows frequencies and percentages of the sample respondents' characteristics categorized by age, gender, income, education and nationality.

Table 1*. Sample Characteristics*

Demographics		**Frequency**	**%**
Gender	Male	538	62.2
	Female	327	37.8
Age	< 18 years	74	8.6
	18 -25 years	236	27.3
	26 - 35 years	247	28.6
	36 - 45 years	155	17.9
	> than 45 years	153	17.7
Education	High school or less	173	20.0
	Diploma	88	10.2
	Bachelor	497	57.5
	Higher studies	107	12.4
Monthly income	0-5,999 SR	320	37.0
	6,000-9,999 SR	151	17.5
	10,000-14,999 SR	193	22.3
	15,000 SR and above	201	23.2
Nationality	Saudi	837	96.8
	Non- Saudi	28	3.2

4. Scales and Data Analysis

4.1. Scales

The study variables were measured by scales designed depending on the literature review of theoretical and empirical studies. The study used a single item scale to measure the independent variable of "price sensitivity", two-items scale to measure the dependent variable "Consumer's Purchase Attitude", four-items scale to measure "Consumer's Awareness". Each item was measured by a five- point Likert scale ranging from "5= Strongly Agree" to "1= Strongly Disagree" The study used categories to measure the remaining demographic moderating variables gender, age, education, and monthly income.

4.2. Data Analysis

Multiple linear regression is used to test all the study hypotheses. For the categorical variables that moderate the study relationships: gender, age, education, and income, all of them have been converted into dummy variables. Interaction between dummy variables and independent variables has been performed before doing the regression analysis for testing the moderating role of these variables. Large categories have been

taken as references when testing the demographic variables' moderation on the relationships. Significance of ANOVA is used because it provides a general information about the fitness of the proposed model. Analysis was performed using PSS version 24.0. For this research work, 5% level of significance which corresponds to 95% confidence interval is selected for this research work.

5. Findings

5.1. Validity Testing

The questionnaire, dependent variables, independent variable, moderator variables have been validated by professors as content validity from King Saud University- Department of Marketing. Therefore, some faculty members have provided their comments and suggestions. Then, the survey has been modified accordingly.

Factor analysis has been used to identify the validity of each variable's related items as shown in table 2. Confirmatory Factor Analysis (CFA) was conducted, using the principal component method and varimax rotation. The factor loading of all the items of the measures exceeded the threshold of 0.6 (Hair et al., 2006). The Cronbach's Alpha coefficients are also above the acceptable threshold of 0.6 (Malhotra, 2007). Those indices reflected valid and reliable scales for measuring the variables of the current study.

Table 2. *Validity and reliability testing*

Measurement Items	Factor Loading	Alpha
Health Awareness		0.760
I am aware that repetitive consumption of soft drinks increases the chance of having diabetes	0.751	
I am aware that repetitive consumption of soft drinks increases the chance of having obesity	0.712	
I am aware that repetitive consumption of soft drinks increases the chance of having cavities	0.721	
I am aware that repetitive consumption of soft drinks increases the chance of having heart diseases	0.803	
Purchase Attitude		0.787
I am against soft drinks pricing	0.866	
I will switch to substitute drinks such as juices due to increase in soft drinks prices	0.875	
Price Sensitivity		-
I decided not to buy soft drinks after their price increase	0.801	

5.2. Hypothesis Testing

5.2.1. Testing of H1 and H2

H1 states a negative relationship between health awareness and consumer's purchase attitude. H2 states a negative relationship between price sensitivity and consumer's purchase attitude. To test these hypotheses, multiple linear regression has been used as shown in table 3. The table shows total R square= 0.175, which implies that the two independent variables, health awareness and price sensitivity explain 17.5% of the change in consumer's purchase attitude of soft drinks. Health awareness explains 14.4% and price sensitivity explains 3.1%. The table also shows that F-value is significant, and B for each of the two independent variables is negative. This indicates the significant negative association of both health hazards awareness and price sensitivity with consumer's purchase attitude of soft drinks. Hence, H1 and H2 are upheld. And because the estimate B= -0.571 with health awareness, and B= -0.129 with price sensitivity, the predictability of heath awareness is higher than of price sensitivity on consumer's purchase attitude. Every one-unit increase in the product price brings about 0.129 decrease in the consumer purchase attitude, and every one-unit increase in health hazards awareness of soft drinks brings 0.571 decrease in consumer's purchase attitude, and vice versa.

Table 3. *H1, H2 Testing (Multiple Regression)*

Model	R	R^2	df	F	B
Health awareness	0.380	0.144	2,839	89.005**	-0.571**
Price sensitivity	0.418	0.175			-0.129**

Note: ** Marginally significant at $p \leq 0.05$

5.2.2. Testing of H3 and H4

H3 states that gender moderates the relationship between health awareness and consumer's purchase attitude, and H4 states that gender moderates the relationship between price sensitivity and purchase attitude. To test these hypotheses, multiple linear regression has been used as shown in table 4. The table shows the coefficient (B) for males in each of the two relationships. In H3, the coefficient (B) = 0.012 with a p-value=0.869, which is insignificant, meaning that gender does not moderate the relationship between health awareness and purchase attitude for soft drinks. Hence, H3 is rejected. In H4, the coefficient (B) = 0.003 with a p-value=0.869, which is insignificant, meaning that gender does not moderate the relationship between price sensitivity and purchase attitude for soft drinks. Hence, H4 is rejected.

Table 4. *H3, H4 Testing (Multiple Regression)*

Model	**Male (the female category is the reference)**	
	B	**P-value**
Health awareness → Purchase attitude	0.012	0.869
Price sensitivity → Purchase attitude	0.003	0.966

5.2.3. Testing of H5 and H6

H5 states that age moderates the relationship between health awareness and consumer's purchase attitude, and H6 states that age moderates the relationship between price sensitivity and purchase attitude. To test these hypotheses, multiple linear regression has been used as shown in table 5. The table shows the coefficient (B) for each age category in each of the two relationship. In H5, the coefficient (B) in all age categories is insignificant because P-value is greater than 0.05, meaning that age does not moderate the relationship between health awareness and purchase attitude for soft drinks. Hence, H5 is rejected. In H6, the coefficient (B) in each of age categories is insignificant, meaning that age does not moderate the relationship between price sensitivity and purchase attitude for soft drinks. Hence, H6 is rejected.

Table 5. *H5, H6 Testing (Multiple Regression)*

Model	**Age (26-35 years category is the reference)**							
	Under 18 years old		**18-25 years old**		**36-45 years old**		**Above 45 years old**	
	B	**P-value**	**B**	**P-value**	**B**	**P-value**	**B**	**P-value**
Health awareness → Purchase attitude	-0.022	0.871	-0.111	0.283	-0.069	0.541	-0.032	0.763
Price sensitivity → Purchase attitude	0.191	0.195	0.001	0.994	-0.130	0.258	-0.161	0.160

5.2.4. Testing of H7 and H8

H7 states that education moderates the relationship between health awareness and consumer's purchase attitude, and H8 states that education moderates the relationship between price sensitivity and purchase attitude. To test these hypotheses, multiple linear regression has been used as shown in table 6. The table shows the coefficient (B) for each education category in each of the two relationships. In H7, the coefficient (B) in all education categories is insignificant because P-value is greater than 0.05. This means that education does not moderate the relationship between health awareness and purchase attitude for soft drinks. Hence, H7 is rejected. In H8, the coefficient (B) in each of education category is insignificant. Education does not moderate the relationship between price sensitivity and purchase attitude for soft drinks. Hence, H8 is rejected.

Table 6. *H7, H8 Testing (Multiple Regression)*

Model	**Education - (Bachelor category is the reference)**					
	High School and less		**Diploma**		**Higher studies**	
	B	**P-value**	**B**	**P-value**	**B**	**P-value**
Health awareness → Purchase attitude	-0.057	0.548	-0.165	0.235	-0.192	0.073
Price sensitivity → Purchase attitude	0.112	0.2	-0.163	0.216	-0.020	0.871

5.2.5. Testing of H9 and H10

H9 states that monthly income moderates the relationship between health awareness and consumer's purchase attitude, and H10 states that monthly income moderates the relationship between price sensitivity and purchase attitude. To test these hypotheses, multiple linear regression has been used as shown in table 7. The table shows the coefficient (B) for each income category in each of the two relationships. In H9, the coefficient

(B) in all income categories is insignificant because P-value is greater than 0.05. This means that income does not moderate the relationship between health awareness and purchase attitude for soft drinks. Hence, H9 is rejected. In H10, the coefficient (B) in each of income category is insignificant because P-value is greater than 0.05. So, income does not moderate the relationship between price sensitivity and purchase attitude for soft drinks. Hence, H10 is rejected.

Table 7. *H9, H10 Testing (Multiple Regression)*

Model	**Monthly income (less the S.R 6000 (approx. 6000 USD) category is the reference)**					
	S.R 6000< 10000		**S.R 10000< 15000**		**S.R 15000 and above**	
	B	**P-value**	**B**	**P-value**	**B**	**P-value**
Health awareness → Purchase attitude	-0.149	0.201	0.176	.059	-.050	.607
Price sensitivity→ Purchase attitude	-0.185	0.091	0.049	.634	-.074	.473

Note: S.R 6000 = approx. 1600 USD; S.R 10000 = approx. 2667 USD; S.R 15000 = approx. 4000 USD

6. Discussion

The study has found an inverse relationship between consumer's awareness of hazards of soft drinks and consumer's purchase attitude. This result validates the results of Gour et al. (2010); Boles et al. (2014), and Barragan et al. (2014). This results make sense because there is a growing awareness of health among consumers in the world and in Saudi as well. That explain the tax on soft drinks and other hazards drinks in Saudi. However, the consumers' gender, age, and education do not affect consumers' purchase intention to soft drinks.

The study also has found an inverse relationship between soft drinks price and consumer's purchase attitude, validating the study findings by Prakash and Pathak (2014), Ashok and Rakesh (2016), and Guerrero-López et al. (2017). This might be attributed to the nature of soft drinks as hedonic products (Roininen, Lähteenmäki, and Tuorila (1999). Consumers seems responsive to the increase in prices. The consumers seem they have shifted to the other alternatives such as bottled water and juices. That explain that bottled water is the most consumed beverages in the U.S. with 39.3 gallons per capita in 2016 (compare to 38.5 gallons per capita for soft drinks) (Reuters, 2017). Therefore, consumers shift to other alternatives when the price change which means the price is elastic for soft drinks.

The study has found that demographic variables (e.g., gender, age, and education) do not significantly moderate the negative association of both hazard awareness of soft drinks and price sensitivity with consumer's purchase attitude. This might be attributed to the fact that consumers in all levels of socioeconomic statues drink soft drink because it been offered in most occasion due to the accessibility of the product. This finding contradict common wisdom that consumers with higher income and education will drink less soft drinks. This validates the study findings by Armstrong et al. (2010). This might be attributed to the fact that soft drinks prices are considered to be acceptable compare to other drinks such as fresh juices in the Saudi market even after their price increase. So, 50% increase in soft drinks prices in Saudi Arabia represents only SAR 1.5 ($ 0.40) which is very much affordable by almost all income classes, taking into account the high purchasing power of consumers in the Saudi Arabian market. This means that the inverse relationship between price sensitivity and purchase attitude is not moderated by income.

6.1. Implications

This study presents several managerial implications. Based on the study findings, soft drinks marketers should pay attention to the increase of consumers' health awareness. Healthier products (e.g., fresh juices, vitamin drinks) are needed be developed and marketed to consumers to increase sales and market shares. This study would help marketers to segment the market based on perceived value. Drinks with more health benefit would be more appealed to consumers with high health awareness. Thus, the Saudi market need healthier drinks such as no carbonated soft drinks, vitamin drinks, and fresh juices.

The prices of soft drinks should be perceived as acceptable and marketer can achieve that by normalizing the price among peers and friends. Adoption of social media marketing is important in this regard. Saudis are the most penetrating users of Twitter in the world (Albalawi and Sixsmith, 2015). In addition, soft drinks price increase should be considered very carefully since it significantly influences the consumers' purchase attitude negatively. Hence, soft drinks' pricing strategy should be considered as critical to the purchase attitude. Marketers should do best to keep the price stable even with external constraints such as

taxes. Also, marketers should work to optimize the soft drinks cost structure to prevent the price increase in future if they would like to maintain the market share stable.

Finally, marketers can neglect factors of consumer's gender, age, education, and income, since the study does not find significant moderating role of those variables on the price-attitude relationship and awareness-attitude relationship. Soft drinks are a type of product that is used by most of the people in the market. Hence, the undifferentiated targeting strategy in suitable for most people in this market concerning those variables.

6.2. Limitation and Future Research

The study questionnaire was distributed among Arabic speakers in Saudi Arabia without the population who don't speak Arabic which represent more than 15% of Saudi Arabia population. Moreover, the research only studied the awareness of hazards and price sensitivity of soft drinks. More research could be done looking for other predictors of soft drinks' purchase attitude. Hence, the study recommends future research to identify more variables that significantly contributes and determines the consumer's purchase attitude. The study also studied the role of some demographic variables that proved to be insignificant on the studied relationship. Benefit sought is one of other variables that is expected to have a moderating role on the studied relationship and may be studied in future research, hence needs to be considered as a moderating variable in future research to know whether it is a good base for market segmentation and targeting.

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