

# Exploring Factors Affecting Young Jordanian Consumers Attitude towards Energy Drinks Consumption

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## Abstract

The energy drinks market is witnessing a massive increase in terms of sales volume all over the world. Understanding factors that affect consumers' behavior in the energy drinks market can be very beneficial for marketing managers in many areas. This research will explore the influence of perceived benefits, knowledge, energy drink attributes, and reference groups on young Jordanian consumers' attitudes towards energy drinks consumption. Also, it will highlight the consumption patterns of energy drinks in the Jordanian market. A quantitative research method was employed to answer the research questions, and a questionnaire was distributed to solicit the required data from respondents. To collect the necessary data, the researcher used convenience random sampling; about 302 questionnaires were completed and used in data analysis. Results show that young Jordanian consumers' attitude is positive and relatively moderate. Price emerged as the most important attribute for energy drinks, and among the reference group, peer influence was the highest among other groups. Staying awake to study statement emerged as the main perceived benefit. Regression analysis results confirmed that perceived benefits, energy drinks attributes, and reference groups have a significant effect on young Jordanian consumers' attitudes, while knowledge shows no significant effect. For future research, we recommend researching on how to de-market energy drinks.

**Keywords:** Energy Drinks, Young Consumers, Knowledge, Reference Groups, Attitude, Perceived Benefits, Jordan.

## 1.0 Introduction

The term energy drinks (EDs) stands for a wide assortment of beverages that usually contain caffeine, taurine, proprietary blends, herbal extracts, vitamins, and amino acids, and are marketed to boost mental alertness and physical stamina (Higgins et al., 2018). From this

definition, it is clear that EDs are different from regular juice in terms of containing ingredients which are not found in other regular drinks such as high levels of caffeine mixed with supplementary ingredients (Faris, 2014). In the past two decades, there has been a tremendous interest in this product, and people became more aware of it due to the intense advertisement campaigns in traditional and social media. Breda et al., (2014) assert that 80% of secondary school students and athletes are consuming EDs frequently to help enhance their performance.

Since its inception, EDs producers continue to market different brands to children and adolescents (Schneider and Benhamin, 2011). Heckman et al. (2010) also asserted that EDs companies target youth at college and university level as well as athletes and consider them as the most attractive segment. According to Allied Market Research, global EDs sales reached \$53.01 billion in 2018 and were expected to rise by 7.20% to hit \$86.1 billion by 2026 (Amy, 2020). In 2018, they found that the adult segment dominated the overall end-user market and during the same forecast period, the compound annual growth rate (CAGR) is expected to grow at 6.70% while the children's segment is projected to increase to a significant CAGR of 6.10%.

Due to this substantial growth of the food and beverage industry worldwide, marketing scholars devote a great deal of attention to study this tremendous market to design appropriate marketing strategies. This increased attention can be attributed to the increase in global market competition through innovations and the launch of new brands as well as consumers' growing interest in health and food safety. In addition to that, extensive promotion campaigns are very influential in increasing the popularity of EDs by magnetizing children and young consumers' attention towards EDs as products that boost energy, improve physical performance, and mental awareness. On the other hand, much research shows that EDs have negative consequences on young consumer's health in the short and long term (Al-Shaar et al., 2017). The most frequently reported side effects on consumers include dizziness, abdominal pain, vomiting, headaches, nervousness, insomnia, redness of the skin, and frequent urination (Alford et al., 2011; Itany et al., 2014; Jones et al., 2012; Utter et al., 2018).

In Jordan, there was a lack of research available on Eds as most available conducted research was on soft drinks. The other research did not bring up any information about the factors that may affect youth consumers' attitudes towards EDs (Al-Shibly et al., 2020). There are two purpose of this research; first is to shed light on EDs consumption

among young consumers, and secondly, to explore the main essential factors that affect young consumers' attitudes in the Jordanian market. The current study will help in answering the following questions:

- Q1) What are the consumption patterns of EDs among young consumers in Jordan?
- Q2) What is the attitude among young consumers towards EDs in Jordan?
- Q3) What factors affect young consumers towards EDs in Jordan?

## **2.0 Literature and Hypotheses**

EDs are recognized as a global phenomenon. This fact is attributed to the high spread of these products in markets all over the world. Many researchers have tackled this important product from different perspectives in western and Arab countries. Mainstream research was conducted in the USA (Higgins et al., 2018), Canada (Jessica et al., 2017), New Zealand (Utter et al., 2018), Lebanon, (Ghozayel et al., 2020), Saudi Arabia (Abrar et al., 2020, Musaiger and Zagzoog, 2014), Malaysia (Sudarmawan et al., 2016) and Jordan (Al-Shibly et al., 2020). Some researchers attempt to explore the health concerns and risk behavior of EDs on young consumers (Itany et al., 2014), while other researchers focused on various factors affecting purchase patterns of EDs (Jessica et al., 2017). Another division of researchers focused on consumption patterns of EDs (Buchanan and Ickes, 2015). Scarce research conducted on the Jordanian market focused on medical students' consumption habits of caffeinated – beverages (Saadeh, 2019). Another study was conducted by Al-Shibly et al. (2020) who investigate how de-marketing can reduce Jordanian youth consumption of EDs, but to the contrary, research result shows that marketing still plays a very important role in the diffusion of EDs (Al-Shibly et al., 2020). In this current research, the aim will be to explore the various factors that affect young Jordanian consumers' attitudes towards EDs. Previous research shows that factors pool that may affect consumers include cultural, social, psychological, personal, and demographics (Ghozayel et al., 2020). Our aim in this research is to explore the most related and relevant factors that have a direct effect on Jordanian consumers' attitudes towards EDs. After a vigilant review of previous research, four main factors emerged to be very relevant and influential in affecting the attitudes of consumers associated with EDs. Those factors are; perceived benefits, knowledge, ED attributes,

and reference groups. In this section, we will demonstrate relevant literature for all variables and propose a hypothesis accordingly.

Product attributes are considered a milestone in the success of any product. Product attributes include quality, size, color, flavor, package type, components, and features that affect the consumer's ultimate purchase decision (Chowdhary and Ryan, 2003). If the product possesses a unique attribute as a competitive advantage, this will help not only in attracting customers but also in dominating the whole market. EDs have many attributes mentioned in previous research. For example, McLellan and Lieberman (2012) and Gallimberti et al. (2013) found that the most common benefit of EDs was enhancing physical and mental performance. Another benefit stated by Alford et al. (2001) and Azgaba et al. (2014) was improving alertness, mood, and concentration levels, while Itany et al. (2014) found that it promotes the feeling of pleasure. Research by Musaiger and Zagzoog (2014) show that EDs are very useful in obtaining energy. A recent study by Visram et al. (2016) asserted that Eds use support a more active and healthier lifestyle. Finally, Ghozayel et al. (2020) conducted a focus group discussion on individual factors that affected their EDs consumption behavior and they found that the perceived benefits of EDs are an essential factor affecting consumer behavior. Based on that, the following hypothesis is proposed:

- H1. There is a significant influence of perceived benefits on consumers' attitudes towards EDs consumption.

Knowledge is a critical factor in affecting consumers' attitudes. Usually, consumers collect information about products to enhance the level of their knowledge regarding different features to facilitate decision making. Many studies focused on knowledge influence on EDs consumers (Buchanan and Ickes, 2015; Visram et al., 2016). Musaiger and Zagzoog (2014) investigated the relationship between knowledge, attitude, and the level of EDs consumption among teenagers aged 12–19 years in Saudi Arabia. Fifty percent of teenagers did not know what the main ingredients in EDs are and that they contain caffeine. About 67% of the sample believed that EDs are the same as soft drinks. Jacob et al. (2013) conducted a cross-sectional study in the UAE on medical students which shows that (95%) of the respondents were unaware that EDs contain caffeine. Study by Aluqmany et al. (2011) reached the same results which confirm that

69.6% of the study sample did not know what the active ingredients are. Visram et al. (2016) found that knowledge about possible harmful effects of EDs was low. Ghozayel et al. (2020) found that caffeine and sugar were the most known ingredients of ED. They found some differences in the knowledge level between males and females. Abrar et al. (2020) found that the overall percentage of knowledge scores about EDs by female students at the health sciences colleges was poor as only 0.7% had good knowledge. Abrar et al. (2020) found that students who consume EDs were significantly more knowledgeable regarding the contents of EDs compared to those who did not consume EDs. Based on that, the following hypothesis is proposed:

H2. There is a significant influence of knowledge on consumers' attitudes towards EDs consumption.

Paper by Al-Shibly et al. (2020) explored EDs patterns in Jordan. The survey indicated that 63.2% of the sample finds that the external package of EDs to be attractive and inviting to customers. Results also show that the price of EDs has no significant impact on consumption. Study by Visram et al. (2016) showed that taste and energy seeking are considered as the main motives while branding and marketing are identified as the major influence on young people's consumption choices. Jennifer et al., (2016) found that price sensitivity influences consumer demand for EDs. An increase in EDs prices will reduce the purchase of EDs and increase the purchase of other caffeinated beverages among EDs consumers. Sudarmawan et al. (2016) found that brand name and quality have a positive relationship with the Muslim consumer's attitude towards soft drink. The finding also suggests that quality plays a dominant role in influencing a consumer's attitudes. The same results emerged in a study by Ghozayel et al. (2020) that show that participants favored the foreign brands and perceived them as more compelling and of higher quality. Also, they emphasized that the general availability of EDs throughout the Lebanese market increased the ease of access and consumption of these beverages. Based on that, we will propose the following hypothesis:

H3. There is a significant influence of ED attributes on consumers' attitudes towards EDs consumption.

Shahzad et al. (2015) confirmed that consumers' socialization is an influence on the drinking behavior of consumers. Consumer social groups like family, friends, and other reference groups play a vital role in consumption behavior (Bogueva et al., 2017). Among one of the most important social factors is reference groups. A reference group is a group that inspires consumers to follow or symbolize the way of behavior (Al-Jeraisy, 2008). According to Gillani (2012), the opinions of customers can be affected by their compliance with the reference groups. Alsunni and Badar (2011) noted that friends were the main stimulus of the first use of EDs. Barber et al. (2010) asserted that most consumers consume EDs with friends, family, and co-workers. Sudarmawan et al. (2016) found that peer pressure has a positive relationship with the Muslim consumer's attitude towards soft drink. Based on that, we will propose the following hypothesis:

H4. There is a significant influence of reference groups on consumers' attitudes towards EDs consumption.

### 3.0 Research Model

As per the literature review presented above, the research will propose Model (1) to postulate the relationship between the different variables used in this research.

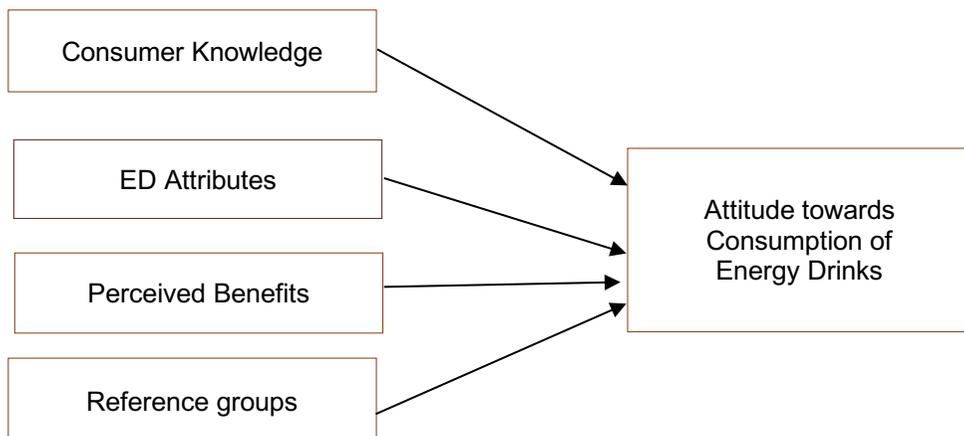


Figure 1 : Research Model

### 4.0 Research Methodology

Since this study is descriptive and exploratory, a quantitative method used to solicit data from the study sample to answer the

research questions. A self-administrated questionnaire was designed by previous authors and contains questions about the variables used in this study to test the effect of the independent variables on the dependent variable. The first section of the questionnaire contains questions on respondent demographics. The second section contains questions about EDs consumption patterns. The last section contains a total of 31 questions to measure independent and dependent variables using 5 Likert-type scales ranging from 1=strongly Disagree to 5= strongly Agree. It is highly critical to note that in designing the questionnaire, we have adopted questions from various previous research. The reference groups were adopted from Shahzad (2019), perceived benefits from Ghozayel et al. (2020), Jessica et al. (2017), and Alsunni and Badar (2011). We adopted ED knowledge from Abrar et al. (2020). The questionnaire is present in appendix 1. The sample is made up of students from two private high schools and two private universities in Amman city. The researcher used the convenience random sampling method to assure a variety of students are represented in the sample. Before distributing the questionnaire, the researcher ensures that students consumed EDs at least once within the last three months and those who has never consume any EDs were excluded. Out of 400 questionnaires distributed, 342 were returned but only 302 questionnaires were completed and used in data analysis. SPSS version 22 was used in analyzing the data and as a starting point, we checked the reliability of the questionnaire to evaluate its internal consistency via Cronbach's alpha. The results of Cronbach's alpha were as follows; perceived benefits was 0.771, consumer knowledge was 0.812, EDs attributes was 0.799, reference groups was 0.810, and attitude towards EDs was 0.742. All of them are above the minimum accepted threshold (0.70) as noted by Hair et al. (2014).

## **5.0 Results**

302 questionnaires were used in the final data analysis. Descriptive results show that male respondents were 64.6 % of the total sample while females show a lower percentage with only 35.4 %. Concerning the age of the respondents, about 56.2 % were between 21-25 years old while the remaining 44.8% were between 15-20 years old. Half of the respondents (50%) are in high school while 44.0% are undergraduate students and only 6.0% are studying at a postgraduate level. Regarding family income, the highest percentage was

respondents coming from high income households as 33.4% of the respondents come from households with incomes higher than 1501 JD. About 32.8% of the respondents belong to the higher-middle class with household incomes between 1001-1500JD. Only 13.9% of the respondents belong to the lower division with household incomes less than 500JD. Table 1 shows the respondent demographics.

Table 1 : Respondents Characteristics

	<b>Frequency</b>	<b>100%</b>
<b>Gender</b>		
Male	195	64.6 %
Female	107	35.4 %
<b>Age</b>		
15- 20 years old	133	44.8 %
21 – 25 years old	169	56.2 %
<b>Education</b>		
High school	151	50.0 %
Bachelor degree	133	44.0 %
Masters degree	18	6.0 %
<b>Monthly Household Income</b>		
Less than 500 JD	42	13.9 %
From 501 - 1001 JD	60	19.9 %
From 1001 - 1500 JD	99	32.8 %
More than 1501JD	101	33.4 %
<b>Sum</b>	<b>302</b>	<b>100%</b>

As an answer to the first research question regarding EDs consumption patterns among young consumers in Jordan, this study show that more than half of the respondents (52.3%) who consumed EDs are between 15 – 18 years old and this is consider considered as too young to consume such products. About 33.7% started drinking EDs between 10 – 14 years old and this can be very damaging and harmful for consumers at such early age. As per consumption frequency, results show that young consumer's consumption is moderate as only 29.1% of the respondents mentioned that they consume EDs daily, while only 12.9 % consume it twice a day. For 34.8% of consumers, social gatherings with friends such as parties were the most commonplace for EDs consumption. School and university were among the favorite places where students consume EDs despite the restriction imposed by the Ministry of Education in

Jordan. The gym is another important place that can persuade the consumer to consume EDs in order to enhance physical performance.

Table 2 : EDs Consumption Patterns

	Frequency.	100%
<b>The first time I used energy drinks, my age was:</b>		
10 -14 years old	102	33.7 %
15 – 18 years old	158	52.3 %
Above 18 years old	42	13.9 %
<b>Consumption frequency:</b>		
Once a day	88	29.1 %
Twice a day	39	12.9 %
1 - 2 per week	64	21.1%
3 – 5 per week	32	10.5%
1 – 5 per month	79	26.2%
<b>Location of consumption:</b>		
At school/university	78	25.8 %
At restaurant	41	13.5 %
At the gym	43	14.2 %
At home	35	11.6 %
Social Gathering With Friends	105	34.8 %

The second research question is what is the attitude among young consumers towards EDs in Jordan. To answer this question, the means for all factors are calculated as shown in table 3. The total mean for overall factors shows that the perceived benefits factor received the highest mean among all other factors with 3.90. This high mean is attributed to the different benefits that young consumers believe they will get from consuming EDs, and therefore young consumers generate a positive attitude towards EDs. For example, the second sentence (To stay awake for studying) received the highest mean among all other questions with a 4.31 mean. Staying awake can be a very significant benefit that young consumers are looking for to cope with different tasks such as study, work, and play. In the second position, knowledge received the highest mean after perceived benefits with 3.69. Consumer knowledge about EDs is essential since it contains ingredients different from soft drinks and consuming high quantity may cause many side effects on consumer health. EDs attributes received the third position with 3.55 mean. Attributes such price, quality, and packaging hold a high significance for consumers when it pertains to

EDs. In the fourth position, reference groups received 3.08 mean with peers having more influence towards the consumption of EDs. The final and most important item is the attitude towards EDs. The overall mean for the attitude variable is 3.02, and since we used a 5-Likert scale, the mean is slightly above the accepted average of 3.00 and is considered as positive and relatively moderate.

Table 3 : Mean of items

Items	Mean	Items	Mean	Items	Mean	Items	Mean	Items	Mean
Pb1	3.91	kow1	3.75	EDattrib1	3.67	Refgroup1	3.49	Atti1	3.11
Pb2	4.31	kow2	3.71	EDattrib2	3.56	Refgroup2	3.24	Atti2	3.09
Pb3	3.95	kow3	3.66	EDattrib3	3.55	Refgroup3	3.15	Atti3	3.00
Pb4	3.74	kow4	3.74	EDattrib4	3.52	Refgroup4	2.98	Atti4	2.94
Pb5	3.75	kow5	3.63	EDattrib5	3.65	Refgroup5	2.88	Atti5	2.96
Pb6	3.74	kow6	3.68	EDattrib6	3.59	Refgroup6	2.75	Atti6	3.13
				EDattrib7	3.50			Atti7	2.95
Total	3.90	Total	3.69	Total	3.55	Total	3.08	Total	3.02

## 6.0 Testing the Hypotheses

To test the proposed hypotheses and to answer the third question, regression analysis is the most suitable method of analysis. As previously noted and based on literature, we hypothesized that perceived benefits, knowledge, EDs attributes, and reference groups will affect young Jordanian consumers' attitudes towards EDs. After conducting the multiple regression analysis, results are exhibited in Table 4. The model summary shows that the R-squared value is 0.51, and the F-value is 77.81 with a significance level of 0.00. We can presume that the regression models predict young consumers' attitudes towards EDs significantly well. The collinearity statistics for variance inflation factor (VIF) was under the commonly used cut-off point of 10 with the highest value of 2.0 (Belsley et al., 1980) thus confirming the absence of multi-collinearity in the data. The Durbin-Watson coefficient was 1.939 which confirms that error terms were not correlated. We can observe from Table 5 that perceived benefits (beta = -.140-,  $p < .005$ ), EDs attributes, (beta = -.143-,  $p < .002$ ), and reference groups (beta = .735,  $p < .000$ ) have significant effect on young Jordanian consumers' attitudes towards EDs. Based on that, we accept H1, H3, and H4, while knowledge was found to not be significant (beta = .042,  $p < .401$ ) and as such, H2 was rejected.

Table 4 : Model Summary

R	R-squared	Adjusted R-squared	F	Sig.
.715 <sup>a</sup>	.512	.505	77.815	.000

a. Predictors: (Constant), reference group, knowledge, ED Attribute, Perceived benefits

Table 5 : Regression Analysis results

Model		Coefficients <sup>a</sup>				
		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.632	.214		7.625	.000
	Per benefits	-.147-	.052	-.140-	-2.827-	.005
	Con knowledge	.041	.049	.042	.841	.401
	ED Attribute	-.149-	.048	-.143-	-3.090-	.002
	Reference group	.611	.035	.735	17.309	.000

a. Dependent Variable: Attitude towards ED

## 7.0 Discussion

EDs consumption is increasing all over the world. This research is among the earliest in discovering EDs consumption patterns in the Jordanian market. We tried to explore the factors that influence young Jordanian consumers' attitudes towards EDs as well. Many appealing results were revealed from this research.

Descriptive data show that price was the most critical attribute among others, and peers influence was higher than any other reference groups. Meanwhile, for perceived benefits, the statement to stay awake for studying received the highest mean among all other items with 4.31. This result is in line with findings from Alsunni and Badar (2011). Young consumers perceive EDs as important in improving sports performance or physical activity with 3.95, while the statement to stay awake or alert received 3.91. Generally, the image of EDs is perceived as a source of stamina. This is attributed to the fact that people suffer from an inactive lifestyle in the Middle East. Descriptive data revealed that while more than 75% percent of respondents recognized that EDs ingredients include caffeine and sugar, we assume that young consumers do not truly realize the severe consequences and side effects of EDs on health. The government agencies and other nonprofit organizations should carry out educational campaigns to educate and inform young consumers

regarding the unfavorable effects of these products as well as about safe consumption. Young consumers need to be able to differentiate between soft drinks, soda, and EDs. It is necessary to mention EDs ingredients in obvious labeling form with all ingredients presented along with its potential harms. Again, price and advertisement emerged as the most significant attributes. This is in line with studies by Jennifer et al., (2016) and Visram et al., (2016). Most of the respondents are still students, and price can be very important in influencing this nonworking segment of consumers. It is noteworthy to say that advertisement to vulnerable adolescents (14-18 years old) is considered unethical. In many countries, such as Saudi Arabia, the government decided to ban the advertisement of EDs (Abrar et al., 2020). The overall attitude of respondents towards EDs consumption was moderate and this was reflected by a moderate frequency of consumption. Consumers exhibited a moderate level of knowledge regarding ingredients found in EDs.

Multiple regression results revealed that perceived benefits, EDs attributes, and reference groups have a significant influence on Jordanian consumers' attitudes towards EDs while knowledge shows no significant influence. The R-value was 0.715, whereas the R-squared value was 0.512. This means that 0.512 of young Jordanian consumers' attitudes towards EDs' changeability is a result of the changeability in the four independent variables.

The results of multiple regression analysis show that perceived benefits ( $\beta = -.140$ ,  $p < .005$ ) have a significant effect on young Jordanian consumers' attitudes towards EDs. This result is in line with Alsunni and Badar (2011) and Ghazayel et al. (2020). With regards to EDs attributes, the results also confirmed that EDs attributes have a significant effect on young Jordanian consumers' attitudes towards EDs ( $\beta = -.143$ ,  $p < .002$ ). This result is in line with Niraj & Subhajyoti (2018) and Jennifer et al. (2016). As for reference groups, results show a significant effect for reference groups on young Jordanian consumers' attitudes towards EDs ( $\beta = .735$ ,  $p < .000$ ). This result is in line with Shahzad et al., (2019) and Ghazayel et al. (2020). Knowledge was found to be not significant ( $\beta = .042$ ,  $p < .401$ ) and hence, H2 was rejected. This result is in line with Aljaloud (2016), Alhyas et al. (2015), and Shahzad et al. (2019) and is contrary to results found by Abrar et al. (2020).

## 8.0 Conclusion

The findings of this study show that students are consuming EDs regularly with at least 42% consuming EDs daily. The perceived benefits, reference groups, and ED attributes have a significant effect on young Jordanian consumers' attitudes towards EDs. Public health institutions should strive to educate and inform students about the possible negative side effects of EDs, curb the growing consumption phenomenon by university students, and encourage them to follow a healthier lifestyle. Consumers' awareness can force companies to launch newer and healthier products with low sugar and less caffeine. Finally, results show that reference groups also influence young consumers who prefer to consume EDs during social gatherings with friends, with guests, at school or university, and in restaurants. Marketers should position their products as suitable with special occasions. Finally, for future research, it is highly recommended to investigate other important social and personal factors such as level of education, personality traits, religiosity, and the role of advertisement.

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## Appendix 1

Questionnaire

No		1	2	3	4	5
	<i>Perceived Benefits</i>					
1	To stay awake or alert (preventing sleep)					
2	To stay awake for studying					
3	To improve sports performance or physical activity					
4	For more energy					
5	Increase my concentration					
6	Improve emotional status					
	<i>Consumer Knowledge</i>					
7	I know all the ingredients of energy drinks					
8	I know that EDs contain caffeine					

9	Ingredients of EDs are the same as soft drink					
10	I know that EDs contain sugar					
11	I know the effect of EDs on body organs/system					
12	I know that EDs can cause some side effects such as addiction, allergy and obesity.					
	<i>ED Attributes</i>					
13	The price of energy drink fits with my budget.					
14	I buy only high quality of energy drink brands					
15	I will buy only the well-known brand.					
16	Availability in all outlets make it easy for me to buy ED					
17	The advertising of energy drink is attractive					
18	The package of energy drink influences me to buy.					
19	I choose only imported brands of ED					
	<i>Reference groups</i>					
20	My peers encouraged me to buy energy drinks					
21	I obtained EDs information from my peers					
22	I asked my peers for advice about energy drinks					
23	I drink EDs because my colleagues drink them					
24	I drink EDs because my family members drink them					
25	My peers encouraged me not to buy these products					
	<i>Attitude towards Energy Drinks</i>					
26	EDs are cool					
27	EDs provide me with self confidence					
28	I like trying new products, that's why I drink energy drinks					
29	I strongly recommend EDs for my friends					
30	EDs are good for health					
31	EDs mean youth and strength					
32	I like the taste of energy drinks					