



# The Impact of De-marketing in Reducing Jordanian Youth Consumption of Energy Drinks

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**Abstract.** This paper explores the world of energy drinks and its negative effects on the youth and how to de-market it, the study uses a quantitative method to evaluate the impacts of consuming energy drinks among minors and the youth, in this paper we distributed surveys on the targeted sample who are the youth of Jordan and got back some very interesting results, the results of the surveys were analyzed thoroughly using the latest mathematical analyzing methods and software to give out a clear big picture of what is happening in reality with the consumers of energy drinks from the youth. the results that we arrived to showed some trends that are worrying which require immediate actions before the issues go out of hand, and for the sake of countering and solving these issues we made a list of applicable recommendations that we found best at the end of the paper to act as a starting point to apply measures to solve the issues at hand in order to save the society from a danger they are unaware of, and help preserve the health of youth.

**Keywords:** De-marketing · Anti-marketing energy drinks · Counter marketing energy drinks · Effects of energy drinks · Youth consumption

## 1 Introduction

In the recent years, a new product invaded the markets as well as the minds of the young generation which resembled a new form of addiction. It is believed to have a mystic influence on the performance of these people; it is energy drinks (ED) in its various forms and tastes. Not only teenagers and school students have this blind belief

in the effects of this product, but also their parents, who whenever they feel their children are getting weak and incapable of performing well, especially during exams time, they immediately rush to the nearest supermarket and buy a pack of ED for their children hoping it will affect their energy immediately and help them perform better. This is blind ignorance of the real effect that such products may have on those young vulnerable creatures. In fact, those parents are not aware of the dangers they are exposing their children and teenagers to. ED only have the word energy in its name but no real energy, and in fact they have adverse effect, in the sense that they negatively affect the health of those who drink it and specifically it's more harmful to the youth [1–3]. In order to evaluate a certain product, we have to analyze its ingredients and study the scientific effects it has on its consumers [4]. Also we have to make a scientific survey confirming to the results of some study cases which are made in various parts of the world conducted by reliable and nonbiased parties to evaluate such product [5]. The manufacturers of ED will try to convince the consumers of the advantages such products promise to provide them with. Those who are against the product will try to point out the negative aspects of such products. All that we need is to analyze certain studies and researches conducted all around the world, to evaluate the impact of the consumption of these goods [6, 7]. We will try to include in our survey such studies and the results of such research so that we can judge such product and either advise people to use it or render them aware of the dangers of consuming it. We will try to explain the dangers of each serving and of multiple servings. The study will also tackle the effects of combining ED with other products such as ethanol or alcohol, because these days, consumers are keen on obtaining a double effect by combining ED with alcohol or ethanol.

People are used to drink soft drinks as a refreshment or a softener after a heavy meal to provide them with relief, the most famous of them are Colas and other gaseous drinks. However, in the past twenty years or so, ED have started to invade the markets with a strong force and they made their way easily in the hearts and minds of young generations [8, 9]. The new product has been described to have magical powers of boosting their energy every time they consume it. Life has changed a lot and younger generations seem to be weak and fragile, and their weakness augmented with the consumption of unhealthy food such as fast and junk foods, unlike previous generations who were used to consume more natural food ingredients. As a result, a special need for energy boosting products arose and consequently those products came to fill the new gap in their lives [10]. According to recent studies and analysis of ED, it was found that these ED contain high portions of sugar and caffeine, two product that give some sort of weak energy, the sugar and the caffeine serves to keep the consumers alert and awake. They try to include also other herbal ingredients and certain vitamins to give the impression that they contain [12] everything people need to stay energetic and awake. Moreover, Colas soft drinks also contain a good quantity of caffeine and sugar along with many other ingredients and they never dared to say that their products are ED [12, 13]. It seems that the producers of ED have built their theory on the psychological effect of calling their product energy drinks and they have succeeded in planting this illusion in the minds of youth consumers [14, 15].

## 2 Paper Hypotheses

H1: There is no significant impact of De-Marketing strategies on youth consumption of energy drinks.

H2: The price of product has no significant effect on youth consumption of energy drinks and psychological variables.

H3: Type of product has no significant effect on youth consumption of energy drinks.

H4: The distribution channel has no significant effect on youth consumption of energy drinks.

H5: The promotion has no significant effect on youth consumption of energy drinks and psychological variables (Fig. 1).

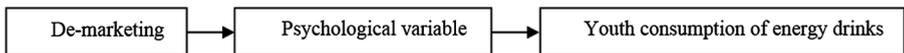


Fig. 1. Research model

## 3 Literature Review

Social marketing focuses greatly on fear appeals to discourage people from carrying on with a bad habit they are getting used to, It also affects their habits, mental and attitudes, and the most important of which is social media [4, 11, 15–18]. Thus, the second phase of our anti-marketing campaign is to show the consumers of ED the negative effects these brands and products can have on them. As previously mentioned in this paper it is important to tackle the adverse impacts on the health of the consumer, stating some factual information about study cases from all over the world about, not only the side effect of these products, but also about the dangers resulting from their consumption as well as the overdoses when wrongly consumed by ignorant people who think the more they take, the stronger they become [19]. ED are originally products which will hopefully provide people with energy to help them perform certain tasks or keep them awake and alert in certain situations such as exam times. Unfortunately, people are not often aware of the health dangers that come with their consumption [20].

### 3.1 Health Issues Caused by Energy Drinks

According to a recent medical paper, it has been discovered that the caffeine included in ED is absorbed within 30–35 min, and then it is metabolized in the liver to produce its desired effect [21]. Accordingly, the caffeine content was investigated by FDA (food and drug administration), new caffeine standards were imposed only 71 mg per 12 oz serving. The paper showed that the undesired effects of consuming such substance include: anxiety, gastrointestinal complaints, nervousness, cardiac arrhythmias, tachycardia, insomnia, restlessness, and in rare cases death. as well Low birth weight for gestational age, for women consuming 200/300 mg of caffeine daily [21]. Another important factor to mention is the relationship of ED which contain caffeine that is

related to the blood pressure and hypertension. Those who consume high doses of coffee (which contains caffeine) showed a significant increase in their systolic blood pressure and peripheral vascular resistance pressure, as well diastolic blood. Not only that, but we can also consider the impact of consuming ED on fatty deposits, as well as the concentration of triglycerides (glucose). As it is always the situation, many medical studies are often carried out on animals mainly rats. There were thirty rats divided into three groups who were provided normal food and one group were administered 3 ml of ED and later tap water. Analyzing the results of the studies, the animals receiving the Energy drink was additionally characterized through declining content of Fatty tissue peril-intestinal the muscle, as well as peril-cardiac fatty tissue. Moreover, blood plasma Laboratory specimens of these animals contained higher concentration of glucose. The metabolic effects of ED are attributed to caffeine, saccharide and B-group vitamins occurring in those products [22]. The same thing would apply to human beings consuming ED at frequent intervals [23].

Another important discovery from the previous studies was the relationship between ED consumption and the social and behavioral effects of these products on these people [24]. According to a study conducted in 2008, it was discovered that there is strong relation between ED consumption and risk-taking. Frequent ED consumers were found to have smoked cigarettes, abused drug prescriptions, and were involved in violent activities. They also engaged themselves in unsafe sex, doing extreme sports, and dangerous stunts [20]. The study showed also that the consumption of ED also leads to other bad and dangerous habits of consuming other stronger stimulants and drugs which can destroy the career of people especially pilots [10, 14]. The results are usually lack of concentration, headaches, and risky behaviors.

## 4 Research Methodology

This research is considered to be a basic academic paper which has a multipurpose approach: exploratory, descriptive and explanatory. Exploratory in a sense that its purpose is to define the nature of the problem at hand and make it clear; descriptive because it describes the characteristics of the phenomenon we are studying and explanatory because it attempts to explain how things are going on and to recognize the cause and effects between different factors. The population represents the Jordanian youth. A diversified sample of youth that represents a wide range of the youth in Jordan was surveyed. We distributed 100 survey forms and received back 87 survey forms which are fair and square. The use of questionnaire surveys for data collection refers to fact that these tools could identify the relationship among the studied items [25].

### 4.1 Demographic Variables

Demographic data were evaluated for the respondents and the results were determined where the percentage of males was 63.2% for females 36.8%. The respondent's age ranged from 21–23 in the rate of 56.3%, while the educational level (Bachelor Degree) accounted for 80% of the respondents.

## 5 Data Analysis

In experimental studies, the dependent variable is the response that is measured by the researcher or is the presumed effect: (Jordanian youth consumption of energy drinks). An independent variable is the presumed cause, and is the variable that is varied or manipulated by the researcher: De-marketing, Intervening Variable: psychological variable.

## 6 Descriptive Analysis

To describe the attitude towards questions, mean and standard deviation are used as follows

### Products

**Table 1.** Descriptive statistics (products)

Statement	N	Min	Max	Men	Std. Deviation
P1	87	1	5	3.41	1.244
P2	87	1	5	2.84	1.284
P3	87	1	5	3.44	1.309
P4	87	1	5	2.36	1.438
P5	87	1	5	2.67	1.387
Valid number	87	1.00	5.00	2.9425	.96685

The results of the previous Table 1 show negative attitudes towards q (2,4,5) Due to results less than the mean of the scale (3) but, there are positive attitudes towards the rest of the questions because the means are higher than scale (3).

**Table 2.** Descriptive statistics (price)

Statement	N	Minimum	Maximum	Mean	Std. Deviation
PR1	87	1	5	3.66	1.108
PR2	87	1	5	3.02	1.338
PR3	87	1	5	3.49	1.170
PR4	87	1	5	3.18	1.147
PR5	87	1	5	2.84	1.302
Price	87	1.40	5.00	3.2391	.79641
Valid number	87				

The results of the previous Table 2 show negative attitudes towards q (5) Due to results less than the mean of the scale (3) but, there are positive attitudes towards the rest of the questions because the means are higher than scale (3).

**Table 3.** Descriptive statistics (promotion)

Statement	N	Minimum	Maximum	Mean	Std. Deviation
PRO1	87	1	5	3.24	1.329
PRO2	87	1	5	3.17	1.287
PRO3	87	1	5	3.34	1.413
PRO4	87	1	5	3.37	1.192
PRO5	87	1	5	2.98	1.285
Promotion	87	1.20	5.00	3.2207	.96883
Valid number	87				

The results of the previous Table 3 show negative attitudes towards q (5) Due to results less than the mean of the scale (3) but, there are positive attitudes towards the rest of the questions because the means are higher than scale (3).

**Table 4.** Descriptive statistics (place)

Statement	N	Minimum	Maximum	Mean	Std. Deviation
PL1	87	1	5	3.11	1.409
PL2	87	1	5	3.44	1.168
PL3	87	1	5	3.43	1.178
PL4	87	1	5	2.82	1.253
PL5	87	1	5	3.31	1.323
Place	87	1.20	5.00	3.2207	.87606
Valid number	87				

The results of the previous Table 4 show negative attitudes towards q (4) Due to results less than the mean of the scale (3) but, there are positive attitudes towards the rest of the questions because the means are higher than scale (3).

**Table 5.** Descriptive statistics (psychological)

Statement	N	Minimum	Maximum	Mean	Std. Deviation
PY1	87	1	5	3.23	1.460
PY2	87	1	5	2.79	1.511
PY3	87	1	5	3.32	1.393
PY4	87	1	5	3.46	1.218
PY5	87	1	5	3.54	1.362
Psychological	87	1.00	5.00	3.2690	1.06829
Valid number	87				

The results of the previous Table 5 show negative attitudes towards q (2) Due to results less than the mean of the scale (3) but, there are positive attitudes towards the rest of the questions because the means are higher than scale (3) (Table 6).

## 7 Hypothesis Analysis

**Table 6.** Variables Entered/Removed<sup>b</sup>

Model	Variables entered	Variables removed	Method
1	Place, Products, promotion, Price		Enter

<sup>a</sup> All requested variables entered.

<sup>b</sup> Dependent variable: q2

**Table 7.** Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.421 <sup>a</sup>	.177	.137	1.337

<sup>a</sup> Predictors: (Constant), Place, Products, promotion, Price

**Table 8.** ANOVA<sup>b</sup>

Model		Sum of squares	DF	Mean square	F	Sig.
1	Regression	31.638	4	7.910	4.423	.003 <sup>a</sup>
	Residual	146.637	82	1.788		
	Total	178.276	86			

<sup>a</sup> Predictors: (Constant), place, products, promotion, price

<sup>b</sup> Dependent variable: q2

**Table 9.** Coefficients<sup>a</sup>

Model	Unstandardized coefficients		Standardized coefficients beta	t	Sig.
	B	Std. Error			
1 (Constant)	2.490	.634		3.928	.000
products	-.228	.235	-.153	-.971	.334
price	-.339	.324	-.187	-1.044	.299
promotion	.468	.242	.315	1.935	.056
place	.486	.269	.296	1.806	.075

Multiple regression is used to test above hypothesis and it is found that F value = 4.423 is significant at 0.05 level so that H1 will be rejected and Ha will be accepted that mean there is significant impact of De-Marketing strategies on youth consumption of energy drinks Also it is found that the relationship is moderate because r = 0.421 and the

independent variables explain 17.7% of the variance in the dependent variable. The Table 9 of Coefficients summarizes the following results:

- The price of product has no significant impact on youth consumption of energy drinks and psychological variables because  $t$  value =  $-1.044$  is not significant at 0.05 level
- Type of product has no significant impact on energy drinks because  $t$  value =  $-0.971$  is not significant at 0.05 level
- The distribution channel has no significant impact on youth consumption of energy drinks because  $t$  value =  $1.806$  is not significant at 0.05 level (Table 7)
- The promotion has no significant impact on youth consumption of energy drinks and psychological variables because  $t$  value =  $1.935$  is not significant at 0.05 level (Table 8).

## 8 Conclusion

In view of the paper and the survey related to the original topic of the investigation about the impact of de-marketing in reducing Jordanian youth consumption of energy drinks. Our original purpose is to help de-market this item because of its negative influence on people. We gave out a hundred forms of questionnaire to various types of people mainly of the youth group. We received eighty seven filled in forms which we analyzed and came up with the following results: All the respondents said they consumed energy drinks at various frequencies. The final outcome indicated that 48.3% of the sample rarely consumed energy drinks. Another important outcome was that 46% of the sample drinks more than one type of Energy Drinks. It is found that 81.6% of the sample consider themselves not to be addicted to energy drinks. This defies the idea that there is brand addiction. However, this does not rule out the possibility that there are people who are addicted to this product. As for the best location for marketing Energy Drinks, it was found that 50.6% of the sample believes that supermarkets are the best places to market these products. This conforms to what we previously stated that energy drinks are best marketed at supermarkets and grand shops. The external appearance of the E.D. This is consistent with the study of [1, 6, 26–28] products has a strong impact on the desire to consume a certain brand. The survey indicated that 63.2% of the sample finds that the external appearance of E.D. product to be appealing and inviting to customers. No wonder as the look of the product has a strong impact on the customers' decision when choosing a certain product, and there is a full science with specialty related to the design of the product, and it comes under graphic designs and promotion. These days, the content of the product is not the main decisive factor in promoting a certain product. As for the feeling achieved from consuming E.D. [8, 14] it was found that 49.4% of the sample does not immediately feel refreshed and energetic after consuming energy drinks. It is this point that requires further study and analysis, as it is very much related to our original issue, which de-marketing energy drinks. When about 50% of the sample mentioned that they did not feel refreshed and energetic immediately after consuming this product, this can be used as a starting point that the feeling developed later on could be psychological and not realistic. People tend to

convince themselves that they are becoming strong and energetic and with further experimentation, the whole idea could be proven false and mere illusion. When referring to the points suggested in the hypothesis, we came out with various unexpected results worth pointing out. To start off, it has been discovered that the price of the product has no significant impact on the consumption of energy drinks and psychological variables. because the consumers value the rewards expected from consuming energy drinks higher than any cost they may have to pay for. [1, 20, 27], In fact, the value is less than the significant level. The same thing applies to the type of the product because here also because the t value is less than the significant level. The distribution channel similarly has no significant impact of youth consumption because the t value is not at the required significant level. Finally, the promotion did not exert any significant impact on the youth consumption, because it did not reach the required significant level. However, it has been discovered that the four factors combined together have a significant impact on the consumption of the youth for energy drinks and psychological variables.

## 9 Recommendations

In order to spread awareness in our country about a topic that is not yet seen by them as a problem, and reduce the harmful health risks and sicknesses that energy drinks might cause, we will work on introducing new ideas to help the cause and de-market a serious threat in our society. This is a list of our recommendations: Firstly Establish an awareness campaign to spread the word about the harmful side effects and health risks of drinking energy drinks, and especially spreading awareness of the dangers of youth consumptions of such drinks and how it's even more harmful to them to consume than it is to adults, in addition to how it could develop an addiction to whomever is consuming it. Second, there should be campaigns that deliver a wakeup call for the consumers exposing the lies of energy drinks companies who only care about increasing their customer base and increasing their profits regardless if their marketing base was true or not. Finally, there should be developed strict rules and regulations and severe punishments and sanctions enforced to deter energy drinks companies from such activities, where energy drinks companies always distribute free samples to attract new customers in Jordan.

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