

# A Study on the Misleading Teenagers by Non-traditional E- cigarette Marketing

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## ABSTRACT

In recent years, e-cigarettes, as a new form of smoking, have gradually spread among young people, and there are also cases of teenagers smoking e-cigarettes on campus. In this study, our group mainly studied how non-traditional marketing methods of e- cigarettes affect the cognitive judgment of some teenagers on the harm degree of e- cigarettes, and proposed that this non-traditional marketing method would mislead the cognition degree of e-cigarettes harm degree of teenagers to some extent as the research hypothesis. In order to explore this issue, our group adopted the form of anonymous questionnaires and interviews with experts, and concluded that the unconventional marketing methods of e-cigarettes vendors would mislead teenagers about e-cigarettes to some extent, which is mainly reflected in the lack of understanding of the dangers of e-cigarettes and the tendency of willingness to try. In a society where the number of young people smoking e-cigarettes is increasing every year, only when the causes of the problem are identified can effective solutions be found. Our team's investigation and research attempts to help solve this problem from one aspect.

**Keywords:** E- cigarette, Teenagers, Marketing

## 1. FOREWORD

Cigarettes and alcohol are two "forbidden objects" in the field of ideological and moral education. Incorporating part of education makes a new generation of teenagers understand its harm and take the initiative to stay away, with good results. But no one could have expected that an "uninvited guest" had already deployed troops and spread-electronic cigarettes. As a group of high school students, their peers can also be found smoking electronic cigarettes on campus. We are the parties , even the first victims. The World Health Organization released a report on July 26, 2019, confirming that e-cigarettes are harmful and should be supervised [1]. Therefore, my group wants to help solve this problem by studying the misleading of electronic cigarette marketing model to teenagers.

Although Li Han, the inventor of e-cigarette, claimed to invent e-cigarette to help people quit smoking. In fact, as a substitute for cigarettes, e-cigarettes not only failed to help give up smoking, but made teenagers the biggest victims of e-cigarettes.

Studies have shown that students who have used electronic cigarettes, whether occasionally or repeatedly, are much more likely to smoke traditional cigarettes after one year than students who have never used electronic cigarettes. As early as 2015, the team of Beijing Normal University conducted a survey on 2024 teenagers aged 12 to 18, of which more than 90% had heard of e-cigarettes and more than a quarter had used them [2]. In December 2019, Guangming Daily reported that "the survey results released by the Chinese Center for Disease Control and Prevention show that people aged 15 and over in China, there are 10 million people who smoke electronic cigarettes in groups, mainly young people aged 15 to 24. Recent reports show that the proportion of high school students using e-cigarettes increased from 1.5% in 2011 to 27.5% in 2019. The consequences of smoking e-cigarettes for a long time are extremely serious, even more harmful than traditional cigarettes. It may affect the function of immune system, leading to the decline of immunity. In severe cases, it is more likely to cause cardiovascular disease, easily cause cancer and lead to fatal lung

disease [4](Silke, 2020).

At present, the proliferation of electronic cigarettes has not been effectively controlled, which is related to its lack of good solutions. In the current tobacco laws such as the Tobacco Monopoly Law of the People's Republic of China, the Drug Administration Law of the People's Republic of China, and the Regulations on the Supervision and Administration of Medical Devices. E-cigarette products are not defined as tobacco products, medicines or medical devices in China, but are regulated as general consumer goods [5].

## **2. RESEARCH ANALYSIS**

### **2.1. Literature Review**

Non-traditional marketing is one of the main reasons for the proliferation of electronic cigarettes among young people. If you search for "e-cigarette" in JD.COM, at least 120,000 of the 260,000 results will be directly written with words to help "quit smoking" in the trade name or introduction[1], which will mislead buyers to understand the harmfulness of e-cigarette, and understand that it is less harmful than cigarettes. Unexpectedly, Dartmouth College estimated that in 2015, when 2,070 smokers successfully quit smoking with the help of electronic cigarettes in the United States, at the same time, 168,000 teenagers who had never smoked would start smoking after using electronic cigarettes [6]. More studies have shown that the harm of electronic cigarettes even exceeds that of traditional cigarettes.

Ana María Rule, assistant professor of environmental health and engineering at Johns Hopkins University, began to measure the metal content in electronic cigarettes in 2014. Her research shows that nickel and chromium are important metal exposures to e-cigarette users. Hexavalent chromium and some nickel compounds are known carcinogens of lung cancer. Rule also pointed out a more potential danger: "The inhalation of common flavoring chemicals may bring metals into brain and heart tissue cells," such as maltol, which is common in electronic cigarettes. As a flavoring chemical, it is very easy to combine with iron in blood.[4]

In addition to the false slogan "harmless" of electronic cigarettes, the cool appearance of electronic cigarettes is also one of the means to lure teenagers. "The design of e-cigarette products highlights individuality, which is more in line with young people's consumption psychology. The products are fashionable and lightweight, and have different shapes. They can also be blended with a variety of tastes to cater to young consumers [7]." There will also be novel functions, such as connecting with smart phones through Bluetooth to achieve multiple functions to increase smoking

enjoyment. Some e-cigarettes are even shaped like chewing gum, while others call themselves "energy bars" [1]. The glamorous appearance and packaging make electronic cigarettes a trend among young people. Even young people who are minors in their lives are hard to avoid electronic cigarettes. It appears in life in different ways. Music festivals, shopping malls, KTV, bars and other places have all been "occupied" and become advertising territory [8].

Acta tabacaria sinica once pointed out: "29 countries, including Britain, America, France, New Zealand, Spain, Australia and South Korea, prohibit the sale of electronic cigarettes to minors. Brazil, Argentina, Singapore, Colombia, Mexico and other 28 countries and regions prohibit the sale of all types of electronic cigarettes [10]. "Behind the prohibition is that e-cigarettes contain nicotine, which is an addictive substance and will make teenagers smoke cigarettes further [11].

But in China, e-cigarettes are not strictly controlled. Article 34 of the Regulations on the Control of Smoking in Public Places in Hangzhou: "The following terms in these Regulations mean: smoking refers to the act of inhaling and exhaling tobacco smoke or harmful electronic cigarette aerosol, and holding ignited tobacco products." However, the smoking regulations in Beijing and Shanghai do not stipulate that e-cigarettes are included in the scope of "smoking" and "tobacco". Even the Regulations of Shenzhen Special Economic Zone on Controlling Smoking was once called the most strict tobacco control order in history, and it did not involve any expression related to electronic cigarettes. At present, the management of electronic cigarettes is still treated as general sales items [5].

The above materials only talk about the factors that teenagers are misled by the non-traditional marketing methods of e-cigarette vendors. To sum up, after collecting and adopting the viewpoints in various literatures, our group thinks that meeting the above three aspects at the same time will explain the reasons why e-cigarettes successfully hunt teenagers. When the merchants design the e-cigarette style which is in line with this group, and the fuselage contains colorful LED, high-tech screen display and rich flavor of cigarette oil, if there is no large-scale publicity of "healthier than cigarettes", the creation of e-cigarette will inevitably appear in the world of young people, and ultimately it will not achieve the best effect. In addition, when the epidemic began to spread, there was no law to control it, and the education and prevention propaganda did not emphasize the harmfulness of e-cigarettes. Based on the above research, our group increasingly thinks that these factors are misleading factors of teenagers' cognition of the harm degree of e-cigarettes, which may cause the increasing number of teenagers smoking e-cigarettes. Therefore, our group designed the following research

scheme to verify the proposed research hypothesis.

**2.2. Research Method**

In order to verify the problem of "teenagers reduce misleading to e-cigarettes" proposed in the scheme, two key points are put forward, one is willingness and the other is teenagers' cognition of the harm degree of e-cigarettes. In this study, the degree of willingness is the degree of willingness to try, and the degree of harm is the degree of harm that an individual thinks this item is harmful to himself.

Non-traditional marketing mode is a modern marketing mode, which is a mode in which merchants use the Internet, short videos, personalized packaging, and establish network trust to publicize goods. Taking this marketing method as a variable, we collected the advertisement videos of potato chips, spicy strips, red wine, beer, cigarettes and electronic cigarettes on the Internet, and finally put together the short videos to test the respondents. Moreover, the degree of harm of the items should be scored, and the respondents should be asked "among the following five items (spicy strips, electronic cigarettes, cigarettes, cocktails and betel nuts), please score 1-10 for their degree of harm." This score can reflect the testee's own understanding of the above test items according to his life experience. After playing the advertisement, test the same content again to reflect the influence of short video advertisement on the judgment of respondents, which is convenient for comparison before and after.

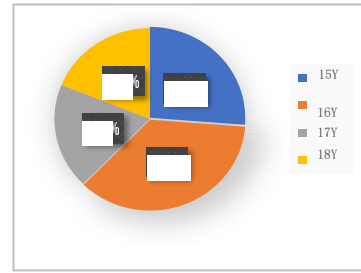
In the questionnaire design, our group also designed some questions related to the background of teenagers, which are more extensive and abstract. It is helpful to know whether life background has influence on teenagers and increase the reliability of data.

To sum up, according to the design of the questionnaire survey, if the final survey data of our group shows that the scores of teenagers' willingness and harm to e-cigarettes are higher than those before watching the video, the hypothesis that non-traditional marketing methods of e-cigarettes will affect teenagers' awareness of the harm to e-cigarettes is established.

**2.3. Research Results And Analysis Discussion**

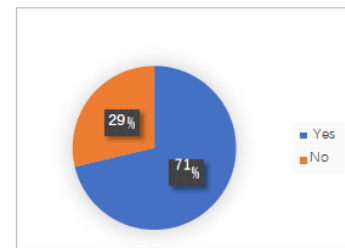
**2.3.1. The Background Of The Respondents Is Related To The Phenomenon Of Smoking Electronic Cigarettes**

According to statistics, 26% of the people who participated in this statistic are 15 years old, 36% are 16 years old, 19% are 17 years old and 19% are 18 years old. Most of these samples are in high school, and they have in dependent judgment on the likes and dislikes of things.

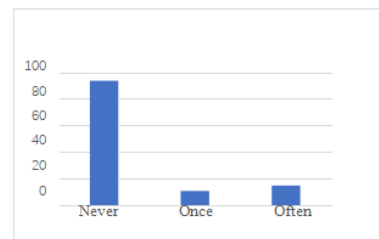


**Figure 1** Age distribution

According to the data, in this sample group, 29% of the students around the sample do not have smoking, and 71% of the students around the sample have smoking. This data indicates that smoking exists in the schools where most of the samples are located. And the sample itself has smoking, we can see that some samples often smoke or have tasted it once.



**Figure 2** E-cigarette smoking among school students



**Figure 3** Sample smoking of e-cigarette

To sum up, the social status quo of underage students smoking electronic cigarettes in junior and senior high schools is relatively common, even at this age, they have formed an independent ability to judge right and wrong.

The reasons for the above results may be as follows: (1) The non-traditional marketing methods of e-cigarettes successfully utilize the consumption psychology of teenagers and seize their curiosity, which leads them to have the psychology of trying e-cigarettes and finally have the phenomenon of smoking e-cigarettes. (2) Even if they have the ability to judge right and wrong independently, at this age, the self-control ability of junior and senior high school students is not as good as curiosity. When a companion smokes electronic cigarettes as a sign of the trend, the prominent herd mentality makes them have the psychology of trying.

2.3.2. The Frequency Of E-cigarette Advertisements Seen By Samples

According to the data of the second questionnaire survey, although there is no electronic cigarette advertisement in the sample, the number of students who rarely see and often see occupies the majority, and the number of students who often see is slightly less than that who rarely see.

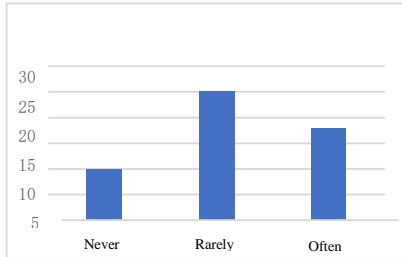


Figure 4 Frequency of e-cigarette advertising

The possible reasons are as follows: (1) The non-traditional marketing methods of e-cigarette vendors are not extensive. (2) The reason why the non-traditional marketing methods of e-cigarette merchants successfully hunted some teenagers is more focused on the exquisite cool appearance packaging of e-cigarettes, the successful use of teenagers' consumption psychology, and the advertisement of e-cigarettes, although seen few times, has achieved a profound effect.

2.3.3. Comparison Of The Willingness Of The Samples To Test Samples Before And After Watching The Video

Collect data on the willingness of the samples before and after watching the ad video, we found that the number of people choosing cigarettes increased from 31 to 38, with a significant increase of 7 times. We can conclude that cigarette advertisements can attract some young people. While the number of e-cigarettes remained unchanged at 54. From the data of cigarettes, it can be concluded that even the harmful items in value judgment can attract teenagers' attempts through advertising packaging, which eventually leads to long-term smoking.

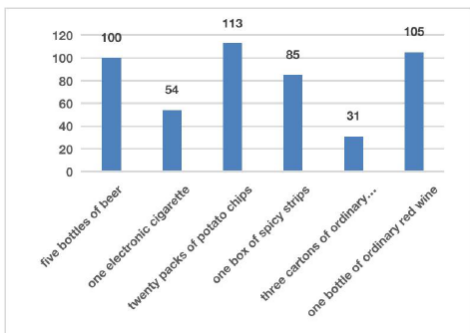


Figure 5 Willingness before watching advertising

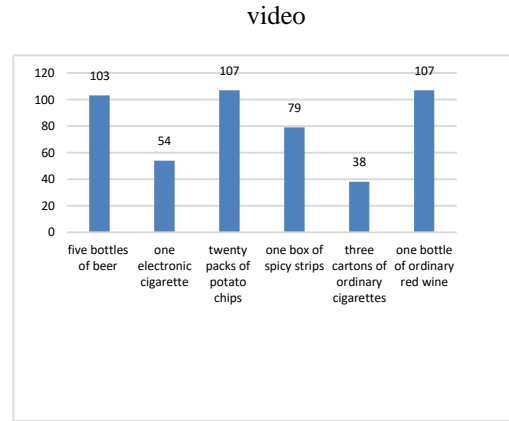


Figure 6 Willingness after watching advertising video

The possible reasons are: the broadcast of an advertisement in the questionnaire is not enough to completely interfere with a person's judgment of a thing, and repeated publicity in a long-term living environment may change a person's cognition to some extent.

2.3.4. Subjective Changes Of Hazard Assessment Of Samples Before And After Watching E-cigarette Advertisements

After watching the advertisement video of e-cigarettes, the average score of subjective scores on the harmfulness of e-cigarettes dropped by 0.09, indicating that advertisements made the samples think that the harmfulness of e-cigarettes decreased. From then on, it can be concluded that commercial advertisements can make teenagers think that the harm of electronic cigarettes is reduced, which verifies the hypothesis put forward by our group.

The possible reasons are as follows: (1)The rich content in advertisements can really attract teenagers, because they relax their vigilance against the dangers of e-cigarettes, and then this group appears to smoke e-cigarettes. (2)One-time advertising is not enough to fully simulate the e-cigarette advertising in life, which makes the result only 0.09 before

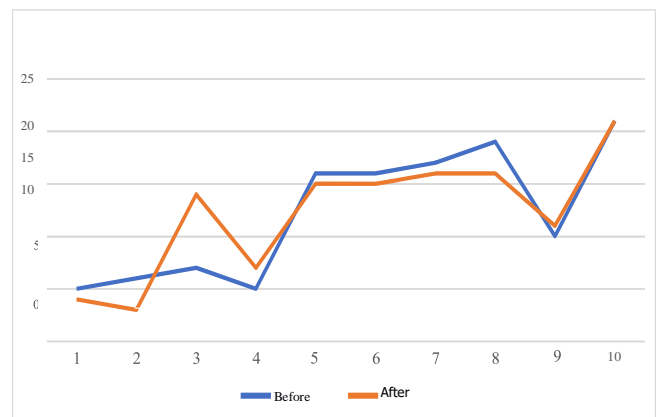


Figure 7 Changes of subjective scores of e-cigarette

before and after watching

and after the change. However, one insignificant advertising leads to the young people's reduced vigilance against e- cigarettes, which can fully demonstrate that the non-traditional marketing methods of merchants are very effective.

Based on the above second-hand data and the investigation and analysis of first-hand data, our group comes to the conclusion that the non-traditional marketing methods of e- cigarettes will mislead teenagers' cognition of the harm degree of e-cigarettes to a certain extent. Even though this marketing method is not very extensive, e-cigarette vendors have successfully utilized the consumer psychology of teenagers, designed exquisite and cool packages and publicized the advertising content with profound influence, which can still influence the subjective judgment of teenagers and make them ignore or not know the real harmfulness of e-cigarettes even when the publicity frequency is slightly lower.

### 3. CONCLUSION

Through data analysis and discussion, the following conclusions are drawn: Combining the results of the first- hand data and the background data, our group comes to the conclusion that the non-traditional marketing methods of e- cigarette marketers will mislead teenagers' cognition of the harm degree of e-cigarettes to a certain extent, which confirms the hypothesis set before the experiment. Because of the non-traditional marketing methods of e- cigarette marketers, teenagers choose to smoke e-cigarettes, which is influenced by external factors such as propaganda content, smoking as a trend among students around them, and internal factors such as prominent psychology in this age group.

In addition, even if the conclusion of corresponding hypothesis is drawn, there are some shortcomings in our group. Taking online anonymous questionnaire as the main way of investigation requires a large number of samples. However, in a limited time, our group only collected 112 valid questionnaires. With plenty of time, more survey samples can make the results clearer and more accurate. When designing the influence of advertisement on a person's psychology in the questionnaire, it doesn't take into account that the influence of advertisement lies in the repetition in life, but once watching, it is filled again immediately after the evaluation of the harmfulness of the items in the previous questions. Although the difference between the data before and after comparison supports the hypothesis of our group, it is not obvious enough. However, this subtle influence of advertising in life can not be amplified in the questionnaire, and can only be further clarified by expanding the sample size. The

deficiency in control variables is mainly reflected in the fact that when investigating the harm degree of e- cigarettes and cigarettes, there are some other items as interference, which makes the respondents unable to directly target e-cigarettes and cigarettes. Although it does not affect the final result of the experiment, it can make the data clearer by appropriately reducing the number of other substitute items.

When it comes to the conclusion that teenagers' cognition of the harm degree of e- cigarette will be misled by the marketer's non-traditional marketing methods to a certain extent, it is more beneficial for our group to further try its best to design a scheme to solve this problem.

After this investigation, we think that the following points can be improved:

(1)It is suggested that "smoking is harmful to health" should be printed on the outer packaging of e-cigarettes. After investigation, our group believes that e-cigarettes still have certain health and safety problems. According to the literature, the smoking of e-cigarettes is potentially harmful to smokers themselves. Epidemiological and experimental evidence shows that e-cigarette aerosol has harmful effects on lung, cardiovascular system, immune system, brain and oral cavity. By doing corresponding experiments, it can be found that the risk of lung cancer and bladder urothelial cancer in experimental mice will increase. In addition, e- cigarettes do the same harm to second-hand smokers. Therefore, our group suggested that the sign of "smoking is harmful to health" should be printed on the outer packaging of electronic cigarettes, which can play a certain warning role.

(2)Restricting the taste of e-cigarettes and opposing over-packaging of e-cigarettes: In the psychological development stage of teenagers, their consumption behavior is not only related to their personal identity, but also related to the recognition and acceptance of their collective. Electronic cigarettes are rich in taste and packaging. According to the survey, teenagers will be attracted and misled by the rich taste and packaging, and think that this product is similar to food, so they relax their vigilance and affect their judgment ability. Our group thinks that we should improve on the "source", limit the choice of e-cigarette tastes and reduce the audience.

(3)Prohibit e-cigarette advertising in the circle of friends and Wechat business: As one of the "non-traditional marketing methods of e-cigarette", Wechat business is easy to be monitored and prohibited. Our group hopes that the government will strengthen its jurisdiction over Wechat business and reduce the large-scale publicity of e-cigarettes.

(4)Strengthen campus supervision: According to the survey, there are still some young people who have

responded to the situation of students smoking electronic cigarettes on campus. And some people explained their smoking e-cigarettes. Our group hopes that the school will strengthen the inspection of smoking e-cigarettes and strengthen the school rules, so as to quit smoking and prevent young people from contacting e-cigarettes to a certain extent.

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