

# Marketing analysis of sugar-free beverages based on Fogg's behavior model

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**ABSTRACT.** In recent years the concept of a 'sugar-free diet' has been gradually incorporated by many people as an important part of their dietary choices and healthy living. The advertising and promotion of the concept by sugar-free beverage merchants has played a significant role in this. What are the characteristics of sugar-free beverage merchants' marketing models? How effective is the communication to new generations of consumers? What could be improved in the marketing process? This paper analyses the behavioural patterns of young sugarfree beverage users based on the Fogg behavior model and explores better ways to market the sugar-free concept.

**Keywords:** Sugar-free drinks, Concept marketing, Fogg behavior model, New generation group

# 1 Introduction

Since 2020, the sugar-free beverage market in China has been growing rapidly, with a large amount of capital entering the market and a significant increase in financing for the industry, making the track increasingly crowded. The increase in the number of sugar-free products has led to more stringent selection criteria for consumers, with the concept of a "sugar-free diet" gradually being seen as a standard for maintaining health by some groups. The new generation is now placing a greater emphasis on their appearance and health, and 'sugar-free' is becoming an important label in the drinks market. The advertising and concept of sugar-free beverages has played an important role in the changing diet and the rising demand for sugar-free beverages.

# 2 Theoretical basis of sugar-free beverage marketing research

This paper aims to explore the marketing model of sugar-free drinks in China, based on clarifying its conceptual marketing and the characteristics of young consumer groups, BJ Fogg's Behavior Model is used as the theoretical basis for relevant analysis.

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#### 2.1 Concept marketing of sugar-free beverages

In the promotion and sale of sugar-free beverages, concept marketing is the main core concept. The so-called concept marketing is a marketing strategy in which enterprises create a concept with core values according to social and cultural phenomena and their development trends as well as consumers' psychological needs, and disseminate the functional orientation, value concept, cultural connotation, fashion concept and scientific and technological knowledge contained in the product to consumers through the introduction of this concept, so as to cause consumers to resonate and adopt purchasing behaviour.[1] The concept of "sugar-free, healthy and tasty" is used as a selling point to differentiate sugar-free beverages, and through various means to strengthen the added value of the product and break through the red sea of homogeneous competition.

To break it down to specific marketing aspects, in Zhang Tiantian and Liu Lin's "Research on Brand Innovation in Yuanqi Forest", for example, Yuanqi Forest, the head manufactur of sugar-free beverages, has adopted cultural concept marketing, new media marketing, KOL marketing and other approaches [2]that represent the main marketing channels for sugar-free beverages today. And regardless of the channel, concept marketing is its main core idea.

#### 2.2 Consumption characteristics of the young "Generation Z" group

According to Yang Yunhong, the immersion in the use of social software has alienated the consumption habits of young people. The symbolic meaning of an item on social media platforms such as Xiaohongshu is the main reason for consumption. [3]In addition, some brands reflect the condition of the family and the status of the individual, prompting some young people to pursue trendy goods whose spiritual value often exceeds the value of use. In addition, the influence of social media platforms such as Xiaohongshu has made young people a "one-way" consumer group. Many brands on Xiaohongbook use celebrity endorsements or sales strategies such as quality authors to implant their needs into users, and under the influence of this atmosphere, people lose their initiative and engage in impulsive consumption

Yan Hua believes that the consumption characteristics of the youth group are the following: (1) the pursuit of fashion sense, concentrated self-expression (2) the pursuit of personalization, good at expressing themselves (3) concern for emotional expression, with strong impulsiveness; [4]and the consumption behavior of the youth consumer group, overconsumption occupies an important proportion; than other groups of youth groups are increasingly focused on the development of consumption and health consumption; at the same time consumption of goods more focused on unique and personalized choice.

#### 2.3 Fogg Behavior Model

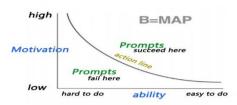


Fig. 1. Fogg's Behavior Model (Source: BJFogg'sBehaviorModel, 2009/2016.)

Fogg's Be-havior Model is developed by Yale faculty member Fogg. Fogg describes a general and relational equation for the model given by:

$$B = M AT$$
(1)

Equation (1) can be considered more descriptive then algebraic and it informs that in order to Behavior (B) occur, a interaction between three factors must be in place: Motivation (M), Ability (A) and a stimulus called Trigger (T). Note that a null value for M AT implies B = 0, which means in the FBM context, no behavior.[5]Fogg's Behavior Model summarises how a product can 'persuade' users, i.e. increase their satisfaction. According to Fogg, three conditions need to be met in order for a user behaviour to be converted: motivation, ability and cue. As can be seen in Figure 1, if a user has certain motivations and abilities, and is successfully prompted, a successful behaviour will occur, and if not, it will fail. However, not establishing a well defined criteria for its proper positioning. This line informs that individuals with motivation and ability values above it, only need a signal type trigger in order successfully move towards a behavior change. Any value (M, A) below, results an inefficient trigger.[6]

This model not only helps to explore how to improve users' satisfaction with sugarfree beverage products and sustain their purchase, but also provides a reference for summarising the reasons for users' non-purchase behaviour. Based on Figure 1, Fogg has refined each of the three dimensions of motivation, ability and cue.

He proposes that motivation consists of three subcategories: pleasure and pain, which are the instinctive responses people have when faced with an event; hope and fear, which are the emotions people feel as a result of a possible outcome that motivates their behaviour; and social acceptance and rejection, which is similar to the herd effect.

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According to the Fogg model, motivations describe the desirability of actions and are qualified on a spectrum of low to high. They include distinctions between physical (pain/pleasure), emotional (hope/fear), and social (acceptance/rejection) consequences of the action. Abilities refer to the capability of an individual to perform a behavior and are labeled between easy and hard. Different aspects of ability include time, money, physical effort, mental effort, perceived adherence to social norms, and how well a

behavior fits within an established personal routine. Lastly, prompts p are signals to an individual that tell them when it is the correct time to act and can push an individual's motivation and ability coordinates above the action line (see Fig. 1). Different prompts are utilized depending on the individual's relative motivation and ability.[7]

The six sub-categories of capability are: time, money, physical strength, mental strength, moral discipline, and habit. Capability here does not refer to enabling people to acquire new skills, as people are reluctant to spend too much effort on this, but rather to lowering the threshold for learning the product.

The Fogg Behavior Model also suggests that motivation and ability can sometimes compensate for one another. If motivation for a particular behavior is low, the model predicts that behavior can still happen if the behavior is easy to adopt. In other words, one does not need a high level of motivation for something that is easy to do. Similarly, if ability is low, the model predicts that behavior can still happen if the motivation is high. In other words, one can adopt hard behaviors when one's motivation is high. [8]

The three situations of insufficient motivation, insufficient competence, and where both motivation and competence meet the conditions correspond to three different conditions for prompting success: some kind of motivation set up to enhance motivation; some kind of guidance set up to enhance competence; and some kind of effective reminder. Motivation and competence are in harmony with each other and complement each other. High motivation often means that the more people want to do something or achieve something, the more likely they are to produce the target behaviour; simple competence usually means a lower barrier to entry, and the easier it is to produce the target behaviour. However, having certain motivations and abilities does not necessarily mean that the target behaviour will be achieved; cues are still needed to add up.[9]

In his Behavior model, Fogg particularly emphasises the importance of cues. With the prevalence of internet advertising, users can respond to cues instantly in mobile scenarios. Using Fogg's Behavior model to analyse the user's motivation, ability and cue conditions in turn to purchase a product under the marketing of sugar-free beverages, it is possible to obtain ways to make the user perform the target behaviour.

# 3 Research Methodology

Theoretical analysis based on Fogg's Behavior model (discovering characteristics and summarising patterns)

# 4 User analysis based on Fogg Behavior Model

#### 4.1 Marketing channels

The main marketing channels of sugar-free beverage manufacturers can be divided into two aspects: online and offline.

In the traditional offline channel, according to the results of the data survey in Figure 2, the user profile of the sugar-free beverage market in China accounts for nearly 70% of the young group aged 18-30. Therefore, it can be seen that sugar-free beverage

manufacturers have made considerable investment to bring their products closer to the "young" age group. The "youthful" positioning standard.

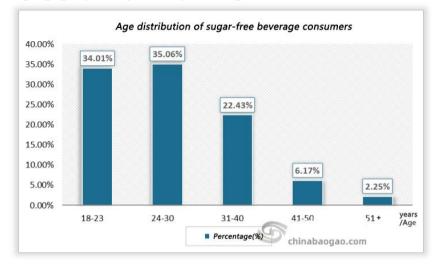


Fig. 2. Age distribution of sugar-free beverage consumers (Source: chinabaogao.com 《China Sugar Free Beverage Industry Development Depth Analysis and Investment Prospects Forecast Report (2022-2029)

Take the main product "Yuanqi Forest Sparkling Water" of "Yuanqi Forest", the head brand of sugar-free drinks in China, as an example, in terms of offline marketing, the packaging of the product is fashionable and functional, with a simple and fresh Japanese packaging style, a striking and prominent "gas" ink logo, and the eye-catching slogan "O sugar, O fat, O calories". The simple and fresh Japanese packaging style, the prominent ink logo of the word "gas" and the eye-catching slogan of "0 sugar, 0 fat, 0 calories" have enhanced the brand's tone and created a new path in the current domestic beverage market, which is in line with the needs of young people's life and aesthetic values. At the same time, as "Japanese" and "Chinese" trends continue to change, Yuanqi Forest will continue to adjust its packaging style (e.g. the logo is changed from the Japanese word "気" to the Chinese character "气"), always in line with the market aesthetic.), always in line with market aesthetics and consumer expectations. In terms of selling, the product is priced at a medium to high level, in line with the current social environment and consumption habits, while strengthening consumer trust and lowering the threshold of brand awareness. The large number of product and advertising placements in shops and vending machines targeting office buildings, universities and supermarkets also provide consumers with sufficient behavioural cues and the ability to behave accordingly.

In terms of online marketing, new media placement, KOL marketing and co-branding partnerships are three of the more typical channels. In terms of new media marketing, Yuanqi Forest mainly conducts a large number of advertising, marketing and sales activities on high traffic and popular social and video platforms such as WeChat, Weibo, B Station, Xiaohongshu, Jieyin and related live broadcasters. Through many social media platforms, we launch new products, call for experience officers and hold welfare activities to achieve the effect of precipitating users and promoting their continuous conversion; at the same time, we increase our exposure by naming a large number of variety shows that are popular among young audiences. Content with circle attributes can weaken the purpose of marketing, enhance user trust and have a unique role in driving brand communication. [10]In terms of KOL marketing, Yuanqi Forest cooperated with KOL bloggers on Weibo and Xiaohongshu to launch a large number of tweets, which had a wide influence on users. This breaks the traditional model and broadens the sales channels. In addition to bloggers, many public figures have been invited to expand the brand's reach by being featured on social media and starting live broadcasts. In addition, regular and precise co-branding activities (Disney, KFC, Green Arrow, Peace Elite, etc.) have been carried out to capture the entertainment and food needs of the young generation Z. The brand has continued to invest in buzz and "getting out there".

Overall, Genki Forest's online and offline marketing worked in tandem with each other, and the consistent tone and marketing style played a considerable role in securing a high standout rate and establishing a positive branding effect among the younger and sugar-reduced demographic.

Behavioural analysis

According to Fogg's Behavior Model (Fogg's Behavior Model), we can analyze consumers' behavior in terms of their motivation, ability and relevant cues respectively, so as to explore the current marketing situation of the sugar-free beverage industry and its consumer behavior rules.

#### 4.2 Motivation (reason to buy).

According to the Fogg's Behavior Model, motivation is usually caused by three aspects: person, action and situation. According to iiMedia Research, 62.9% of consumers buy sugar-free beverages because they want to live a low-sugar lifestyle, while 48.7% buy sugar-free beverages because they taste better. This shows that consumers need to be motivated internally and stimulated by external reasons.

## 4.3 Ability (objective conditions for purchase).

ie. the difficulty of purchase as self-assessed by the consumer. Improving skills, acquiring resources and tools, and lowering the threshold of behaviour are three ways to increase the ability to buy. The same applies to the case of "Yuanqi Forest Sparkling Water", which has taken measures to reduce the difficulty of purchase by placing a large number of products in shop freezers; its pricing of RMB 4.5 - 5 is higher than the general market pricing of beverages at RMB 3 - 3.5, making it more difficult to purchase, but as it is mainly sold in the vertical category targeting middle and high income groups and young people, its strong purchasing power also gives it the ability to increase its purchasing power. Stronger purchasing power also makes it more motivating to buy.

Overall, there is a certain consumption threshold for sugar-free drinks for all consumers, but the target group has some purchasing power.

#### 4.4 Cues (mainly advertising and marketing by manufacturers).

Like motivation, people, actions and situations are the three types of cues. Situational cues dominate the cue construction of sugar-free beverage manufacturers. Product packaging, celebrity and variety marketing, and social media marketing are the main cueing channels for manufacturers. By creating their own ink font labels and Japanese minimalist packaging, as well as the slogan "0 sugar, 0 fat, 0 calories", which gives consumers a strong "healthy drink" cue, the product packaging is a visually compelling and direct cue, making it much more likely that the cue will lead to a purchase. The product packaging is visually compelling and direct, making it much more likely that the prompt will lead to a purchase.

In addition to the packaging, sugar-free beverage manufacturers have placed a large number of promotional ads on social media where many young groups are active. Not only did they market their brands through popular KOLs such as Jitterbug, B-site and Xiaohongshu, but they also reinforced the hints with stickers, lip-synching and celebrity sitcoms in many popular variety shows. After a series of brand marketing, the brand image of sugar-free drinks as healthy, sugar-free, high quality and trendy was successfully established.

## 5 Questionnaire survey results

According to the results of the questionnaire survey, 154 out of over 200 questionnaires were returned. 83% of people had drunk sugar-free drinks, 64.% thought they chose sugar-free drinks because they liked their taste, 43% chose sugar-free drinks because they thought they were healthier than other drink types, 49% would continue to use sugar-free drinks as one of their future drink choices after trying them, and 88% of people had seen various brand promotions for sugar-free drinks more than once.

## 6 Conclusion

With the young generation Z group's strong motivation and purchasing power, and the availability of multiple and effective cues, the audience of sugar-free beverages is likely to continue to buy after a good purchase, given the good taste and the "no sugar = healthy" concept. In addition to the positive feedback from the drinking experience and the psychological satisfaction of reducing calorie intake, the constant and varied cues from daily life, social media and variety videos also play a strong role in long-term purchases. Continued motivation to buy, a certain level of purchasing power and sufficient cues make sugar-free products an important choice among the younger generation of Generation Z.

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