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**THE EFFECT OF PSYCHOLOGICAL
DISTANCE ON ONLINE ADVERTISING: A
CASE STUDY OF VIDEO ENROLLMENT
ADVERTISEMENT OF COLLEGES**

HE XIAN

SINGAPORE MANAGEMENT UNIVERSITY

2023

The Effect of Psychological Distance on Online
Advertising: A Case Study of Video Enrollment
Advertisement of Colleges

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Submitted to Lee Kong Chian School of Business
in partial fulfillment of the requirements for the Degree of
Doctor of Business Administration

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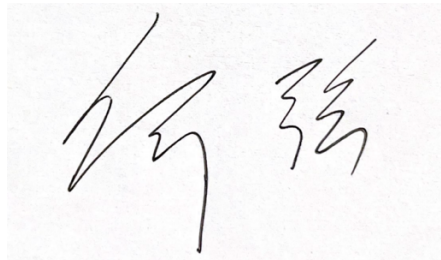
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I hereby declare that this DBA dissertation is my original work and it has been written by me in its entirety.

I have duly acknowledged all the sources of information which have been used in this dissertation.

This DBA dissertation has also not been submitted for any degree in any university previously.

A handwritten signature in black ink, consisting of two characters: '何' (He) and '弦' (Xian).

HE Xian

24th April 2023

The Effect of Psychological Distance on Online Advertising: A Case Study of Video Enrollment Advertisement of Colleges

He Xian

Abstract

Advertising for enrolment through the Internet has become an important means of enrolment promotion in Chinese universities. However, there is currently no clear research conclusion on how to conduct effective advertising, especially on the selection of factors such as promotion time, promotion platform, and target audiences. Based on the construal level theory, this study investigated the effects of different types of college enrolment advertising on different media platforms, using different dimensions of psychological distance corresponding to factors such as timing of launch and area of launch. The empirical results show that different advertising types do have significant effect differences on different groups. “Desirable” information is more effective for parents, while the students pay attention to both “desirable” information and “feasible” information at the same time. There are also differences in the publicity effect of different platforms. In the empirical study, the information published on the Kwai and Douyin is more effective to the students, while the information published on the “Moments” is more effective to the parents.

Keywords: Psychological Distance, Advertising Information, Online Advertising, Advertising Effects

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Chapter 1 Introduction

In the Internet era, the channels and means of advertising are becoming more and more diversified, which has brought new changes to the advertising of various industries. With continuous expansion of college/university enrollment in the past 20 years and changes in demographic structure in recent years in China, the structure of supply and demand in the higher education market has undergone dramatic changes, and the market pattern has changed from the seller's market in the past to the buyer's market, even the competitive pressure on university enrollment is gradually increasing. The post-00s generation, growing up with the development of China's Internet economy, have become the main consumer force of higher education, and the Internet has become the main channel for these new young people to obtain information. At present, Cheng Kong Graduate School of Business, Shanghai Jiao Tong University and other higher education institutions have begun to use different platforms, such as Tencent, to recruit students. Using online advertising for enrollment has become a trend, and more and more colleges and universities begin to join the practice.

There are two reasons for the wide use of online advertising in the college enrollment. First, it benefits from the dividends of the mobile Internet, big data, We media, artificial intelligence, short videos and etc., Internet-based applications have been widely applied in the society, according to the 51st

“China Internet Development Statistic Report” issued by the China Internet Network Information Center (CNNIC), as of December 2022, there are 1.067 billion Netizens in China, the Internet penetration rate is 75.6%, the number of mobile Netizens is 1.067 billion, and the proportion of Netizens using mobile phones is 99%. Therefore, there is a broad social basis for colleges to adopt online advertising to recruit students through the Internet. Second, the main audience (students) in the enrollment promotion have the characteristics of Internet natives. The post-00s generation, growing up in the Internet wave, are very familiar with the Internet and online applications, and even strongly depend on the Internet to some extent. Most of their information comes from the Internet, therefore, colleges use online advertising for enrollment promotion to have a good affinity for these audiences.

In terms of online advertising channels, with the development of the Internet, the online advertising platforms also show diversity. At present, there are three mainstream types of online advertising platforms in China. The first category is the graphic, mainly based on WeChat official account (微信公众号), Baijia account (百家号), Penguin account (企鹅号), Zhihu We media (知乎自媒体), and so on. These content platforms are relatively friendly to the graphics. Among them, WeChat official account is a mainstream online advertising platform, and its advantage is that the platform is relatively open to the content. The second category is videos, mainly divided into long video, medium video,

and short video platforms. Short video platforms are the most popular, including Douyin (抖音), Kwai (快手) and Video account (视频号), while long video platforms are Youku (优酷), iQiyi (爱奇艺), Tencent Video (腾讯视频) and Bilibili (B站). The short video platforms are dominated by Douyin and Kwai, the content is short and fast, and are mainly based on the recommendation algorithm. The third category is live broadcasting, which is a relatively new form of content, specifically divided into e-commerce live broadcasting, game live broadcasting and entertainment live broadcasting. Common platforms include Baidu Live Streaming (YY直播), Taobao Live streaming (淘宝直播), JD Live streaming (京东直播), Kuaishou and Douyin Live streaming (快手和抖音直播).

From the perspective of products, college enrollment promotion has substantial differences from other products' advertising. For example, the geographical location, the dual nature of the audiences (parents and children), the high involvement in decision making, and etc., making the advertising strategy of enrollment promotion less effective compared to that of the general products. But on the other hand, there is few academic studies on college enrollment promotion, especially the lack of systematic research on the effect of the college online advertising. Due to the lack of relevant theoretical guidance, it seems that colleges act blindly in the online enrollment promotion. For example, when and for whom would it be better to advertise? Based on the diversity of the

advertising platforms, what are the differences in the delivery effect of each platform? What factors can affect the effect of enrollment promotion?

Therefore, although the recruiting advertisement through the Internet has become an important marketing means in Chinese colleges, there is still no clear research results on how to carry out an effective advertising, especially in the influential factors such as the time, platform and target audiences. This study intends to investigate the effect of different advertising platforms on college enrollment promotion from different dimensions of psychological distance (temporal, spatial, social, and hypotheticality).

Based on the Construal Level Theory (CLT), this study explores the effects of different advertising platforms on Chinese college enrollment promotion by taking different dimensions of psychological distance corresponding to the timing and area of online advertisements. Take a Chinese college as a sample, an empirical study is carried out and finds that the advertising types and platforms do have significant influence on the advertising effectiveness. The advertising type with “desirable” information has more significant advertising effect on parents in all platforms, while the advertising effect of “feasible” information on Kwai is more significant to students in terms of platforms.

Chapter 2 Literature Review

2.1 Online Advertising and Relevant Studies

In recent years, the rapid development of the Internet has brought a huge impact on all traditional industries. In the era of traditional media, only authoritative organizations have media qualifications, and they disseminate information through traditional media, such as televisions, radios, newspapers and magazines. With the rise of the Internet, the Internet-based information transmission is popular, and has been gradually nibbling away the market share of traditional media. Online advertising, also known as Internet advertising, refers to the advertisements published on the Internet. Compared with the traditional advertising, online advertising can meet consumers' needs based on their psychological characteristics and consumption behaviors, reduce their boredom with advertisements (For example, based on the viewers' search and browsing history, the online shopping websites can use the algorithms to decide their consumption preference and push the advertisements before them). According to the 2022 Mobile Internet Development Yearbook released by the third-party organization QuestMobile, though the overall advertising market declined by 9.4% in 2022, the online advertising market still exceeded 680 billion yuan, with an increase of 4% from 2021. Thus, this paper focuses on online advertisements placed on Internet platforms.

2.1.1 Online Advertising

Online advertising has been regarded as an effective means to achieve marketing goals and strategies to a large extent due to its diversity of display content (visual, verbal or written content) and interactivity (Okazaki & Taylor, 2013). In particular, it plays a prominent role in customer engagement, customer relationship management and communication (Filo et al., 2015; Saxena & Khanna, 2013), so online advertising is increasingly adopted by enterprises as a channel that can effectively carry out marketing events and communicate with target customers (Popp & Woratschek, 2016; Harrigan et al., 2016; Gao and Feng, 2016; Kohli et al., 2016). A large number of empirical studies also confirm the important role of online advertising in marketing events (i.e. Chang et al., 2015; De Vries et al., 2012; Hill and Moran, 2011; Jung et al., 2016; Lee and Hong, 2016; Lee et al., 2016; Lin and Kim, 2016; Lin et al., 2016; Lugmayr, 2012; Mangold and Faulds, 2009; McCaughey et al., 2016; Okazaki and Taylor, 2012; Okazaki and Taylor, 2013; Powers et al., 2012; Rejón-Guardia et al., 2016; Steyn et al., 2011; Swani et al., 2016; Wu, 2016).

How the online advertising influences customers' perception, attitude and purchasing behavior has been the focus of this research area (e.g., Buhalis and Rossides, 2012; Hamilton et al., 2016; Gironda and Korgaonkar, 2014; Zhu et al., 2016; Erkan and Evans, 2016;). At present, online advertising is mainly used as information sources in customers' purchasing process (Drews and Schemer,

2010; Powers et al. 2012), and has become more and more important in customers' purchasing decisions (Hamilton et al., 2016; Zhu et al., 2016; Erkan and Evans, 2016). In addition, scholars have also found that online advertising platforms also impact on customers' attitudes and actual purchasing behavior.

In terms of factors affecting the effects of the online advertising, Duffett (2015) believes that the efficiency and effects of online advertising campaigns depend on how customers view and express their attitudes towards products, indicating that the effects of online advertising are likely to be significantly related to the psychological level of the audiences. In addition, some scholars also investigate the influential factors of the online advertising. For example, some studies find that there are gender differences in users' preference for online advertising platforms (Clavio and Kian, 2010; Lebel and Danylchuk, 2012). Although studies related to online advertising have attracted the attention of a large number of scholars, but there are still some problems in the existing research.

First, when exploring the online advertising effects, the vast majority data of the extant studies is from college students and is usually from developed countries (Jung et al., 2016; Harrigan et al., 2016), which only considering the advertising effects on specific platforms and specific groups (Chang et al., 2015). So, there is still a lack of comparative research on different online advertising platforms. Secondly, the comparative study of different online advertising types needs to

be further explored. Filo et al. (2015) call for further attention to the impact of advertising types on customer attitudes toward advertising platforms, such as Facebook, and so on. Finally, although the current research on the online advertising has covered many fields, such as tourism and hotels, there is still a lack of research in education, politics, social and cultural environment, especially in the field of colleges enrollment promotion (Ali Abdallah Alalwan Al, 2017).

2.1.2 Online Advertising of College Enrollment Promotion

Western scholars begin to pay close attention to the problems of college enrollment promotion early, most research on the school choice is conducted in the framework of consumer behavior research, the marketing effects of college enrollment promotion are analyzed from the perspective of marketing, and the relevant research shows that the factors affecting higher education consumption decisions are complex, therefore, when choosing a college, more information is to be obtained by students to eliminate the “attitude contradiction” in decision-making (Zuniga, Losantos & Sanchez, 2009). Meanwhile, based on the multiple stages of consumption decision-making (Puccinelli, 2009), Sipila and Herold (2017) believe that different types of information have different effects at different stages in college decision-making due to different levels of interpretation. Based on Construal Level Theory, the effects of “Word of Mouth” information in two-stage decision making (search and choice) are tested.

Constantinides and Stagno (2011) investigate the influence of social media (one type of online advertisements) on students' school choice and conducted market segmentation for social media.

Due to the National College Entry Examination in China, colleges have traditionally paid little attention to recruitment, and relevant academic studies are few. In recent years, with the increasing pressure of college enrollment competition, studies have begun from the aspects of enrollment promotion strategies and models (Feng Zhenmei, Man Wei, 2018; Chen Qian, 2017; Zhang Jiyan, Jiang Zhaolei, 2017; Huang Guobiao, 2014). Some scholars have also begun to pay attention to the application of online advertising in college enrollment promotion: Jiang Xianliang (2013), after analyzing the problems existing in traditional means of enrollment promotion and the advantages of online advertising, believes that it is a trend to use the online advertising for enrollment. Hou Yuejuan (2016) investigates the main channels of colleges' image communication through a questionnaire survey and finds that online advertising platforms such as the official websites, official microblogs, post bars and BBS received the highest attention. Li Cong (2018) conducts an empirical study on Wuhan University of Physical Education's use of online advertising for enrollment promotion, showing the advantages of online advertising in interactivity and immediacy, and proposes that the enrollment promotion strategy should integrate information resources and gather promotion focus.

From the perspective of the use of online advertising tools, microblog (Li Wei, 2004; Tong Li, 2015; Tian Merlot, 2015; Zhang Rong, 2016; etc.), WeChat and QQ (Ma Chuang, 2014; Li Li, Liu Shuyan, 2015; Wang Zhongqiang, Hu Zengjun & Guo Bin, 2014; etc.) and other tools are well received by scholars. However, in general, although attention has been paid to the important role of online advertising in enrollment promotion, domestic research on college enrollment promotion is still mainly focused on how to apply online advertising, the breadth and depth of the research is still seriously insufficient, especially the effect of online advertising enrollment promotion has not been fully studied. In view of the fact that many emerging online advertising platforms have been widely used by many colleges in recent years to promote the recruitment, it is increasingly necessary to conduct research on these platforms.

2.2 Construal Level Theory and Relevant Studies

2.2.1 Construal Level Theory

Liberman and Trope (1998) first proposed that events at different temporal distances could lead to different psychological construal. For example, they asked participants to provide open-ended descriptions of near-term (“tomorrow”) rather than long-term (“next year”) events. As expected, the results confirmed that recent events, such as “reading a book”, were consistent with lower-level or secondary goals (“reading scientific fiction”), while longer-term events were more consistent with higher-level or advanced goals

(“broadening my horizons”). From this, they propose the Construal Level Theory (CLT), which suggests that people choose different levels of construal (high or low) when interpreting events or objects (Trope, Liberman & Wakslak, 2007). Among them, high construal level represents abstract, simple and essential, such as representing money as words, while low construal level represents concrete, complex and superficial, such as representing money as pictures.

2.2.2 Construal Level and Psychological Distance

Psychological distance is a kind of subjective experience that people have of something close to or far away from its reference point (myself, now, here), that is, the individual is self-centered. The direct experience of his/her own here and now, that is, the distance or proximity of the described event or behavior in space and time, with the individual as the reference point. The perception of the greater or lesser probability of occurrence. Psychological distance is divided into four dimensions: temporal distance, social distance, spatial distance and hypotheticality (Trope, Liberman & Wakslak, 2007). Among them, temporal distance refers to the individual’s perception of the time and distance of the event. Spatial distance refers to the individual’s perception of spatial distance. Social distance refers to the size of the difference between the social object and the individual self (e.g., self-others; friends-strangers), and hypothetical refers to the probability of an event or object occurring or the distance from reality.

Most researchers believe that an individual's construal level will change with the change of psychological distance, that is, the construal level is determined by the psychological distance between an individual and an object or event (Soderberg et al., 2015). This change affects the individual's cognitive activities such as judgment, prediction and evaluation. The link between psychological distance and construal level mainly stems from whether the stimulus brings direct experience (Trope et al., 2007). When a stimulus can be experienced, people characterize it with specific features after receiving relevant information about it, whereas stimuli that lack direct experience, such as the past or future, other places, and other individuals, can only be represented abstractly because of a lack of detailed cognition. Thus, people have established a connection between psychological distance and abstract processing. This association becomes highly generalized over time, causing psychological construal to be influenced by the distance of the stimulus, even when there is equal knowledge of distant and close stimuli (Trope et al., 2007; Wakslak et al., 2006).

This connection between construal level and psychological distance has been demonstrated in all dimensions. Studies of temporal distance have found that people tend to describe distant future events more abstractly than recent events (Liberian, Sagristano & Trope, 2002) and, therefore, value desire over feasibility when making choices for the distant future (Liberian and Trope,

1998). Similar results are found for other dimensions of psychological distance, including spatial distance (Fujita et al., 2006a), hypothetical (Todorov, Goren & Trope, 2007; Wakslak et al., 2006) and social distance (Liviatan, Trope & Liberman, 2008).

The relationship between the four psychological distances and the construal level is very similar, that is, when people think about distant future events (temporal distance or spatial distance) with high construal level, we tend to explain it in an essential and abstract way and pay attention to its most essential and core features. When we think about near future events with low construal level, we tend to interpret it in a concrete and superficial way and pay more attention to the superficial features of things. Therefore, the features associated with low construal level (concrete and superficial features) are regarded as low-level value, while the features associated with high construal level (abstract and essential features) as high-level value. When people recognize things, influenced by psychological distance, they have different evaluation criteria for the value of the things. Taking temporal distance as an example, the value of features associated with low construal level (low-level value) will gradually diminish over time, while the value of features associated with high construal level (high-level value) will gradually increase. Based on the temporal distance, Trope and Liberman (2000) report an explanatory finding that events with favorable high-level value and unfavorable low-level value (“studying in the

library”) are perceived as more attractive in the distant future than in the near future. On the contrary, events with unfavorable high-level value and favorable low-level value (“eating cake”) are less attractive the further away they are. Thus, in response to distant future events rather than near future ones, the “informational and evaluation implications” of high construal level has more impacts than that of low construal level (Trope & Liberman, 2003; 2010).

2.2.3 The Application of CLT in the Advertising

Studies have shown that psychological distance and construal level are related to advertising effectiveness and performance. In the process of consumer decision-making, psychological distance affects the construal level of consumers and plays an important role in various ways at different stages of consumer decision-making (Isaak, 2017).

Psychological distance and construal level affect consumers’ judgment and decision, because consumers make decisions on how to present the product rather than the product itself (Trope & Liberman, 2010). For example, when consumers evaluate which product to buy, they make choices based on their psychological construct of the product. In different contexts, the psychological distance from the product determines how the product is perceived and subsequently represented psychologically. When evaluating products, consumers will perceive which features (or information) of products are more

important according to psychological construal, thus influencing which features or information to be used or ignored in the decisions. As a result, consumers will assign higher weight or value to specific aspects of information or product features, which guiding decisions in the corresponding direction. This means that if the high-level value (such as the desirability of products) is more prominent than the low-level value (such as the feasibility of products), then the further away the thing is, the more attractive it will be. If the low-level value is more advantageous, then the closer the distance, the more attractive the things should be (Trope & Liberman, 2010). This finding means that in advertising, different features of products or information affect consumers' evaluation and decision making through high and low levels of construal, and also affect the marketing effectiveness of products. Similar findings are illustrated in many scholars' studies (shown in Table 2-1).

Table 2-1 The Application of CLT in Advertising and Consumers' Decision Making

Research Direction		Low Construal Level (Close Psychological Distance)	High Construal Level (Far Psychological Distance)	Authors	Publications	Year
Perception of Consumers	Information Attributes	more sensitive to "lost" information	more sensitive to "accessible" information	White, Mac Donnell	JMR	2011
	Perceived Price	prices are monetary payments	prices are quality indexes	Boenemann, Homburg	JCR	2011
	WOM	close friends have a greater impact on recent consumption behavior	strangers have a greater impact on long-term consumption behavior	Zhao, Xie	JMR	2011
Consumers' Attitude and Evaluation	Product Attributes	emphasis on secondary attributes	emphasis on primary attributes	Martin, Gnoth	JA	2009
	Similarity	prefer the diversified products	prefer a single product	Henderson; Goodman	SP JCR	2013 2012
	Ad Content	prefer ads with quality info	prefer self-concept ads	Freitas, Langsam, Clark	JESP	2008
	Enterprise Attitude	easier to stand the enterprises' problems		Kyung, Menon	JESP	2010
Consumers' Choices	Line Extension	exemplar-fit extend products	prototype-fit extend products	Chai Junwu et al.	心理学报	2011
	Saving Money		save more money	Cheema	JMR	2011
	Product Choice	gift promotion is more effective	price promotion is more effective	Liu Hongyan et al.	心理学报	2012
	Processing	more confident on the choice		Tsai	JCR	2011

Empirically, Liberman and Trope (1998) find that when considering purchasing products in the distant future, participants put more emphasis on the desirability aspects, while considering purchasing products in the near future, they pay more attention to the feasibility ones. Martin, Gnoth and Strong (2009) find the impact of consumers' temporal orientation (such as future-oriented versus present-oriented) on the product features in advertising context. Consumers' weight to a specific product's features (primary and secondary) depends on the construal of the temporal distance (and the near future in the distant future), which affects the final impacts on advertising - when consumers are future-oriented, they seem to be more easily persuaded by primary features of products, and those present-oriented consumers prefer the advertising with secondary features of products. Many studies have demonstrated similar effect mechanisms in other dimensions of psychological distance.

In terms of social distance, studies have found that when consumers buy products for themselves, they have closer psychological distance and pay more attention to the feasibility of products, while when they buy products for others, they have farther psychological distance and pay more attention to the desirability of products (Zhou Meihua et al., 2015). In the context of online marketing, interpersonal similarity becomes a manifestation of the social dimension of psychological distance (Zhang Qin, 2019), and consumers will be

influenced by commentators with similar social identities in the process of consumption decision-making (Li Baoku, 2019).

In the dimension of spatial distance, in the study of Word-of-Mouth (WOM) information of online marketing by Che Cheng (2017), it has found that when the spatial distance is relatively close, the WOM information of low-level value is more useful to consumers, while when the spatial distance is far, the WOM information of high-level value is more effective to consumers.

Previous studies have shown that the attributes of information in advertising have an important impact on the advertising effectiveness. Information with a low construal level (concrete) is more effective when the psychological distance is relatively close, and information with a high construal level (abstract) is more effective when the psychological distance is relatively long. But current studies of advertising effectiveness are more explained by the variables, such as the love of consumers, advertising, consumers purchase intention, few are explained by the variable of consumers' actual behavior. This study starts from the college students' choice of schools and uses construal level and advertising appeal as moderators, to examine the influential factors of advertising effectiveness.

2.3 Advertising Appeal and Advertising Audience

2.3.1 Advertising Appeal and Relevant Studies

Advertising appeal is the content to be emphasized in commodity advertising, commonly known as “selling point”, reflecting the whole advertising strategy, and is often the key to the success of advertising. If the advertising appeal is properly selected, it will have a strong appeal to consumers, stimulate the desire to consume, so as to promote the implementation of the product purchase. Obviously, advertising appeal is a very important part of advertising content, which has an important impact on the advertising.

At present, most of the research on advertising appeal is classified based on functional appeal (FA) and emotional appeal (EA) (Spears and Singh, 2004; Zarantonello et al., 2013). However, since consumers usually make consumption decisions based on certain features of products, advertising appeal is usually designed based on product features. Therefore, some scholars began to link the attributes of product and benefits to the concepts of feasibility and desirability respectively (Lee et al., 2018a; 2018b; Liberman & Trope, 1998), where feasibility is usually related to product attributes, means of obtaining products and product prices, while desirability is usually related to goals, values and quality (Lee et al., 2018a; 2018 b). On this basis, some scholars convey the product features in feasibility and desirability according to different advertising message, and study the effects of two kinds of advertising appeal in different

areas, such as Nah RayHan (2019)'s research of green advertising finds that the feasibility appeal and desirability appeal has different effects and the feasibility appeal is more effective in green advertising. Yoon et al. (2019) use price discount and product quality to represent the advertising of feasibility and desirability respectively and examine the effects of discount advertising in different environments. Kazakova et al. (2016) study the effects of two advertising appeals in TV advertising, and find that compared with TV advertising emphasizing the feasibility of products, TV advertising emphasizing the desirability of products has more cognitive and attitudinal advantages for consumers. Lee et al. (2018) find that different types of advertising appeals have different effects on audiences with different political orientation in anti-tobacco advertising, and Liberals give higher evaluation to the advertising appeal of feasible information, while Conservatives give higher evaluation to the advertising appeal of desirable information.

The studies above show that although there are few studies on feasibility appeal and desirability appeal in advertising, empirical studies in related fields show that two appeals play important roles in advertising, especially in the field of the college enrollment promotion. The desirability (for example, the reputation) and feasibility (for example, the admission score) of colleges are important factors for students and parents to consider when making decisions. Therefore, according to CLT and existing research, this study divides the types of

information in college enrollment promotion into two types, 1) the desirable information which include targets, value, quality and other aspects of the information (usually associated with the more abstracts), and 2) the feasible information which include attributes, means, price (usually associated with more specific features), this classification is consistent with that of product features proposed by Trope et al. (2007).

2.3.2 Advertising Audiences and Relevant Studies

Advertising audiences are information receivers in the process of the advertising dissemination. In practice, advertising audiences have two connotations, the broad advertising audiences refer to all people who touch the advertising through media, that is, the media audience of advertising, and the narrow one refers to the target audiences of advertising and objects of advertising appeal.

As advertising is spread by means of mass media, the media audiences of advertising are not completely consistent with the target audiences. From the perspective of consumer roles, the audiences of advertising may include product needs, advisers, decision-makers, users and other roles.

The characteristic of advertising selection determines the specific appeal targets of advertising campaigns according to the requirements of the advertising. Regarding the college choice, the decision-making process is complicated with

many participants, among which the most important participants are students and their parents. As the ultimate consumers and users of education, students are naturally the main target audiences of advertising. However, as families, especially parents, have great influences on students' school choice, especially in China, the wish lists of National College Entry Examination are even decided by students' parents, so they also become important target audiences of advertising.

Chapter 3 Theoretical Model and Hypothesis Development

3.1 Construal Level and Advertising Appeal

The effects of advertising depend on advertising appeal, and consumers' perception of advertising appeal is affected by the construal level (Phillips 1997; Ma 2008; Buijzen, 2014). Some studies have shown that the construal level of consumers is related to different advertising appeals (e.g., Chang et al., 2015; Park & Morton, 2015; Septianto & Pratiwi, 2016). These studies have found that construal level plays an important mediating role in consumers' evaluation of emotional or functional appeals in advertising. Minoa Fikouie (2022) tests the correlation between construal level and advertising appeal, and the results show that different combinations of advertising appeal and construal level have different advertising effectiveness in different contexts. In previous studies, functional appeal and emotional appeal are often taken as the research objects, while this study mainly emphasizes the appeals of feasibility and desirability in advertising.

Trope et al. (2007) believe that objects, events and behaviors can be viewed according to their desirability and feasibility. Desirability is defined as the value of the final state that someone pursues, while feasibility represents the effort (means) needed to achieve that final state. Desirability is associated with more abstract manifestations, but feasibility refers to more concrete manifestations. The salience of desirability versus feasibility depends on the construal level

(Dhar & Kim, 2007) - when a product is represented at a higher level, its desirability related aspects become more important in the decision making (e.g., “Why do you want to own this product?”); in contrast, when a product is presented at a lower level, its feasibility related aspects are more prominent in the decision making (e.g., “How do I use this product?”). When describing an activity such as “studying for tests”, those in the high construal level prefer to focus on the “why” aspect of the situation (e.g., “performing well”), while those in the low construal level prefer to focus on the “how” aspect (e.g., “reading a textbook”) (Vallacher & Wegner, 1987; Trope & Liberman, 2010). Some studies have also found that feasibility and desirability are asymmetric when evaluating. Consumers’ interests in the feasibility may depend on the desirability. For example, individuals first assess the attractiveness of the job (goal relevance) and then consider the feasibility aspects of how to obtain the job (means relevance). These findings suggest that the change of feasibility considerations in psychological distance is more sensitive than that of desirability. According to the findings, Todorov et al. (2007) show that in the product evaluation, high probability (low hypotheticality distance) increased means related features (feasibility) relative to the objective weights of relevant features (desirability), therefore, reduces the preferences to the preferable but more infeasible results, rather than the undesirable but more practical results. As for product selection, the study of Zhao, Hoefler and Zauberan (2007) shows that consumers with a high construal level prefer products with good

intentions (such as software with excellent functions but difficult to use), while consumers with a low construal level prefer products with good feasibility (such as, easy to use software, but limited to basic features).

When making decisions for others rather than for themselves (social distance), people value desirability over feasibility. For example, when deciding the best vacation plan for themselves, people tend to incorporate feasibility into their decision, while when advising others, they will choose the very ideal vacation plan (Xu & Xie, 2011; Lu, Xie & Xu, 2013). According to Baskin et al. (2014), gift-givers (compared with recipients) have a more abstract understanding of gifts and therefore attach more importance to the desirability of gifts than to that of the feasibility. Their hypothesis is supported by the results. In addition, they find that by reducing the construal level of the gift-giver to the low construal level of the recipient - for example, by highlighting closeness to the recipient, or by asking the recipient to reflect on their preferences when choosing a gift - the givers make choices that match the recipients' choices.

As can be seen from the above studies, the relationship between the feasibility and desirability and the construal level has been confirmed in multiple dimensions of psychological distance. Therefore, in advertising, it is reasonable to believe that advertising information associated with different features will have different advertising effects under the influence of psychological distance.

That's to say, in consumption decision-making, due to the different psychological distances, consumers will use different construal levels to represent and understand the features and information of products or objects reflected in advertising. If psychological distance is relatively far, consumers are in the high construal level to characterize and understand the product, the desirable information of product or object is given greater weight in the decision-making; if psychological distance is relatively close, consumers come are in the low construal level to characterization and understand the product, the feasible information of the product or object is given greater weight in the decision-making. Therefore, different types of advertising will bring different effects.

3.2 Psychological Distance

According to CLT, because different psychological distances determine consumers to use different construal levels to represent and understand the features and information of products or objects, psychological distances have important impacts on different types of information advertising effectiveness.

In college enrollment promotion, the main decision made by consumers (the audience of the advertising) is to choose the colleges/universities that students will attend in the future. At this time, the psychological distances of consumers are their perceptions of school choice probability in the dimensions of time,

space, self, occurrence and so on, taking themselves as the reference point (themselves, now, here, etc.).

Specifically, in the temporal dimension, temporal distance refers to the individual's perception of the time and distance of an event. In the decision-making process of school selection, if consumers receive the advertising information of college enrollment promotion earlier before their final decision on schools, their psychological distances are relative far and they are more interested in desirable information on the college enrollment promotion, if close to their final decision on schools, their psychological distances are relative close and thus they are more interested in the feasible information on the college enrollment promotion. For example, before the National College Entry Examination, because of the uncertainty on exam grades, students and parents are unclear on the school choices, so they mainly focus on the macro aspects of schools (desirable information), such as which schools are better, but after National College Entry Examination, once the grades are released, students and parents pay more attention to which school the students can enter, and focus on the micro aspects of schools (feasibility information), such as admission policies.

In social dimension, social distance refers to the differences between social objects and the individual self (e.g., self-others; friends-strangers). In the

advertising of colleges and universities, the audiences of advertising information may be the students themselves (the final recipients of the school selection), or other individuals who can influence the final choice of school (the students' families, friends, mainly are the parents). Different audiences of advertising information have different psychological distances due to the impact of events (school choice) on themselves. Students are the final bearer of school choice, they are responsible for the result of the choice, so their psychological distances are close, while others (family members and friends) have great influence on school choice, in some families, even the final decision of school choice is made by the parents, but after all, they are not the direct recipients of the final school choice, so their psychological distances are far.

In spatial dimension, spatial distance refers to the individual's perception of spatial distance. In the decision-making of school choice, if a college is close to the consumers, such as a college is located in the city where they live, they may have some understanding and cognition of the school and be relatively familiar with it. When they further receive the advertising information of the school, they will have a close psychological distance. However, if a college is far away from the consumers, they may lack basic understanding of the school and be relatively unfamiliar with it, so their psychological distance is far when receiving the advertising information.

In the hypotheticality dimension, hypotheticality refers to the possibility of events or objects occurring or the distance from reality. In the decision-making process of school choice, even before the National College Entry Examination, students and parents make rough evaluations of the target range of school choice based on students' study performance. So when receiving the college enrollment promotion, if beyond the range of the school choice (for example, the students' grades cannot meet the entry requirements of the schools), students and their parents are unlikely to choose, then their psychological distances are far, and if within the range of the school choice (for example, the students' grades meet the entry requirements of the schools), students and their parents are likely to choose, then their psychological distances are close.

Therefore, influenced by the psychological distances of advertising audiences, the colleges' advertising effectiveness is correlated to the timing of launch, target audiences, area and other factors, and these factors are corresponding to the different dimensions of psychological distances according to CLT, thus forming different construal levels, and affecting advertising effectiveness of different information (desirability/feasibility).

3.3 The Advertising Effectiveness

As the independent variable of this study, advertising effectiveness refers to the impact of advertising and the degree to which the goal is achieved. As this study

mainly focuses on online advertising platforms, the advertising effectiveness are usually indicated by data such as click rate, forwarding rate and conversion rate. In order to facilitate the comparison of different platforms and different types of information, this study chooses click-through rate as the index of college's advertising effectiveness.

3.4 Research Model

Due to the influence of the advertising time, target audiences, advertising area and other factors, in the process of advertising, colleges and universities can produce different psychological distances and different construal levels, the latter conveys different type of information (the desirability and feasibility) to the people and leads to the different levels of acceptance. Therefore, different types of information have impacts on advertising effectiveness through the interaction of factors such as the advertising time, target audiences and advertising area.

H1: There is an interactive effect between the types of advertising information and the timing of launch - the timing of launch has its impact from the dimension of the temporal distance. When the temporal distance for school choice decision-making is far, the psychological distances of students or parents are also far, which leads to the high construal level; when the temporal distance for the decision is close,

the psychological distance of students is close, which leads to the low construal level.

This study takes the National College Entry Examination as the time node. For early advertising (before the National College Entry Examination), the advertising effectiveness of desirable information is better than that of feasible information. For the advertising in the later stage (after the National College Entry Examination and during the wish-list filling period), the feasible information is better than the desirable information.

H2: There is an interactive effect between the types of advertising information and area of launch - the area of launch has its impact from the dimension of spatial distance. The out-of-town students and parents (far from the advertising schools) may be unfamiliar with the schools, then their psychological distances are far; while the local students may have certain understandings to the school, so their psychological distances are close.

For the out-of-town audiences (geographically distant from the schools), the desirable information is better than the feasible information, while for the local audiences, the feasible information is better than the desirable information.

H3: There is an interaction effect between the types of advertising information and the target audiences – the target audiences have their impacts from the dimension of social distance. Parents are more rational in the school choice due to their richer social experience, since they are not the final recipients of school choice, their psychological distances are relatively far; however, as students are the final recipients of school choice, their psychological distances in school choice are relatively close.

For parents, desirable information is more effective than feasible one, while for students, feasible information is more effective than desirable one.

To sum up, the research model as shown in Figure 3-1.

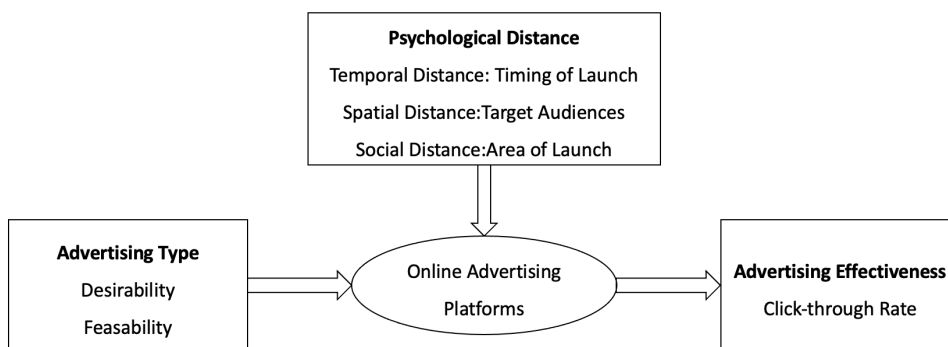


Figure 3-1 Research Model

Chapter 4 Research Design

Due to the confidentiality of colleges' enrollment promotions, it is difficult to collect public data. Therefore, this study uses a vocational college in Chongqing as a sample to conduct an experiment on its enrollment promotion before and after the National College Entry Examination. The sample school is owned by the author's family, which makes it easier to control the experiment and collect data. Compared with undergraduate-level education, vocational education institutions are more homogeneous. Colleagues from the marketing department also learn that when colleges launch the enrollment promotions, the marketing approaches and channels are similar, so the conclusions drawn from the experiment are representative to a certain extent.

According to the availability of data and the research objectives, the factors such as the advertising time, the information type, advertising platforms, target audiences and advertising area and etc. are controlled in the research.

4.1 Timing of Launch (Before vs After the National College Entry Exam)

During the window period of the 2021 National College Entry Examination (7th - 9th June, 2021), advertising was released before (1st – 7th June, 2021) and after (23rd – 30th June, 2021) the National College Entry Examination. According to China's National College Entry Examination system, this period is an important

period for college enrollment promotion, and is also an important period for students and parents to collect the admission information of colleges and universities. It aims to verify the differences of advertising effectiveness in different time periods.

4.2 Advertising Information Type (Desirability vs Feasibility)

Based on CLT, this study divides the advertising information into two categories according to the desirability and feasibility of information (shown in Table 4-1).





The desirability and feasibility here are defined by Trope (2007) and Lee et al. (2018a; 2018 b). Desirability is associated with more abstracts, mainly reflecting macro aspects of information such as a school's reputation and quality, while feasibility is associated with more specifics, mainly reflecting micro aspects such as a school's environment and enrollment requirements.

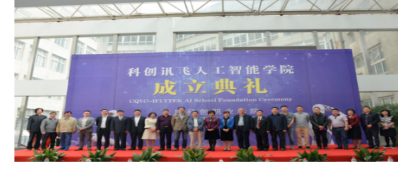

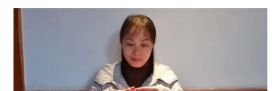
The school introduction, greetings from the President, social focus, honors and awards, honored graduates, school facilities, social activities, admission information, teaching activities are mainly used in the advertising of colleges and universities. Among them, information such as school introduction, greetings from the President, social focus, honors, honored graduates are used to promote the value of the school and to provide the overall impression of the

school to the target audiences, which is categorized as macro and abstract and reflects the “desirability” of the school. The information of school facilities, social activities, admission information, and teaching activities is mainly used to introduce the specific aspects of the school, which is categorized as detail and concreteness and reflects the “feasibility” of the school.

For the decision makers on school choice, they get to know the school (through school introduction), establish the whole image of the school (through social focus, honors and awards, honored graduates, etc.), and conclude that the school is “good” or “bad”, which is namely as “desirability” of the school, the information of teaching facilities, social activities, admission information, teaching activities and others can let students know more about how to “enter” the school (admission information), and how to live and study after entering the school (teaching facilities, teaching activities, etc.), which is namely as “feasibility” of the school. The advertising information classification and samples are shown in Table 4-1.

Table 4-1 Classification of College Advertising Information

	Ad Information	Classifications	Samples
1	School Introduction	desirability	
2	Greetings from President	desirability	
3	Social Focus	desirability	
4	Honors and Awards	desirability	

5	Honored Graduates	desirability	
6	School Facilities	Feasibility	<p>腾讯·大渝网 要闻 娱乐 经济 健康 美食 福利活动</p> <p>精选内容</p> <p>重庆科创职业学院与科大讯飞共建科创讯飞人工智能学院</p> <p>2015版本 腾讯大渝网 2018-04-27 09:57</p>  <p>参与科创讯飞人工智能学院成立典礼活动的各位领导合影留念</p> <p>为进一步落实中央“实施创新驱动发展战略”和“深化产教融合、校企合作”部署，推进重庆市“8+3”战略行动计划，服务地区经济社会发展，重庆科创职业学院与科大讯飞股份有限公司合作共建了科创讯飞人工智能学院。4月26日上午，科创讯飞人工智能学院成立典礼在科创学院举行。</p> <p>重庆市教委高教处处长吴斌，永川区政协副主席马玉平、重庆南岸职业教育研究会会长张亚松，重庆市民办教育协会会长陈传文及院地执行董事长何松、校领导陈伟、陈志高、田一平、刘鸿飞出席典礼，学校党委书记张维主持典礼。</p>
7	Social Activities	Feasibility	<p>重庆科创职业学院连续四年亮相重庆科技馆活动周</p> <p>来源：永川网 2020-08-31 18:00</p>  <p>8月29日至29日，以“科技强国·创新驱动”为主题的2020年重庆科技馆活动周在重庆科技馆精彩上演。</p> <p>8月23日至24日，为期2天的主题展览活动在重庆园博园举办。此次展览设置科技抗疫、智能制造、美好生活、科技扶贫4个主题板块，共展示互动性、体验性强的科技创新成果100余项。</p> <p>重庆科创职业学院自2017年挂牌于重庆市科管基地以来，已连续4年参加重庆市科技馆活动周主场活动，立足学校基地特色，围绕公众科普需求开展了一系列丰富多彩的科普活动。</p> <p>重庆科创职业学院——重庆市机器人及智能制造科管基地展区在智能制造区B08，展区内设有3D打印增材制造、无人机模拟飞行、机甲大师体验三个模块共6个互动体验项目。</p> <p>重庆科创职业学院以PLA材料加载磁流沉积成型技术打印的儿童益智玩具——磁流沉积成型体验可以锻炼体验者的动手能力，益智</p>
8	Campus Life	Feasibility	<p>首页 新闻 原创 视听 问政 评论 专题 区县 娱乐 财经 旅游</p> <p>政法 直播 文艺 教育 生活 应急 房产 健康 汽车 助证 鸡家 会客厅 万花楼 百姓故事 3·15 的</p> <p>重庆科创职业学院组织校园疫情防控“安全网”众志成城</p> <p>抗击疫情</p> <p>2020-02-25 11:54:04 来源：华龙网·重庆客户端 0 条评论</p> <p>华龙网·重庆客户端2月25日11时50分讯（赵桂斌）新冠肺炎疫情爆发以来，重庆科创职业学院按照重庆市委教育工委、市教委统一安排，持续做好疫情防控在首要位置，践行初心使命，强化责任担当，扎实推动疫情防控工作科学化、有序有力开展。</p> <p>发挥党员先锋模范作用 抗击疫情党员先行</p> <p>作为首批全国样板支部，重庆科创职业学院经济管理系教师党支部在此次疫情防控工作工作中充分发挥党员的先锋模范作用和党员干部的先锋模范作用，支部党员讲奉献、敢担当、勇争先，通过钉钉、微信群等方式，学习疫情防控相关政策和专业知识，并发挥文科教师的优势，开展了“声”援武汉——党员领读诗”活动，通过撰写防疫诗文、防疫顺口溜等方式，在微信、微博广泛传播，唱响主旋律，凝聚正能量。</p> <p>巾帼不让须眉 抗击疫情我们一样行</p> <p>疫情发生以来，在抗疫过程中，重庆科创职业学院涌现了一大批典型人物，讲述了巾帼不让须眉的动人故事。</p> <p>唐礼萍是该校艺术与教育学院的老师，也是永川区非物质文化遗产传承人。面对新冠肺炎疫情，唐礼萍第一时间构思了“来自唐院长的网络诗”，通俗易懂、生动灵动的为科学抗击疫情，发出心声。</p>  <p>网络问政</p> <p>网络民意箱，有事请吐槽</p> <p>学校疑乱收课后延时服务收费</p> <p>敬老院建设运营情况调查</p> <p>精品栏目</p> <p>火龙果 “钢铁”救援</p> <p>民兵 高别！ 聚在雨中之歌</p> <p>新闻聚焦</p> <ul style="list-style-type: none"> 进博会上的“重庆面孔” 重庆最美夜景打卡地 首批批准 红星美凯龙“花式”私收物业费 重庆非团自驾游先忧忧感谁2 新一期“重庆好人”名单发布 促销战线出台：不得先提价再 多地试水网上春晚招商 网信办部署整治网络“有损制 家长群变“压力群”“等等群” 凤凰、编曲……81岁“大男

9	Enrollment Information	Feasibility	 <p>The screenshot shows the website for Chongqing Vocational College of Innovation. It features a navigation bar with links like 'Home', 'About Us', 'Admission', 'Teaching', and 'Contact'. The main content area is titled '重庆科创职业学院2020年招生简章' (Chongqing Vocational College of Innovation 2020 Admission Prospectus). It includes a QR code for enrollment and a list of articles related to the college's admission process.</p>
10	Teaching Activities	Feasibility	 <p>The screenshot shows a news article titled '聚焦 重庆科创职业学院精细化管理迎接首批返校复课学生' (Focus Chongqing Vocational College of Innovation's精细化管理迎接首批返校复课学生). The article discusses the college's management and preparation for the first batch of returning students. It includes several photographs showing staff members interacting with students and a sign that reads '非志无以成学' (Without ambition, one cannot achieve learning).</p>

4.3 Advertising Platforms (Douyin vs Kwai vs Moments)

According to China's Internet advertising market in the first half of 2022 released by QuestMobile Research Institute, the media delivery of Internet advertising is concentrated on videos, consulting and social medias, and short videos have become the main delivery medium (QuestMobile2022 Internet Advertising half-yearly report). As of June 2022, the number of active mobile Internet users of Generation Z born in 1995 and 2000 has reached 342 million (shown in Figure 4-1), and this group is the main target audiences for the enrollment of colleges and universities.



Figure 4-1 Mainstream Video APP Platforms

According to the current Chinese Internet advertising market and the target audiences of this research, this study chooses three online advertising platforms, namely Douyin (抖音), Kwai (快手) and Moments (朋友圈). The reasons are: firstly, as the three most popular platforms for promotion, it is representative to verify the advertising effectiveness of these platforms; secondly, all three platforms can release video information, which is conducive to ensuring the consistency of information content, so as to have comparability; and finally, known from the marketing departments of colleges and universities that after the popularization of mobile Internet, the application of search engines and websites in the advertising has been greatly reduced compared with that of before, and it continues to decline.

4.4 Target Audiences (Parents vs Students)

Since China's National College Entry Examination is extremely important in Chinese family life, and parents have great influence on students' entry examination, this study focuses on the effects of advertising information on both students and parents. On the selected online advertising platforms, big data provides us with the possibility to accurately control the advertising audiences. On these platforms, netizens are labeled according to their attributes and behavioral features, thus providing the function of accurate advertising based on the "labels" of potential advertising audiences. Age of the audiences is tagged to distinguish the parents and students in the advertising, interests and hobbies, profession, and etc. are also tagged to control the effects of advertising, thus it can effectively ensure the reliability of the target audiences.

4.5 Areas of Launch (Chongqing vs Sichuan vs Guizhou)

Most colleges and universities in China have certain degree of admission areas, but area may also become an important influential factor when students choose schools. The college in this study is located in Chongqing, and their students mainly come from Chongqing, Sichuan and Guizhou, and a small number of students come from other areas, so the advertising in this study is mainly directed to these areas. The control of the advertising area is similar to the advertising audiences, which is also controlled by "labels".

Chapter 5 Results of Advertising Videos Testing

The key element in this experiment is the video used in the advertising. In order to eliminate the influence of other interfering factors on the advertising effect and accurately verify the relationship between the advertising information type and the advertising effectiveness, this experiment not only controlled the above factors in the experiment, but also examined the shooting quality and information type of the advertising video in the pilot study.

5.1 Pilot Study

In order to investigate the promotion effect of the advertising video, the questionnaire survey is adopted to examine the advertising video. In the survey, participants are the G12 students from dozens of middle schools, the main source of students in Sichuan, Guizhou, Chongqing and other places. Questionnaires are distributed through the Credamo questionnaire platform, and the final valid social sample is 1450.

5.2 Testing of Video Shooting Quality

In order to ensure that the advertising effect is not affected by the quality of video shooting, we examine whether there is any difference in the evaluation of the two videos by participants who have seen Video 1 and Video 2 through independent sample T-test.

In order to examine whether there are differences in the shooting of the two videos, we develop a scale and ask the participants to rate the production quality, shooting techniques and angles, video images, and sound effects of the advertisement. The scale is analyzed and its Cronbach's alpha coefficient reached 0.951, indicating that the scale is reliable (Table 5-1). There is a significance level of more than 10 percent in the T-test for the participants' overall ratings of video shooting, indicating that there is no significant difference in the quality of shooting between the feasibility and desirability videos (Table 5-2).

Table 5-1 Reliability Analysis of Videos' Shooting Quality

ITEM	mean	stderr	N
Cronbach's Alpha	.951		4
Please rate the production quality of the advertisement.	6.098	2.1316	1450
Please rate the shooting techniques and angle of the advertisement.	6.131	2.1344	1450
Please rate the video images of the advertisement.	6.142	2.1398	1450
Please rate the sound effects of the advertisement.	6.153	2.1268	1450

Table 5-2 T-test of Video Shooting Quality

ITEM		Sample		T-test	
		N	mean (stderr)	T	p
Advertisement Shooting Quality	Feasibility Video	908	6.066 (1.956)	-1.601	.110
	Desirability Video	542	6.239 (2.049)		

***, **, and * represent $p < 0.01$, $p < 0.05$, and $p < 0.1$ respectively.

5.3 Validity of Video Content Information

5.3.1 Test of Video Content Information

The survey is a scale in which the participants are asked to rate the information in the video. The survey includes six questions, the participants need to rate: 1) whether the information in the video is concrete (small score) or abstract (large score), 2) whether the detailed information is about the school (small score) or the school's philosophy (large score), 3) whether the information is about the study life after enrollment (small score) or the purpose of enrolling in the school (large score), 4) whether the information is more practical (small score) or more ideal (larger score), 5) whether the information is about life and after-school activities (smaller score) or related to studies (larger score), and 6) whether the information is the image of the college students (smaller score) or the image of the college (larger score). The scale is designed in such a way that the smaller the score, the more the subjects preferred the video to contain more concrete, detailed information about the school, the learning process after enrollment, practical information, information about life and extracurricular activities, and

the image of college students. We expect that the participants tend to see the feasibility video at this point. The higher the score, the more the participants tend to see the video to contain more abstract information, the school's philosophy, the purpose of enrolling in the school, the ideal, study-related information, and the image of the school. We expect that the participants should see the desirable video at this point.

The Cronbach's alpha coefficient of the scale reached 0.941, indicating that the scale is reliable (Table 5-3). The P value of the participants' rating of the video content is .006, indicating that the participants perceive a significant difference in the content of the feasibility and desirability videos. And they rate 5.668 for the feasibility video and 5.970 for the desirability video, which means that on average, the rating for the desirability video was indeed significantly higher than that for the feasibility video (Table 5-4).

Table 5-3 Reliability of Video Content Information

ITEM	mean	stderr	N
Cronbach's Alpha	.941		6
Is the content concrete (small score) or abstract (large score)?	5.590	2.3923	1450
Is it about the school (small score) or about the school's philosophy (large score)?	5.804	2.2773	1450
Is it about the study life after enrollment (small score) or about the purpose of enrolling in the school (large score)?	5.707	2.3166	1450
Is it more practical (small score) or more ideal (large score)?	5.828	2.2706	1450
Is it about life and after-school activities (small score) or related to studies (large score)?	5.845	2.2331	1450
Is it about the image of college students or about the image of the college (large score)?	5.908	2.2505	1450

Table 5-4 T-test of Video Information Content

ITEM		Sample		T-test	
		N	mean (stderr)	T	p
Advertising Content	Feasibility Video	908	5.668 (1.9991)	-2.773	0.006***
	Desirability Video	542	5.970 (2.032)		

***, **, and * represent $p < 0.01$, $p < 0.05$, and $p < 0.1$ respectively.

5.3.2 Effectiveness of Advertising Content Information

In the study of advertising communication, scholars have generally measured the effectiveness of advertising through changes in consumer attitudes and behaviors. The attitudes of advertising audiences toward both the advertisement and the brand ultimately affect purchase intention (Lutz et al. 1983). According

to Gardner & Mitchell (1985), advertising attitudes refer to the overall opinion of the audiences about the advertisement after viewing it. Because the higher the attractiveness of the advertising source, the higher the likability and credibility of the audiences (Pazer, 1983), there may be a strong link between the audience's evaluation on the attractiveness of the advertisement and the effectiveness of the advertisement. For example, many scholars have studied the role of endorsers in advertising and verified the positive relationship between advertising appeal and advertising effectiveness (Joseph, 1982; McGuire, 1985; Till & Busler, 2000, Silver & Austad 2004). The use of advertising attractiveness as an effect variable of advertising is also abundant in previous studies (Yang KC., 2004; Forsyth SR, Kennedy C, Malone RE, 2012; Herrando C, Constantinides E.,2021; etc). Therefore, this paper takes the audience's attractiveness rating of the advertisement as the effect variable of the advertisement video. After controlling for variables related to school location, family income, whether the father works outside the home year-round, and mock test ranking, it has been found that the effect of the two videos on the effectiveness of the advertisement is over the significance level of 0.1 (Table 5-5), indicating that the difference in the information provided by the two videos affects students' ratings of the attractiveness of the advertisement to some extent, and the regression coefficient is + 0.225, indicating that the higher the value is, the higher the participants' ratings of the attractiveness of the advertisement. Since we set the value of feasible video to 1 and desirability video to 2, it proves

that desirability video seems to be more effective for the participants. This may be due to the fact that the students in the pilot study are still far away from the time of application, and the longer psychological distance led to the desirability message being more effective.

Table 5-5 Results of Regression Analysis

	Non-Standard Coefficient		Standard Coefficient	t	p
	B	stderr	Beta		
	5.045	.643		7.841	.000
Area (Chongqing =1, Sichuan=2, Guizhou=3)	.089	.173	.014	.514	.607
Gender (Male=1, Female=2)	-.107	.127	-.023	-.844	.399
Monthly Income (less than1000=1, 1000-5000=2, 5000-10000=3, over 10000=4)	-.036	.084	-.012	-.427	.669
Parents work out-of-town year-round (father=1, mother=2, both=3, none=4)	.033	.050	.017	.657	.511
Ranking of mock exams (Top 5%=1, 5%-50%=2, 50%-95%=3, after 95%=4)	.181	.074	.065	2.455	.014
Indicator (feasibility=1, desirability=2)	.225	.117	.051	1.923	.055*

a. Dependent Variable: Please rate the advertisement attractiveness.

***, **, and * represent $p < 0.01$, $p < 0.05$, and $p < 0.1$ respectively.

The above analysis of the pilot study shows that there are no significant differences in the quality and level of video shootings used in the advertisements, and the effect of differences in the quality and shooting level of the videos on the effectiveness of the advertisements can be ruled out reliably. The differences of the information type in the videos are over the 10 percent significance test,

indicating that the information types affect the advertisement effectiveness to some extent.

Chapter 6 Experimental Results

6.1 Data Description

In this experiment, the marketing department of the sample college produced the desirability video and feasibility video according to the advertising types, and carried out two advertising campaigns in different platforms. During the video delivery process, because it is hard to predict which type of advertising video audiences will receive, there is no way to simultaneously control the advertising audience and the advertisement type. Therefore, in order to ensure that there is a casual relationship between the information type of the video and the click of the advertising, the following measure is adopted. First, during video production, it is ensured that each frame of the two types of advertisements can reflect their respective characteristics as much as possible. Secondly, when the advertising videos are pushed on the platform, they are first delivered in the form of small windows and played in real time. When the audiences receive the small window advertising information, only when the videos play in the full screen, the click-through rate of the videos will be.

After the experiment, the data are collected through each platform, and three datasets are obtained after sorting out. Among them, the main dataset examined in this study is Dataset I. Due to some data missing of gender, Dataset II is cleaned after removing the invalid data. Since only Kwai provides time-segment data, the time-segment data of Kwai are sorted into dataset III.

Table 6-1, Table 6-2 and Table 6-3 demonstrate the data information and descriptive statistical results.

Table 6-1 Basic Description of Data Sets

Datasets	Samples	IVs	DV
I	291	platforms, areas, periods, stages, audiences, types of advertising information	Click-through Rate
II	182	platforms, periods, genders, audiences, types of advertising information	Click-through Rate
III	202	periods, audiences, types of advertising information	Click-through Rate

Table 6-2 Inter-group Factor Statistics

Tag	Value	Sample		
		Dataset I	Dataset II	Dataset III
Audiences	Students	146	90	111
	Parents	145	92	91
Types of Advertising Information	Feasibility	142	90	102
	Desirability	149	92	100

Table 6-3 Descriptive Statistical Results

DV: Click-through Rate

Audiences	Type of Advertising Information	Dataset I		Dataset II		Dataset III	
		MEAN/ STD.DEVIATION	N	MEAN/ STD.DEVIATION	N	MEAN/ STD.DEVIATION	N
Students	Feasibility	0.9237% 1.0172%	69	0.7169% 0.6683%	44	4.6171% 6.3620%	57
	Desirability	1.0221% 1.3592%	77	0.8083% 0.8632%	46	2.1917% 1.4099%	54
	TOTAL	0.9756% 1.2066%	146	0.7636% 0.7711%	90	3.4372% 4.8006%	111
Parents	Feasibility	0.5392% 0.4612%	73	0.5496% 0.3462%	46	0.6355% 0.5062%	45
	Desirability	1.1342% 1.4812%	72	1.0453% 0.8526%	46	3.5734% 7.1654%	46
	TOTAL	0.8346% 1.1301%	145	0.7975% 0.6934%	92	2.1206% 5.2895%	91
TOTAL	Feasibility	0.7260% 0.8030%	142	0.6314% 0.5324%	90	2.8605% 5.1478%	102
	Desirability	1.0762% 1.4157%	149	0.9268% 0.8614%	92	2.8273% 4.9881%	100
	TOTAL	0.9053% 1.1692%	291	0.7807% 0.7310%	182	2.8441% 5.0568%	202

6.2 Analysis of Interactive Effects

6.2.1 Results of Dataset I

The results of dataset I (Table 6-4) show that the interaction effect between advertising audiences and the type of advertising information is marginally significant ($F(1,284) = 3.491, P = .063$), and the interaction effect is still significant when other variables are controlled. Among them, “desirable” information and “feasible” information have almost the same effects on students (1.0221% vs 0.9237%), but for parents, “desirable” information is more effective (1.1342% vs 0.5392%).

After the interaction term of advertising audiences and the type of advertising information is introduced, platforms and the type of the advertising information have strong significant impact, indicating that different platforms and different types of advertising information do have significant differences, while areas, stages and advertising audiences are not significant separately.

Table 6-4 Results of Dataset I

	With Control Variables		Without Control Variables	
	Mean Square	Sig.	Mean Square	Sig.
Corrected Model	17.958	.000***	4.876	.013
Intercept	2.495	.118	237.853	.000
Platform	74.210	.000***	-	-
Area	2.785	.099**	-	-
Time	.332	.568	-	-
Target Audience	1.367	.247	1.347	.315
Advertisement Type	9.766	.002***	8.729	.011
Target Audience *Advertisement Type	3.550	.063*	4.478	.068
Error	1.017	-	1.330	-

6.2.2 Results of Dataset II

The results of dataset II (Table 6-5) show that the interaction effect between advertising audiences and the types of advertising information is significant ($F(1,175) = 5.251, P = .023$), but if other variables are introduced, the interaction effect becomes marginally significant ($F(1,178) = 3.643, P = .058$). At the same

time, “desirable” information and “feasible” information have almost the same effect on students, but for parents, “desirable” information is more effective.

After the interaction term of advertising audiences and the type of advertising information is introduced, platforms and the type of the advertising information have strong significant impact, while the gender, periods and the advertising audiences are not significant separately.

Table 6-5 Results of Dataset II

	With Control Variables		Without Control Variables	
	Mean Square	Sig.	Mean Square	Sig.
Corrected Model	6.484	.000***	1.964	.011
Intercept	.063	.662	110.698	.000
Platform	31.483	.000***		
Time	.306	.337		
Gender	.125	.540		
Target Audience	.079	.625	.055	.743
Advertisement Type	4.103	.001***	3.919	.006
Target Audience *Advertisement Type	1.735	.023**	1.859	.058
Error	.330		.510	

6.2.3 Results of Dataset III

The results of dataset III (Table 6-6) show that the interaction effect between advertising audiences and the type of advertising information is significant ($F(1,198) = 15.163, P = .000$). Different from the previous two datasets, the

“feasible” information is more effective for students, but the “desirable” information is still more effective for parents.

Table 6-6 Results of Dataset III

	Df	Mean Square	F	Sig.
Corrected Model	3	148.713	6.273	.000***
Intercept	1	1516.929	63.991	.000***
Target Audience	1	84.473	3.563	.061*
Advertisement Type	1	3.281	.138	.710
Target Audience *Advertisement Type	1	359.435	15.163	.000***
Error	198	23.705		

6.3 Differences in Advertising Performance across Platforms

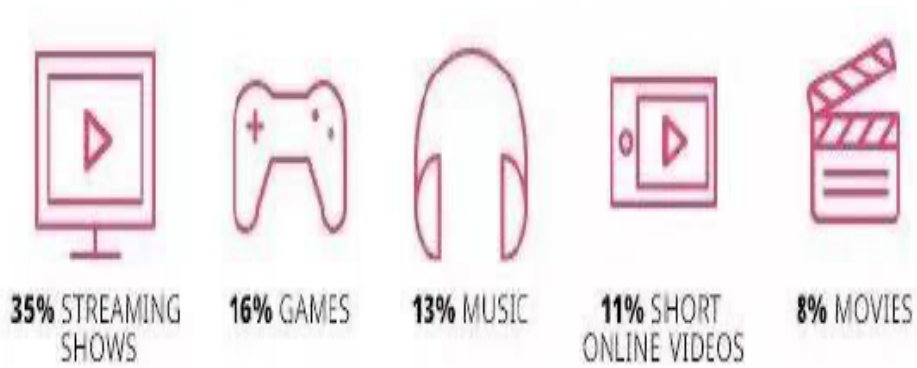
The study also finds that there are differences in the advertising effects of different platforms, which is of great significance to the marketing departments of colleges when selecting the promotion platforms. The data shows (Table 6-7), although there is no obvious difference in the click-through rate of platforms in different time periods (whether it is on Douyin or Moments, there is almost no difference in the click-through rate of parents during the National College Entry Examination and during the filling period, and the students’ click-through rate is almost the same, and the situation is similar). However, there are differences in the click-through rate of advertisements on different platforms at the same time, the click-through rate of parents’ advertisements on Moments platform is higher than that of students, while the opposite is on Douyin and Kwai.

Table 6-7 Click-through Rate across Platforms

	Douyin		Moments		Kwai	
	Parents	Students	Parents	Students	Parents	Students
During the Exam	0.47%	0.60%	0.62%	0.40%	-	-
During the Filling	0.47%	0.61%	0.63%	0.45%	1.50%	2.30%
Total	0.47%	0.61%	0.62%	0.43%	1.50%	2.30%

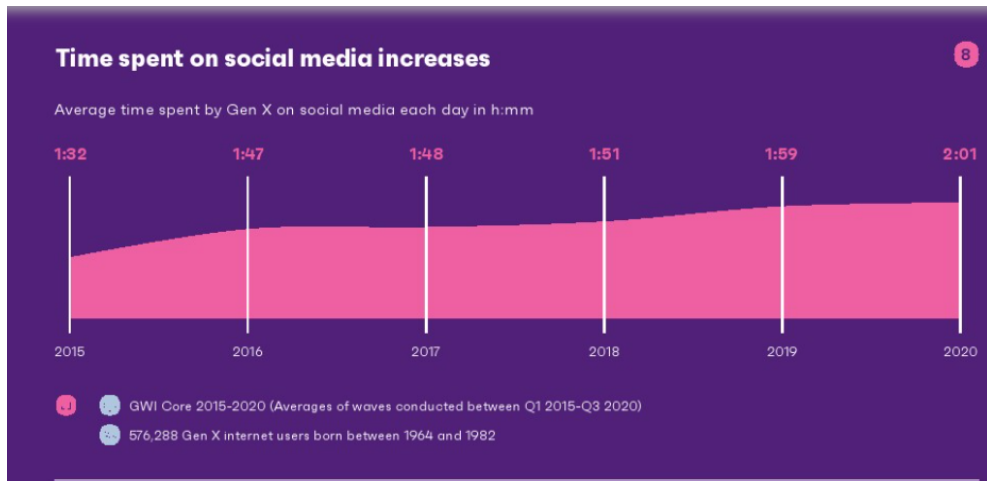
This is consistent with the results of users of different age groups on various online advertising platforms (shown in Figure 6-1 and Figure 6-2). Data from Awesomeness shows that Generation Z (currently the main enrollment target of colleges and universities) is most enthusiastic about the online video accounting for 35% (more than 1/3) of entertainments, while Generation X (parents of college target students) spend about 2.5 hours on their smartphones, two-thirds (66%) of which are spent on entertainment, using social media software is for networking and interaction. In terms of video, this generation still has an overwhelming preference for traditional TV, and even uses mobile phones to watch TV content.

TEEN'S FAVORITE TYPES OF ENTERTAINMENT ARE:



Data Source: Awesomeness

Figure 6-1 App Usage of Generation Z



Data Source: GWI2021

Figure 6-2 App Usage of Generation X

Chapter 7 Conclusion and Discussion

7.1 Conclusion

Through the analysis of three datasets, it can be seen that the interaction effect between the advertising audiences and the type of advertising information is significant, indicating that different types of advertising information do have significant differences in effects on different groups. Specifically, different types of advertising information are significantly different for parents, and “desirable” information is more effective for parents. This is because from the perspective of psychological distance, as parents are not the recipients of the final result of school choice, their psychological distance is far away, so they pay more attention to information about the desirability of the school. However, the type of advertising information is not significant to students. “Desirable” information and “feasible” information have almost the same effect on students (except for Dataset III), because students are the recipients of the final result of school choice decision-making, and their psychological distance is relatively close. In the decision-making process, students will not only consider the desirability of the school, but also pay attention to the feasibility of the school, namely the possibility of admission to the school and the details of future study and life in the school. Some previous studies have found that feasibility and desirability in evaluation can be asymmetrical. Consumer interest in the feasibility aspect may depend on the desirability aspect. For example, individuals first assess the attractiveness of a job (goal-related) before

considering the feasibility aspects of how to obtain the job (means-related) (Todorov, 2008). These findings suggest that in the social distance dimension, feasibility considerations may be more sensitive to changes in psychological distance than desirability considerations. In addition, Todorov and colleagues (2007) find in product evaluation that hypothetical psychological distance may have an impact on the type of advertising information. High probability (low hypothetical distance) increases the weight of means related features (feasibility aspects) relative to end related features (desirability aspects), therefore, reduces the preference for more desirable and less feasible outcomes over less desirable and more feasible outcomes. However, due to the limitation of data sources, this experiment fails to control the psychological distance dimension of hypothetical, and students may evaluate the probability of applying for the school in the advertisement according to their own scores and examination goals, thus forming different psychological distances, which may also be an important reason for the insignificance of information types to students.

A major difference between the results of the first two datasets and Dataset III is that “feasible” information is more effective than “desirable” information for students. Since the first two datasets include all three platforms, and the Dataset III only contains one platform, Kwai, this difference reflects the difference in advertising effectiveness between Kwai, Douyin and Moments, and indicates

that different platforms may indeed have different advertising effectiveness on different information.

In addition, we also note that factors such as timing of launch and area of launch are not significant in this study. The insignificance of timing may be due to the interval time between the two advertisements is short, and the psychological distances of the target audiences are not obvious, so there is little difference in advertising effectiveness. Another possible reason why the geographical factor is not significant is that the Internet is very developed now, and out-of-town students and parents can learn about the colleges through the Internet. Therefore, the traditional spatial distance has little influence on the psychological distance.

7.2 Implications to the Advertisement Strategy of Colleges

Although limited by data availability, data from only one school could be obtained experimentally in this study. However, due to the strong homogeneity of vocational colleges in terms of student source and education quality, the conclusion of this study should at least reflect the generality in the enrollment promotion of vocational colleges across the country, so it still has strong extensibility. According to the conclusion of the above research, the main implications for the advertising strategy in college enrollment promotion are as follows:

First of all, college enrollment promotion needs to be coordinated. In order to achieve the best advertising effect, a good planning should be carried out on the production of advertising content information, advertising frequency, advertising model and advertising platforms.

Since the content of advertisements has an important impact on the advertising effect, the marketing department needs to distinguish the types of information when publishing advertisements, and select the promotion content according to the actual situation of the school. In particular, the distinction between desirability information and feasibility information in the advertising content may be of substantial help to enhance the advertising effectiveness.

Since different types of information have different effects on different audiences (parents and students), it has very important practical guidance for the college enrollment promotion in the future. First of all, in the advertising of college enrollment, the precise delivery of the advertising audience is of great value. Especially when online advertising, we should pay attention to the label selection of the advertising audience, and parents should focus on the desirable advertising information content. This not only improves the effect of advertising, but also reduces the cost of advertising and improves the economic benefits of advertising. Secondly, in the daily enrollment champions, the parents and students should have different emphasis on the language. More macro and

abstract contents such as school quality and reputation should be promoted to parents, while more micro and specific contents such as school conditions and living environments should be promoted to students.

In terms of the selection of different advertising platforms, the mainstream online advertising platforms such as Wechat, Douyin and Kwai have little difference of timing of launch on the advertising effectiveness, but there are differences of effect at the same period on different audiences. Regardless of the type of advertising, students on Douyin and Kwai have a higher click-through rate, while parents on Moments have a higher click-through rate. If the type of advertising is considered, the effect of feasible information on students in Kwai is more obvious.

In terms of the frequency of advertisement delivery, the results of this study show that if the time interval of advertisement delivery is short, the influence of audience psychological distance is small, and the difference of advertising effect is small. However, if the time interval is long, especially if the promotion is carried out early before the college entrance examination, then it may be necessary to consider the impact of the longer psychological distance. Since the launch time chosen by this experiment is design according to the time period when most colleges carry out enrollment promotions, this result also reflects that many colleges may not be able to take advantage of the psychological time

distance of the advertising audience to improve the efficiency of advertising effectiveness in their daily enrollment promotions.

7.3 Limitations

Due to the limitations of experimental design and data sources, there are still some limitations in this study:

Temporal distance is not significant in this study. In this study, according to the practice of school's promotion, the advertising is carried out during the National College Entry Examination and during the filling period, which causes the problem that the advertising time is not significant to the advertising effectiveness due to the short time interval. This indicates that the psychological distance affecting the explanatory level of the advertisement audience is relatively long, which needs to be further designed and verified in future research.

The click-through rate of advertisement as an indicator of advertising effectiveness may be biased. The selection of indicators to measure the advertising effectiveness is a common problem in this kind of research, so many studies take the click-through rate as the evaluation index of the advertising effectiveness. But click-through rates only verify that the audience is likely to be interested in the advertising. There may be a mismatch between this indicator

and the actual effects (such as enrollment rates) that colleges and universities advertise, and reliable data linking the two are often hard to come by. Therefore, click-through rate is used as an indicator to measure the advertising effectiveness of college enrollment promotion in this study, just for the consideration of data availability.

It does not consider the influence of the characteristics and attributes of the school itself in the advertisements. Although considering the generality of vocational schools themselves, the conclusions of this study have general implications for the enrollment of most vocational schools. However, in the actual promotions, the characteristics of different schools, such as different educational levels, may have an impact on the effect of enrollment promotions. Due to the limitation of the research sample, this study did not consider the influence of the characteristics and attributes of the school itself on the advertising effectiveness of enrollment promotion.

7.4 Future Research

To address the above issues, this study argues that the research on the factors influencing the advertising effect of college enrollment promotion can be further expanded:

Considering that the influence of various dimensions of psychological distance on the advertising effect has been proved in many fields, further experimental design can be carried out in the future to further investigate the influence of various psychological dimensions on the advertising effect in college enrollment promotion. For example, we extend the time interval between two advertisements to verify the influence of different temporal distances on the advertising effect, which will also have important guiding significance for the practice of college admission promotion.

The relationship between advertising effect indicators and the actual indicators of college enrollment can be established. For example, by tracking the advertising audience before the college entrance examination, investigate the relationship between their final application and advertising, so as to confirm the relationship between advertising and enrollment publicity effect more reliably.

In the future, comparative studies on the advertising effects of different colleges and universities could be further carried out. For example, in the future, colleges and universities could carry out the promotions with other colleges and universities simultaneously through cooperation, so as to investigate the degree of influence of different attributes and characteristics of schools on the publicity effects of enrollment.

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Appendix

Questionnaire for Pilot Study

感谢您配合本次调查，本次调查问题不多，完成大约在 10 分钟以内，但是请您认真观看视频后根据实际情况作答。本次调查的信息将仅用于学术研究，对您的私人信息将严格保密。感谢您的配合！

(1) 以下问题中将测试您对一些陈述的态度，您将通过一些分值来表达您在广告中所感知到的某种信息的程度，请注意每个问题中分值大小所代表的意义。

例如，在问题 1 中，如果您认为广告中传达的更多的是具体性信息，那么就选择越低的分值，而如果认为广告中传达的更多的是抽象性信息，就选择越高的分值。

视频 信息 区分	您认为广告中传达的信息是：具体的（分值小）还是抽象的（分值大）	1	2	3	4	5	6	7	8	9
	您认为广告中传达的信息更强调：展示学校的细节性信息（分值小）还是学校的办学理念（分值大）	1	2	3	4	5	6	7	8	9
	您认为广告中传达的信息更强调：就读后的学习生活过程（分值小）还是报读学校的目的（分值大）	1	2	3	4	5	6	7	8	9
	您认为广告中传达的信息提供了：更多实用性信息（分值小）还是更多理想性信息（分值大）	1	2	3	4	5	6	7	8	9
	您认为广告中传达的信息更多强调：生活和课外活动信息（分值小）还是和学习有关的信息（分值大）	1	2	3	4	5	6	7	8	9
	您认为广告中传达的信息更多的展示：大学生的形象（分值小）还是学校的形象（分值大）	1	2	3	4	5	6	7	8	9
视频 质量	请您对该广告的制作质量评分	1	2	3	4	5	6	7	8	9

