

Study on the Influence of Private Hospital Advertising on Consumers' Attitude to Brand

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Abstract—In the late 1980s, private hospitals began to emerge in China's medical industry. Until March 2013, data from the Ministry of Health showed that there were 10,166 private hospitals in China. But in China's medical market, public hospitals always occupy the leading position, while the survival of private hospitals is relatively difficult. At present, advertising has become the most important marketing method used by private hospitals in China. It is crucial for the development of private hospitals to clarify the importance of advertising in the marketing of private hospitals, and to further explore the role of advertising and brand-building.

Keywords: *private hospital advertising, advertising performance, social influence, attitude to brand*

I. INTRODUCTION

After the reform and opening-up, people's demand for medical and health services has increased greatly, and private hospitals have emerged as the times require. On March 14, 2012, the "12th Five-Year Plan" of medical reform released to vigorously develop private medical institutions, organize social capital to enter the medical service market and give policy support. In 2015, the relevant regulations promulgated by the State Council further expressed support for private hospitals [1]. The number of private hospitals has increased rapidly, and most private hospitals must think about how to survive in the increasingly competitive market.

Building unique hospital brand and gaining consumer recognition are the most effective ways. The most obvious external manifestation of private hospital brand construction at the present stage is advertising. In recent years, advertising marketing investment in China's medical service market has a slow growth trend, and even some private hospitals' advertising spending exceeds 50% of total profits. [2]

Paying attention to the importance of health care to people's livelihood, China's medical system has been constantly reformed, and the medical service industry has accumulated more and more social capital. The development period of private hospitals in China is short, and there is a

lack of marketing theory knowledge in this field. Advertising is an important way of marketing, and it is also true for private hospitals as for-profit institutions. The quality and effectiveness of advertising placements determine the amount of advertising investment in private hospitals. If private hospitals want to develop better, they need to give full play to the role of advertisement and brand.

II. A STUDY ON THE ATTITUDE TO BRAND ADVERTISING IN PRIVATE HOSPITALS

A. Private hospital

Private hospital is a special appellation in China. They mainly refer to hospitals under the ownership system other than state-owned and collective-owned public hospitals, which implement corporate management and can independently adjust the price of medical services based on relevant factors.

1) *Operational status:* Ji Deshang and other scholars (2016) found that the number of domestic private hospitals is large, growing rapidly, and small in scale. [3] He Sichang, Liu Zhihui and Zhao Daren (2016) said that in recent years, the number of private hospitals has exceeded that of public hospitals. [4] Research data from Jiang Wei, Li Qing and Zhu Zhaofang (2016) show that private hospitals have made great progress in their medical service capacity, but public hospitals still dominate the market. [5] Rosenau p (2003) et al. summarized and evaluated 149 comparative studies on non-profit hospitals and for-profit hospitals. The results showed that 59% of the comparative studies on non-profit hospitals performed better. [6] Scholars such as Sloan F A (2001) point out that the cost of public hospitals is lower from the point of view of medical expenses, but the difference of medical quality between them is not significant. [7]

2) *Marketing strategies of private hospitals:* Ma Xinglei (2009) thinks that network marketing is very important to

the development of hospital, and network marketing can strengthen the communication between hospital and patients, provide more high-quality and efficient service and increase the hospital's popularity. [8] Zhang Wansheng (2015) believes that full-staff marketing of the hospital means that all hospital staff should care about hospital management, participate in hospital marketing activities and become the main body of hospital marketing. [9] Duan Hewang (2011) believes that the brand can guide the development of private hospitals to a certain extent, become the added value of hospital services and enhance consumers' impression of hospital brands. The brand-building of private hospitals plays an important role in the development of hospitals. [10]

3) *Advertising of private hospitals*: Liu Yanyi believes that many private hospitals began to consider the new marketing methods other than advertising. Hou Shengtian believes that for the current private hospitals, advertising marketing is a relatively "helpless" marketing method, but cannot be abandoned. Liu Muqiao thinks that advertising is only one of the marketing means of private hospitals. In fact, the amount of advertising depends on a number of factors, and advertising is still the main means of marketing. Sheng Dalin believes that private hospitals are still very small, and their social popularity and recognition are very low. At this stage of development, it is difficult to survive without advertising. [11]

B. Attitude to brand

Tao Xiaobo, Song Zhuozhao and Zhang Xinrui, et al. (2013) believe that brand attitude refers to a comprehensive internal psychological assessment behavior that occurs when a consumer receives an attribute of a particular brand based on his or her past experience and prior information. [12] John (1973) defines "attitude" as a state of mind that includes feelings, reactions, etc. It is an emotion that arises from learning about the person or thing around you. Schiffman et al. defined it in 1994 as a psychological tendency to have a long-term assessment of something acquired after learning about it. The definition of attitude made by Freedman, Sears, and Carlsmith (1978) are more accepted by the world. They believe that attitude is a combination of cognition, emotion, and behavioral tendency (intentional action), and the three interact. Millar and Tesser (1986), Jooyoung and Morri (2007) argue that cognition and emotion are the basis of behavioral tendencies in the three components of attitudes.

III. RESEARCH MODEL CONSTRUCTION

A. Composition of model variables

Advertising Performance refers to the specific form of advertising displayed in front of consumers, which can directly influence the effect of advertising performance to a certain extent. Dong Jichang (2014) believes that more clever advertising performance can increase consumers' awareness and interest in advertising brands. [13] Therefore,

this paper argues that advertising performance is one of the most important factors affecting consumer attitudes to brand. Social influence refers to the degree to which the community around the individual influence. Yu Kun (2012) conducted research on mobile Internet advertising as a research object, and argued that community influence refers to the influence of mobile Internet advertising users on a specific person or group to decide whether they want to use mobile Internet advertising services. [14] The author thinks that in the research of this subject, social influence refers to whether consumers are influenced by the surrounding groups and can deepen the cognition of private advertising from the interaction. The concept of perceived risk was first extended from psychology by Bauer (1960) of Harvard University. Bauer believes there is a possibility of negative results in consumer buying behavior, but consumers are unable to predict uncertain outcomes. The uncertainty and perception of negative outcomes have evolved into perceived risk today.

The cognitive attitude to brand refers to the consumer's specific or overall belief in things, and the amount of brand information in the consumer's memory leads to different reactions to marketing activities such as advertising. The emotional attitude to brand refers to the consumer's emotional feelings about things. Private hospital's advertisement will produce the preliminary impression to the audience in the dissemination process. This impression will translate into a change in consumer sentiment towards the brand, and consumers will have a tendency to like or dislike the product or brand. In this article, the behavioral attitude to brand in this article refers to the behaviors of the treatment or recommendation to others generated by the audience after receiving the advertisement, and other brand usage behaviors. The study of consumer behavior shows that brand attitude is closely related to brand desire and buying behavior. Based on the above analysis, this paper defines the respective variables and dependent variables in "Table I".

TABLE I. DEFINITION OF VARIABLES

	Variables	Definition
Independent variable	Advertisement performance	The private hospital advertisements seen by consumers have various expressions such as text, pictures, videos, etc.
	Social influence	The extent to which consumers interact with friends about private hospital advertisements and their attitudes towards private hospital brands
	Perceived risk	Consumers perceive the threat of poor financial and therapeutic outcomes that come from private hospital advertising.
Dependent variable	Cognitive attitude to brand	Consumers' impression of private hospital's Brand and the Specific Perception of Satisfying Its Consumption
	Emotional attitude to brand	Consumer's Preference to the Brand of Private Hospitals and the Perception of the Brand Image
	Behavioral attitude to brand	Consumers' tendency to go to a branded private hospital and the tendency to recommend the brand to others

B. Research model establishment

Based on above researches, the theoretical model is seen below. ("Fig.1")

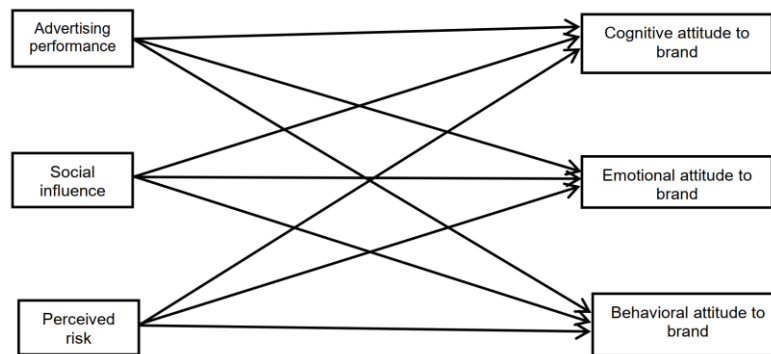


Fig. 1. Theoretical model of the influence of advertising in private hospitals on consumer brand attitude.

C. Research hypothesis

With the development of mobile Internet, advertisements have realized various forms, such as words, pictures, videos and so on. Advertising, as a marketing method, has been widely used. At the same time, the audience has developed aesthetic fatigue due to its extensive use. With the development of the mobile Internet, the superposition of multiple expressions can increase the audience's interest in advertising, thereby increasing the consumer's favorability and impression of the brand. It is necessary to strengthen consumers' perception and love of the brand image, and further promote their desire for medical treatment and sharing.

In the Internet age, social influence has become an important factor affecting consumers' willingness to buy, such as reputation marketing is a kind of marketing method derived from social influence. Social influence has a particularly important effect on the brand attitude of private hospitals. Discussions with others on private hospitals will, to a certain extent, strengthen their impression and love of the brand, and even promote their desire to seek medical treatment by private hospitals.

Due to the influence of the development situation of private hospitals in China at present, more and more advertisements of private hospitals appear on various platforms. Although the state has reviewed some advertisements, there is still negligence, which will easily cause consumers to have a distrust of the advertisement content, hence have a poor impression on the brand's private hospitals, and even produce disgust, and will not go to the doctor.

Based on the above analysis, this paper proposes the following hypotheses ("Table II").

TABLE II. RESEARCH HYPOTHESIS

Sequence number	Research hypothesis
H1	Advertising performance has a positive impact on consumers' cognitive attitude to brand towards private hospitals.
H2	Advertising performance has a positive impact on consumers' emotional attitude to brand towards private hospitals
H3	Advertising performance has a positive impact on consumers' behavioral attitude to brand towards private hospitals.
H4	Social influence has a positive Impact on consumers' cognitive attitude to brand towards private hospitals.
H5	Social influence has a positive Impact on consumers' emotional attitude to brand towards private hospitals.
H6	Social influence has a positive Impact on consumers' behavioral attitude to brand towards private hospitals.
H7	Perceived risk has a negative influence on consumers' cognitive attitude to brand towards private hospitals.
H8	Perceived risk has a negative influence on consumers' emotional attitude to brand towards private hospitals.
H9	Perceived risk has a negative influence on consumers' behavioral attitude to brand towards private hospitals.

IV. RESEARCH RESULTS

A total of 269 questionnaires were collected and 230 valid questionnaires were collected. The effective recovery rate was 85.5%. Overall, the number of female samples slightly exceed that of male; 86.96% of respondents in the survey group were under 30 years old, which shows that the survey group was young and mainly were high-education groups. Because the survey group is mainly concentrated in the younger group, the results of this survey cannot represent the situation of the whole age group. The survey mainly represents the younger group that is affected by private hospital advertising. 37.39% of people chose to be introduced by acquaintances to learn about the news of private hospitals, 10.87% of people chose the others, and the

remaining people chose another five options of TV media, online media, newspapers and magazines, roadside billboards and hospital internal publications. Therefore, it is determined that the interviewees meet the needs of this survey, and the samples have good reference value, and can continue to conduct research and analysis.

In this paper, Cronbach's alpha method was used to analyze the reliability of each part of the questionnaire. The reliability value of each variable in this study is greater than 0.7, which indicates that the data obtained in this study have high reliability and can be used for further data analysis. ("Table III")

TABLE III. ANALYSIS OF SPSS VARIABLE RELIABILITY

Variables	N of Items	Cronbach's Alpha coefficients	Overall Cronbach's Alpha coefficients
Advertising performance	4	0.726	
Social influence	4	0.826	
Perceived risk	3	0.890	
Cognitive attitude to brand	2	0.860	0.904
Emotional attitude to brand	3	0.909	
Behavioral attitude to brand	4	0.915	

By using KMO sample measure and Bartlett sphericity test, the validity of 230 valid data obtained from the survey was analyzed. The KMO value of each variable in this survey is more than 0.5, and the data of this survey is persuasive to a certain extent. The significant probability of

Bartlett sphericity test was 0.000, less than 0.01, and the sample data was significantly correlated. From "Table IV", it can be concluded that this data has good validity and can be used for factor analysis.

TABLE IV. KMO AND BARTLETT SPHERICITY TEST RESULTS

Variables	N of Items	KMO	Sig.
Advertising performance	4	0.667	0.000
Social influence	4	0.794	0.000
Perceived risk	3	0.746	0.000
Cognitive attitude to brand	2	0.500	0.000
Emotional attitude to brand	3	0.739	0.000
Behavioral attitude to brand	4	0.846	0.000

By factor analysis, it is found that the weight of each item of advertising performance variable is higher than 0.6, which indicates that the item selection of advertising performance variable is better, and the scale has better structural validity. The component load of each item was higher than 0.7, the minimum value was 0.791, and the other three items were higher than 0.8, which indicated that the choice of social influence item was better and the scale had better structural validity. The minimum load of each item of perceived risk variable is 0.898, which indicates that the item of perceived risk is well chosen and the scale has good structural validity. The component load of each item of brand cognitive attitude is higher than 0.9, which indicates that the item selection of this variable is good, and the scale has good structural validity. The component load of each item of brand emotion attitude is higher than 0.9, which indicates that the item selection of this variable is good, and the scale has good structural validity. The component load of each item of brand behavioral attitude is higher than 0.8, which indicates that the item selection of this variable is better, and the scale has better structural validity.

Pearson correlation coefficient between advertising performance and brand cognitive attitude is 0.533, and the advertising performance positively affects consumer's brand cognitive attitude towards private hospitals, thus hypothesis 1 is valid. The Pearson correlation coefficient between advertising performance and brand behavioral attitude is 0.525, while advertising performance positively influences consumers' emotional attitude to brand towards private hospitals, thus hypothesis 2 is valid. Pearson correlation coefficient of advertising performance and brand intention attitude is 0.557, then advertising performance and brand intention attitude are moderately positive correlated. Advertising performance has a positive impact on consumers' behavioral attitude to brand towards private hospitals, thus hypothesis 3 is valid. The Pearson correlation coefficient between social influence and brand cognitive attitude was 0.591, and there was a moderate positive correlation between brand influence and brand cognitive attitude, thus hypothesis 4 is valid. The Pearson correlation coefficient between social influence and brand affective attitude was 0.629, and the relationship between community influence and brand affective attitude was highly positive, thus hypothesis 5 is valid. The Pearson correlation coefficient of community influence and brand intention attitude is 0.634, which is positive, and there is a strong positive correlation between social influence and brand behavioral attitude, thus hypothesis 6 is valid. Pearson correlation coefficient between perceived risk and brand cognitive attitude is -0.270, which is negative, thus perceived risk negatively affects consumers' brand cognitive attitude towards private hospitals, thus hypothesis 7 is valid. Pearson correlation coefficient between perceived risk and brand affective attitude is -0.280, which is negative, and perceived risk negatively affects consumer's brand affective attitude towards private hospitals, thus hypothesis 8 is valid. Pearson correlation coefficient between perceived risk and brand attitude is -0.325, and perceived risk negatively affects

consumers' brand attitude towards private hospitals, thus hypothesis 9 is valid.

In the regression analysis of advertising factor and brand cognitive attitude, the regression coefficient of advertising performance was 0.285, social influence was 0.394, perceived risk was -0.193, then advertising performance, social influence and brand cognitive attitude were positively correlated, perceived risk and brand cognitive attitude were negatively correlated, and the social influence contributed the most, advertising performance was second, thus hypothesis H1, H4 and H7 are valid. In the regression analysis of advertising factor and brand emotion attitude, the regression coefficient of advertising performance was 0.239, social influence was 0.458, and perceived risk was -0.196. Then, the advertising performance, social influence and brand emotion attitude were positively correlated. Perceived risk was negatively correlated with brand emotion attitude, and the social influence contributed the most, thus the hypotheses H2, H5 and H8 are valid. The regression coefficient of advertising performance was 0.285, community influence was 0.429 and perceived risk was -0.242 in regression analysis of advertising factor and brand affective attitude, thus the advertising performance, social influence and brand emotional attitude were positively correlated, perceived risk and brand emotional attitude were negatively correlated, and the social influence contributed the most, thus the hypotheses H3, H6 and H9 are valid.

V. CONCLUSION

The social influence has the most significant impact on brand cognitive attitude, followed by advertising performance, and the weakest impact on perceived risk. The brand cognition attitude is the consumer's impression of a brand. The study found that the discussion among friends can make the consumer have a better impression of a branded private hospital. The function of advertising performance is only second to the social influence, which proves that a good advertising form is still very important. The interview found that a good advertising form does not lie in whether it is creative or not, but in whether it can accurately express the real case, so that consumers have a sense of trust, and further by the form of advertising performance directly affect the perceived risk to consumers' brand cognitive attitude.

In terms of brand emotional attitude, the effect of social influence is also the most significant, the influence of advertising performance is the second, and the influence of perceived risk is the weakest. People have emotions. When a friend recommends an advertisement of a private hospital with affection, it is more likely to generate interest and even favorite emotions. This is the most significant reason for social influence.

The effect of social influence on brand behavioral attitude is the most significant, advertising performance is the second and perceived risk is the weakest. Interviewees generally believe that the advertising credibility of private hospitals is low, which makes them less willing to

recommend private hospitals to others or even to seek medical treatment. But one exception is when friends or other acquaintances go to the hospital and get better results, and when they see the hospital's advertisement again, people will develop a desire to recommend or even seek medical advice from private hospitals. Medical service is a special product, and the interviewees agree that only when they need it, they will take the initiative to seek medical treatment, otherwise they have little desire to seek medical treatment, which is also one of the reasons for the weak influence of perceived risk.

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