

The Influence of Online Advertising Presentation Form on Advertising Effectiveness from the Perspective of Web Page Content Involvement

Zhongwei He^{1,a,*}

¹Jiangsu Yanghe Distillery Co., Ltd., Suqian, Jiangsu, 223800, China

^aheweiadrem2008@163.com

*Corresponding author

Keywords: Internet Advertising, Presentation Form, Web Content Involvement, Advertising Effect

Abstract: This study investigates the influences of presentation forms of internet advertising and their interaction on the internet advertising effect, from three aspects of demonstrating manner of internet advertising, internet advertising pattern, correlation between product attributes of internet advertising and web content. Taking the internet advertising of Samsung smart mobile phone as research target, and using laboratory experiment, this paper conducts a survey of 118 college students who were divided into 8 groups. The results indicate that: Demonstrating manner of internet advertising, internet advertising pattern, correlation between product attributes of internet advertising and web content have a significant influence on the internet advertising effect; The effect of the passive, dynamic and not correlation with web content advertising is the optimal, the effect of the active, static and correlation with web content advertising is the worst; Web content involvement of customer has no significant influence on the internet advertising effect.

1. Introduction

With the arrival of the digital age, advertisers and advertising agents have entered the competition of online advertising, and the online space is beginning to be filled with various advertisements and commercial information. This phenomenon is not only particularly prominent on popular websites, but also becoming increasingly prominent in social media, search engine result pages, and mobile applications. According to global advertising expenditure data, digital advertising expenditure has continued to grow over the past decade. According to eMarketer's report, global digital advertising spending reached \$333 billion in 2019, a nearly double increase from \$170 billion in 2015. Every day, a large number of new advertisements appear on the internet, covering various industries and fields. According to Statista's data, the number of online advertisements published globally every day has exceeded millions. In addition, social media platforms have become one of the preferred advertising channels for advertisers. According to Hootsuite's statistics, there are over 3.4 billion social media users worldwide, and platforms such as Facebook and Instagram have become popular choices for advertisers. In the digital age, the number and diversity

of social media advertisements are constantly increasing. And do these flooded online advertisements truly achieve the expected goals of "product promotion, establishing a good corporate image, and increasing opportunities for contact with consumers"? On the one hand, online advertising does indeed enhance consumer information. According to eMarketer data, 68% of consumers stated that they learned about new products and services through online advertising, and 57% of consumers stated that the discounts and promotional information in advertising had an impact on their shopping decisions. According to Think with Google data, product demonstrations and review videos on YouTube play an important role in shopping decisions. On the other hand, surveys have also found that online advertising is perceived by some consumer groups as disturbing and infringing on privacy. According to a study, over 40% of consumers worldwide say they do not like online advertising because it interrupts their browsing activities. According to Page Fair's data, approximately 26% of global internet users have installed advertising interceptors to reduce advertising interference. Adobe's research shows that 81% of consumers believe that there is too much advertising in certain situations. It can be seen that although online advertising has become one of the main tools for enterprises to promote products and services, the marketing advertising effect on the internet is not as obvious as expected by advertisers and researchers. In the past, discussions on the effectiveness of online advertising were mostly non academic articles in general magazines and journals, and there were not many related academic studies. Therefore, transplanting research results related to advertising and marketing from traditional fields to online advertising is a worthwhile way to explore. In the face of online advertising, we need to understand that traditional media and online advertising media have different attributes, and will there be any differences in advertising effectiveness? What exactly do consumers want? What kind of online advertising can attract consumers' attention and thus influence their attitudes and behaviors? Will the display form and form of online advertising affect advertising effectiveness? When advertising on the internet, will different webpage attributes have a significant impact on the effectiveness of advertising, whether it is targeted at pages with high or low relevance to the product attributes? These issues are worth exploring in depth, which is also the theoretical and practical significance of this study.

2. Literature Review and Theoretical Hypothesis

2.1 Research on Influences of Presentation Forms of Internet Advertising on the Internet Advertising Effect

(1) Demonstrating manner of internet advertising and advertising effect

Internet users will slowly have different attitudes to internet advertising when facing the emergence of a variety of internet advertising. If internet advertising caused the negative attitude of the users, it must make users produce the corresponding behavior to the emergence of internet advertising. Hazlewood A. (2005) believes that internet advertising can be divided into active and passive advertising according to the demonstrating manner: Active or passive is a problem about advertising compulsion, Advertising compulsion refers to the extent of the advertising interference in the media^[1]. Interference is defined as an annoyance, resulting in unpleasant or transient impatience; passive advertising refers that the viewer cannot choose to receive advertising information, simply open the corresponding page, advertisement, such as push, insert type advertisement, will appear, which let advertisers can teleport at spots advertising to the user client^[2]. No matter what the visitors do, the web page will automatically jump to another smaller format page when the visitors open web page. The relevant link page will appear as long as the visitors click the election, if not click, the window will not automatically shut down. This kind of ads conveys the advertisement information to the users compulsively. Previous research shows that: high-compulsivity internet advertising will reduce the fluency of the web operation and easily lead

to consumers' antipathy. Browsers can't decide to point the ad for oneself in passive demonstrating manner of advertising, the high compulsivity of which, reduce the fluency of the browser to read the page and easily cause the network consumers' antipathy^[3]. Therefore, in terms of advertising attitude, initiative (willing) advertising presentation will be better than the high-compulsivity and passive presentation; However, Memory effect is visitors' attention to advertising, The attention of visitors to the advertising will increase when compulsivity is high, so the visitors will have a deep impression on the information conveyed by the advertising and therefore forced demonstrating ads have better memory effect. Faced with such an internet advertising market, not only should we consider the arrival rate of advertising, but also reflect the influence of passive advertising on the advertising attitude to avoid the excessive use of passive advertising that caused the consumer's aversion and anxiety.

(2) Internet advertising pattern and advertising effect

Internet advertising is divided into dynamic and static advertising from morphology in the article published by Hoffman, Novak and Chatterjee(1995): the static internet advertising is to display a fixed picture on the web page and it is also a common way of early internet advertising^[4]. Its advantage is that it is simple to make and accepted by all the sites. Its disadvantages are obvious and it is somewhat dull and boring in front of many internet advertisings produced by the new technology; dynamic internet advertising holds the elements of movement, or moves or flashes. Dynamic advertising is usually GIF89 format and its principle is forming the animation of a series of images, most dynamic network ads consist of 2 to 20 frames, they can convey more information to visitors through different images and also can deepen the impression of visitors through the application of animation, their hits are generally higher than the static. What's more, this advertising is relatively not complicated in production, the size is relatively small and usually below 15K. Correia&Anwar (2021) points out that the dynamic effect of network advertising will attract the attention of the user, make them pay attention to the information on the screen, and increase the interaction between the users and the computer interface^[5]. The research of Radfar &Shahabi(2019) refers that clever use of the media in the advertising can be closer to the consumer's heart^[6]. The results of Richmond (1996) to study the shopping website point out consumers in the purchase behavior are different when the shopping site is a simple static website, or the site is rich in dynamic. When the website is rich, dynamic, not only did it improve the amount of consumption on the site and also extend the time of browsing website, but also will pay less attention to the selectivity of network commodity information, quality, shopping safety and convenience etc^[7]. Yating et al.(2020) argues that visitors prefer dynamic presentation forms, and finds that the differences of consumer background (involvement) will cause the difference of the effect of advertising awareness through the analysis of demographic variables of the district septum^[7].

(3) Web Content Correlation and Advertising Effect

Although the related research on relationship between web content correlation and advertising effect is still few, the results were all that the correlation between ads and web content affects the advertising effect. While some studies are contrary to the conclusion :the research of Li et al. (2022) points out that the correlation between ads and web content will have some significant influence on advertising effect^[8]. When the ads and the web content are not relevant, the advertising effect is better than relevant according to the research findings, the possible explanation is that if visitors see ads appearing on the high correlation pages, it's likely to mistakenly think that it is the decoration of the page instead of commercial advertising, so the more irrelevant the web content is, the viewer is more likely to perceive that what he sees is ads rather than ornament. The findings of Kim point out the correlation between ads and web content has a significant influence on advertising effect. High correlation between advertising and web content group is superior to the low one in the memory effect, recognition effect and Selective tendency, whereas, low correlation between advertising and

web content group is superior to the high one in advertising attitude^[9]. In real operation, many websites often suggest advertisers advertise on the high correlation page to get better advertising effect. However, this arrangement will not only reduce the number of visitors, and visitors will likely ignore the existence of ads because they are more interested in web content, which may reduce advertising attention. Therefore, whether the influence of the correlation between advertising and web content on advertising effect is like as advertisers claim, or is merely the strategy of an advertiser, is a topic worthy of verification.

For the above three points, we establish the following research hypothesis:

H1: Different presentation forms of internet advertising will influence the advertising effect of target ads.

H1a: Different demonstrating manner of internet advertising (active/ passive) will influence the advertising effect of target ads

H1b: Different internet advertising pattern (dynamic/static) will influence the advertising effect of target ads.

H1c: Different correlation between product attributes of internet advertising and web content will influence the advertising effect of target ads.

2.2 The Influences of Interaction of Presentation Forms of Internet Advertising on the Internet Advertising Effect

The independent variables in the framework of this research form general internet advertising effect. As a result, whether the permutations interaction between several independent variables will cause the change of the advertising effect becomes a meaningful issue in the new media research area. This study takes two variables from three independent variables, according to the arrangement combination $C(3, 2) = 3$ and then investigates the interaction to try to learn the possible sources of variation of advertising effect in this field. Therefore, we hypothesize the following:

H2: The interaction of internet advertising presentation form will influence advertising effect.

H2a: The interaction between different demonstrating manner of internet advertising and advertising pattern will influence the advertising effect of target ads.

H2b: The interaction between demonstrating manner of internet advertising and web content correlation will influence the advertising effect of target ads.

H2c: The interaction between advertising pattern and web content correlation will influence the advertising effect of target ads.

2.3 The Influences of Interaction between Presentation Forms of Internet Advertising and Web Content Involvement on the Internet Advertising Effect

The concept of involvement was originally used to study personal attitude problem in social events and later it is applied to the problem of consumer behavior due to marketing scholars' interest, for example, Michell & Olson(1981)applies it to advertising^[10]. The general scholar mostly uses the individual psychological cognition state to define the involvement, regard involvement as an inner psychological state, influenced by individual, product, situation or other special stimulation. After that, people will be aware of the importance of the things and then generate different levels of attention. The higher the correlation is, the higher the degree of self – related appreciated is, the involvement degree will be deepened and then people generate a series of subsequent behavior caring for the thing. Web content involvement refers to the psychological state the audience gave when they touch the web or care about the network information from concentration to turning a blind eye. Combining with magazines and TV content involvement, this study will measure web content involvement from five aspects: attraction, correlation, cognition, mistake risk, pleasure

value. The study of Rasty et al.(2013)indicates that the deeper the magazine content involvement of consumer is, the worse the memory effect of advertising is. This is because when the magazine content is interrupted by advertising, consumers will immediately look for the next article to continue reading, and ignore the ads. What’s more, the boring magazine is better than the interesting and fascinating magazine in the memory effect of the ads^[11]. In contrast, the study of Moon(2017)in television advertising shows that the advertising effect is positively related to the involvement of program content. The higher the audience involvement in the TV program is, the better the impact on the memory of the ads is, but when the advertising involvement is to a level, the memory and attitude will begin to decrease^[12]. This research proposes that the relationship between the program involvement and the advertising memory and attitude inverts U type. The network has the characteristics similar to magazine media, consumers can decide the processing mode of the reading, but the network advertising can also be presented in a dynamic way, which is similar to the characteristics of the TV media.

The Internet has both the characteristics of magazines and television media, whether such characteristics will lead that web content involvement affect advertising effect will be one of the themes of this study, so we establish related assumptions as follows:

H3: Considering the web content involvement, the advertising effect of different presentation forms of internet advertising is different.

H3a: Considering the web content involvement, the advertising effect of different demonstrating manner of internet advertising is different.

H3b: Considering the web content involvement, the advertising effect of different internet advertising pattern is different.

H3c: Considering the web content involvement, the advertising effect of different correlation with web content advertising is different. The theoretical model of this study is shown in Figure 1:

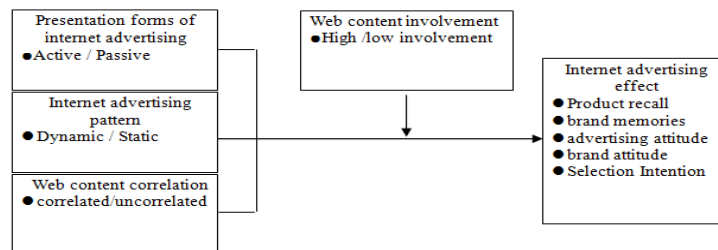


Figure 1: Theoretical model

3. Study Method

3.1 Study Design

This research method uses the laboratory experiment method. The advantages of laboratory design are that it can make researchers observe and measure the influence of the independent variable to the dependent variable when the other related factors are the smallest (Qiu Desheng) [13]. Although the external validity of the laboratory design and the inference intensity will be sacrificed relative to field experiments. Whereas there are too many uncontrollable factors about the user and network, such as network environment, personal Internet use ability, browsing situation and purpose etc, so this study uses laboratory experiment whose experiment environment is more consistent. In addition to controlling the homogeneity of the tested groups, laboratory experiment can also ensure the consistency of the experimental site and minimize the other interference factors.

Pretest: This is to avoid subjects making mistakes when answering the questionnaire due to unfamiliarity or misunderstanding of the meaning of the questionnaire, which could then affect the

validity of the questionnaire.

Therefore, this study makes repeated discussions with the relevant experts to determine the relevance of measure items before the formal implementation of the questionnaire. What's more, this study asks the expert scholars to provide amendment opinion to the questionnaire and conducts a pretest of 15 graduate students with Internet advertising experience. During the pretest process, this study is to learn that there is no situation subjects misunderstand the questionnaire and they have a clear understanding of the mobile phone. Then, the results collected are used as the reference of the adjustment and the amendment to ensure the applicability of the questionnaire reaches a certain degree.

Experiment Grouping: This study mainly investigates the influences of different presentation forms of internet advertising in different web content involvement on the internet advertising effect. There may be some causality between the independent variable and the dependent variable, and the effect of the interaction between the variables may exist. Therefore, this study uses the multi factor experiment design: there are mainly three independent variable of this study and they are respectively demonstrating manner of internet advertising, internet advertising pattern and web content correlation; the intermediary variable of the observation is web content involvement. The dependent variable is advertising effect showing in products recall, brand memory, advertising attitude, brand attitude and click willingness. The subjects are randomly assigned to each experimental group to eliminate the differences of the sample and improve the accuracy of the experimental results; whereas, the web involvement of the subjects is determined by the score of the questionnaire.

The presentation forms of internet advertising in independent variables include three variables. Demonstrating manner of internet advertising is divided into active and passive; internet advertising pattern is divided into static and dynamic; web content correlation is divided into correlated and uncorrelated. As such, there are totally 2 (demonstrating manner of internet advertising,) x 2 (internet advertising pattern) x 2 (web content correlation) = 8 experimental groups in the experimental design. There are 15 participants in each experimental groups, a total of 120 people, so this study can obtain 8 (Group) x 15 (person / group) = 120 experimental data. Each item needs at least 10 samples according to the research of Nunnally(1969)on proposed project analysis. If there are many projects, each project can be reduced to five samples. Because the key items are up to seven questions, it would take at least 70 samples, so 120 samples is feasible in this study.Design of experiment grouping is shown in Table1.

Design and Production of Experimental Tools:

①The production of experimental ads

This study mainly investigates the internet advertising effect, experiment advertising is mainly with the related advertising of Samsung smart mobile phone (banner ads and video ads),the sample of this experiment is mainly with China University of Mining and Technology students . Smart mobile phone is one of the hot commodities among college students, taking mobile phone as experimental advertising product, we hope to improve the degree of participation in experiments.

②The design of experimental web

Experimental web is the Website home page used to display experimental ads. This experiment mainly investigates the internet advertising effect, so we must make the subjects in the situation of browsing the web when conducting the experiment ,make the subjects notice the existence of experimental ads through browsing the web ,and then ask the subjects the product recall, brand recall, advertising attitude, brand attitude, and so on advertising effect through the questionnaire. This experiment use two virtual pages (web pages related to mobile phone products, web pages unrelated to mobile phone products) as background of the experiment to be good for studying the web content correlation variable, and part of the experimental web pages is directly from the actual

domestic famous website (for example: Jing dong, Netease, etc.) capture and do some revision. In addition, all web content of this experiment is not scrollable window to avoid dispersing the subjects' attention due to using the scroll window. In order to effectively control all the variables, the browser tools are not displayed to prevent the subjects using the browser's function to operate the browse order, which will influence the effects.

Table 1: Design of Experiment Grouping

Group	Demonstrating manner of internet advertising	Internet advertising pattern	Web content correlation
1	Active	Dynamic	Correlated
2			Uncorrelated
3		Static	Correlated
4			Uncorrelated
5	Passive	Dynamic	Correlated
6			Uncorrelated
7		Static	Correlated
8			Uncorrelated

3.2 Variable Measurement

The framework of this research includes three independent variables: demonstrating manner of internet advertising, internet advertising pattern and web content correlation; one intermediary variable is web content involvement; one dependent variable is internet advertising performance which includes product recall, brand recall, advertising attitude, brand attitude and click willingness. Operational definition of measurement variables is shown in Table2:

Table 2: Operational Definition of Measurement Variables

Variable type	Variable name	Operation definition	Related literature
Independent variable	Demonstrating manner of internet advertising(E)	Active / Passive	Chatterjee(2001) ^[14]
	Internet advertising pattern(S)	Dynamic / Static	Vaughan(2003) ^[15]
	Web content correlation(R)	Unrelated to web content / Related to web content	The research arranged
Intermediate variable	Web content involvement(I)	High web content involvement / low web content Involvement	Norris&Colman(1992) ^[16]
Dependent variable	Product recall	After accepting the experience advertising information,the level of advertising products recall is high or not.	Norman(1978) ^[17]
	Brand recall	After accepting the experience advertising information,the level of advertising brand recall is high or not.	Norman(1978) ^[17]
	Advertising attitude	The reaction preferences of consumers in the advertising information disclosure.	Lutz(1986) ^[18]
	Brand attitude	The brand preferences of consumers in the advertising information disclosure.	Lutz(1986) ^[18]
	Click willingness	The click willingness is a tendency expressing he will click the ads	Ha(1996) ^[19]

3.3 Data Processing and Analysis

This study uses questionnaire survey to collect data and uses SPSS19.0 as data analysis tool. At the same time, this study uses the Cronbach's alpha value, multivariate analysis of variance, and analysis of variance for data processing.

4. Data Analysis

The Classification explanatory variables of this study are demonstrating manner of internet advertising, internet advertising pattern and web content correlation and each factor has 2 levels, so a total of eight scenes. Different questionnaires are distributed to 8 different experimental group and each group is distributed 15 or so. A total of 118 questionnaires were collected, 120 invalid questionnaires are rejected, 106 is valid questionnaires and the recovery rate is 89.83%.

4.1 Reliability and Validity Test of the Scale

Although the questionnaire is basically from the mature form, but to further understand whether the views to questions of the subjects accord with the classification of the original designers, so this study firstly tests the reliability and validity of the scale. The testing results show that the Cronbach's alpha is all above 0.7 and up to the standards Nunnally (1978) suggested. And all the items have a higher load on each factor, which suggests the reliability and validity of the questionnaire used in this study are good^[20].

4.2 Hypothesis Testing

4.2.1 Manova Total Test Results

Table 3: MANOVA Test Results

Source of variation	Wilks' Lambda	F-value	P-value	Significance
Demonstrating manner of internet advertising(E)	0.051	209.160	0.000	***
Internet advertising Pattern(S)	0.126	48.291	0.000	***
Web content correlation(R)	0.228	19.802	0.000	***
Web content involvement(I)	0.896	0.213	0.000	
E×S	0.619	4.959	0.003	**
E×R	0.724	3.264	0.011	*
S×R	0.635	3.817	0.002	**
E×S×R	0.712	4.828	0.003	**
I×E	0.905	1.180	0.315	
I×S	0.937	0.596	0.620	
I×R	0.928	0.535	0.746	
I×E×S	0.981	0.279	0.908	
I×E×R	0.935	0.712	0.609	
I×S×R	0.908	1.035	0.372	
I×E×S×R	1.000	0.000	1.000	

Note: *** p<0.001; ** p<0.01; * p<0.05

The independent variable of this study is a total of 4 and they are demonstrating manner of internet advertising, internet advertising pattern, web content correlation plus intermediary variable

web content involvement. The variables measuring the advertising effect are product recall, brand recall, advertising attitude, brand attitude, and click willingness. Therefore, this study uses the multivariate variant number analysis (MANOVA), table 3 is the MANOVA test results:

The main effect of the three Categorical explanatory variables: demonstrating manner of internet advertising, internet advertising pattern and web content correlation of this study are all significant and the interaction effect between of these three explanatory variables is also significant. The hypothesis1 and the hypothesis 2 of this paper are all supported, the hypothesis 3 is not established. In other words, the three explanatory variables of this study are all very influential factor for the product recall, brand recall, advertising attitude, brand attitude and willingness to choose of the dependent variable ads. Therefore, this study further does the ANOVA test for each dependent variable to get the influence of each explanatory variable and their interaction on dependent variable.

On the other hand, from the table 3, we can see that the intermediary variable web content involvement of this study, whose main effect and the interaction between presentation forms of internet advertising don't achieve the significant level, so the research hypothesis 3 is completely untenable.

4.2.2 The Influence of Presentation Forms of Internet Advertising on Advertising Effect

This part uses three factors analysis of variance to test the influence of presentation forms of internet advertising on advertising effect.

Table 4: Three factors variation analysis results

Source of variation	III sum of square	Freedom	F-value	P-value	Significance
Demonstrating manner of internet advertising(E)	276.382	1	831.204	0.000	***
Internet advertising Pattern(S)	67.521	1	193.107	0.000	***
Web content correlation(R)	23.186	1	62.487	0.000	***
E×S	4.973	1	13.825	0.003	**
E×R	6.120	1	16.924	0.000	***
S×R	4.108	1	11.454	0.012	*
E×S×R	9.870	1	27.652	0.000	***

Note: *** p<0.001; ** p<0.01; * p<0.05

From the table4, we can see that: the three explanatory variables (demonstrating manner of internet advertising, internet advertising Pattern and web content correlation) of presentation forms of internet advertising all have significant influence on advertising effect; the interaction between presentation forms of internet advertising(E×S、E×R、S×R)all has a significant influence on advertising effect.

4.2.3 The Comparison of Influence of Presentation Forms of Internet Advertising on Advertising Effect

(1)The comparison of influence of presentation forms of internet advertising on main advertising effect

Table 5: The influence results of presentation forms of internet advertising to the main advertising effect

Demonstrating manner of internet advertising(E)	Advertising effect mean	Comparison
Active / Passive	2.733/3.525	Passive>Active
Internet advertising Pattern(S)	Advertising effect mean	Comparison
Dynamic / Static	4.860/2.900	Dynamic>Static
Web content correlation(R)	Advertising effect mean	Comparison
Correlated / Uncorrelated	2.525/4.459	Uncorrelated>Correlated

In the terms of advertising effect, from the table 5 we can see that:

The advertising effect mean of the passive advertising is slightly higher than the active one.

The advertising effect mean of the dynamic advertising is significantly higher than the static one.

The advertising effect mean when the web content is not related is significantly higher than related

(2) The comparison of influence of the interaction of presentation forms of internet advertising on advertising effect

①The comparison of influence of the interaction between demonstrating manner of internet advertising and internet advertising pattern on advertising effect

Table 6: The influence results of the interaction between demonstrating manner of internet advertising and internet advertising pattern on advertising effect

Demonstrating manner of internet advertising(E)	Internet advertising pattern(S)	Advertising effect mean
Active	Dynamic/Static	3.216/2.250
Passive	Dynamic/Static	5.450/3.400

From the table 6, we can see that dynamic internet advertising effect will have higher mean no matter in the case of active or passive internet advertising. However, the reaction of different internet advertising pattern to advertising effect will be different due to the difference of demonstrating manner of internet advertising. While the effect of the passive, dynamic advertising is the optimal.

②The comparison of influence of the interaction between demonstrating manner of internet advertising and web content correlation on advertising effect

Table 7: The influence results of the interaction between demonstrating manner of internet advertising and web content correlation on advertising effect

Demonstrating manner of Internet advertising(E)	Web content correlation(R)	Advertising effect mean
Active	Correlated/ Uncorrelated	1.750/3.300
Passive	Correlated/ Uncorrelated	4.253/5.700

From the table 7, we can see that no matter in the case of active or passive internet advertising, the internet advertising effect will have higher mean when the web content is not relevant. However, the reaction of different web content correlation to advertising effect will be different due to the difference of demonstrating manner of internet advertising. While the effect of the passive and not correlation with web content advertising is the optimal.

③The comparison of influence of the interaction between internet advertising pattern and web

content correlation on advertising effect

Table 8: The influence results of the interaction between internet advertising pattern and web content correlation on advertising effect

Internet advertising pattern(S)	Web content correlation(R)	Advertising effect mean
Dynamic	Correlated/ Uncorrelated	3.726/4.820
Static	Correlated/ Uncorrelated	1.253/2.382

From the table 8, we can see that no matter in the case of dynamic or static internet advertising, the internet advertising effect will have higher mean when the web content is not relevant. However, the reaction variable of different web content correlation to advertising effect will be different due to the difference of internet advertising pattern. While the effect of the dynamic and not correlation with web content advertising is the optimal.

5. Conclusions and Discussions

5.1 Research Conclusions

(1) Demonstrating manner of advertising and advertising effect

The difference of demonstrating manner will influence the advertising effect when the internet advertising is presented. The results indicate that: in terms of advertising effect, passive and dynamic>passive and static>active and dynamic>active and static: in terms of passive advertising effect, passive and not correlation with web content>passive and web content correlation>active and not correlation with web content>active and web content correlation. The effect of the dynamic advertising is obviously better than the static when the internet advertising is passive, while the web content correlation has little influence on internet advertising effect when the internet advertising is active.

(2) Advertising pattern and advertising effect

The effect of dynamic advertising is better than the static one: in terms of advertising effect, dynamic and not correlation with web content>dynamic and web content correlation>static and not correlation with web content>static and web content correlation; in the terms of advertising effect, dynamic and passive>static and passive>dynamic and active>static and active. The explanation of above phenomenon is that when consumers' involvement in advertising information is increased, the thinking path of consumers will be from the surrounding path to the higher level central path according to ELM mode. If the advertising information involvement or attention is low, peripheral route will become important factor and this peripheral route and influence clue probably form factors that influence consumers handling advertising messages and brand attitude. Consequently, advertising involvement in this process will play a decisive factor and is an important independent variable.

(3) Web content correlation and advertising effect

The effect of not correlation with web content advertising is better than the correlation with web content advertising one: in terms of advertising effect, not correlation with web content and dynamic> correlation with web content and dynamic> not correlation with web content and static> correlation with web content and static; in terms of advertising effect ,not correlation with web content and passive> correlation with web content and passive> not correlation with web content and active > correlation with web content and active. The internal research on web content correlation produced the opposite results. As such, the motivation for this study was to incorporate the relevance of web content into the study variables generated, and the results show that viewers may view relevant ads as decorative patterns on a page and will not click when the correlation between ads and web content is too high. The results of this study are different from the advertising

decision-making proposed by the general website. So whether the advice of web operator is true is worth querying.

5.2 Practical Implications

(1)The consideration of choosing demonstrating manner of internet advertising when delivering internet advertising

Although the effect of passive advertising is slightly higher than the active one, the advertisers can't blindly increase the passive demonstrating manner of internet advertising. Blindly increasing the passive demonstrating manner of internet advertising may have negative influence on web browsers' advertising attitude, brand attitude and willingness to choose.

(2)The consideration of choosing advertising pattern when delivering internet advertising

The effect of dynamic advertising is significantly higher than the static one, no matter whether you are interested in the content, you notice first because the dynamic advertising can attract eyeball. If the advertising is static, you can overlook something that you are interested in because the information on the internet is too large. Consequently, the advertisers try to design dynamic advertising, and dynamic advertising will be better especially when consumers actively search for information.

(3)The consideration of choosing web content correlation when delivering internet advertising

The advertising effect when the advertising and web content is not related is better than related. Because viewers may regard the relevant ads as the site's decorative images and simply do not click. This study result is different from the advertising delivery proposed by general website, so we should keep reserved attitude towards website suggestion and must question the opinion of the website operator on the method of evaluating the advertising effect.

(4)The advice on improving advertising effect by internet advertising delivery

When high number of ads has become an unavoidable trend for the current site, advertisers should pay more attention to web correlation, demonstrating manner of internet advertising and advertising pattern to get better advertising effect. On one hand, advertisers can get better advertising effect as long as they place the ads in the lower web correlation or improve the dynamic of advertising. On the other hand, although the interaction between web involvement and presentation forms of advertising is not significant, the reports of web content should adopt moderate way to avoid drastically influencing advertising reading. While advertising cannot dominate, as such, it can have a good effect.

5.3 Limitations and Further Research

(1) Limitations

As an initial exploration and attempt, there are still many deficiencies and places needed improvement in this study:

①Restriction of internet advertising environment

Because this study takes Samsung mobile internet advertising as sample book and the difficulties of its demonstrating manner, pattern of advertising and web choice of web content correlation or not are unable to overcome. The presentation forms of internet advertising Complying with the demand of this research still exist some shortcomings that can't satisfy, the subjects can only choose approximate combination of this research.

②Restriction of experiment sample and product category

Because of the limitation of manpower, material resources and financial resources during the experiment process, the experiment cannot sample in a large range. Therefore, the sample is all

students whose cognition of internet advertising products differs from other social strata. If we infer the results to other groups, whether there are similar results also need to be further studied. In addition, the experimental material of this study is the mobile phone internet advertising, whether the conclusion can be extended to other products also needs further research.

(2) Future Research

The factors that can affect the advertising effect are too many, such as the experience of consumers, the general attitude to advertising, and even the purpose of surfing the internet can affect the advertising effect and it is also a question worth exploring. In addition, this study did not consider the internet user product involvement, advertising involvement and other factors, these factors can be added to discuss advertising effect more complete in the future.

References

- [1] Hazlewood A. *High-cost banner blindness: Ads increase perceived workload, hinder visual search, and are forgotten.* *ACM Transactions on Computer-Human Interaction*, 2005, 12 (4):423-445.
- [2] Aaker David A. and D. E. Bruzzone. "Causes of Irritation in Advertising." *Journal of Marketing* 49. 2(1985): 47-57.
- [3] Gong Shiyang, Li Qian, Zhao Pingping. *Marketing Communication in the Digital Era: Online Advertising, Online Word of Mouth, and Mobile Game Sales.* *Nankai Management Review*, 2018, 21(02):28-42.
- [4] Hoffman Donna, Thomas P Novak. *Marketing in hypermedia computer-mediated environments: conceptual foundations.* *Journal of Marketing*, 1996, 60, 60 (7):50-68.
- [5] Correia M S L, Anwar I M. *A Motivational Cognitive Mechanism Model of Online Social Network Advertising Acceptance: The Role of Pre-purchase and Ongoing Information Seeking Motivations.* *Journal of Creative Communications*, 2021, 16(3):314-330.
- [6] Radfar R, Shahabi A. *Analyzing the Effect of Internet Advertising on Iran's Industrial Market, Using Fuzzy Dematel Method and a Systemic Approach.* 2019, 10(28): 107-124.
- [7] Angel M Z, et al. *Social Network Advertising: The Moderating Role of Processing Fluency, Need for Cognition, Expertise, and Gender.* *Journal of Internet Commerce*, 2020, 19(3):78-92.
- [8] Li Li, He Xiang, Yang Wensheng. *Research on the impact of online advertising on user willingness to pay under the regulation of targeted differentiation.* *Soft Science*, 2022, 36(01):132-138.
- [9] Kim Y N. *The Effect of Ad Customization and Ad Variation on Internet Users' Perceptions of Forced Multiple Advertising Exposures and Attitudes.* *Journal of Interactive Advertising*, 2018, 18(1):63-74.
- [10] Michell, A and Olson. J. C., *Are Product Attribute Beliefs the Only Moderator of Advertising Effects on Brand Attitude.* *Journal of Marketing Research*, 1981, Vol. 18. 318-332.
- [11] Rasty F, Chiajung C, Feiz D. *The impact of Internet travel advertising design, tourists' attitude, and Internet travel advertising effect on tourists' purchase intention: the moderating role of involvement.* *Journal of Travel & Tourism Marketing*, 2013, 30(5):482-496.
- [12] Moon Y. *A Research of the Influence Network Advertisements in News Websites Have on News Article Credibility.* *Journal of Practical Research in Advertising and Public Relations*, 2017, 10(4):128-145.
- [13] Qiu Desheng. *On the Methods of SSK Laboratory Research.* *Journal of Wuhan University of Technology (Social Sciences Edition)*, 2017, 30(06):98-104.
- [14] Chatterjee P. *Beyond CPMs and clickthroughs: Understanding consumer interaction with web advertising.* *Internet Marketing Research: Theory and Practice.* IGI Global, 2001: 209-217.
- [15] Vaughan K K, Fouts G T. *Changes in television and magazine exposure and eating disorder symptomatology.* *Sex Roles*, 2003, 49: 313-320.
- [16] Norris C E, Colman A M. *Context effects on recall and recognition of magazine advertisements.* *Journal of Advertising*, 1992, 21(3): 37-46.
- [17] Dixit A, Norman V. *Advertising and welfare.* *The Bell Journal of Economics*, 1978: 1-17.
- [18] Lutz C. *Emotion, thought, and estrangement: Emotion as a cultural category.* *Cultural anthropology*, 1986, 1(3): 287-309.
- [19] Ha L. *Advertising clutter in consumer magazines: Dimensions and effects.* *Journal of advertising research*, 1996, 36(4): 76-85.
- [20] Nunnally J C. *An overview of psychological measurement.* *Clinical diagnosis of mental disorders: A handbook*, 1978: 97-146.