A Study on Differences between Experts and Consumers in Creative Advertising Effect regarding Commercial TV Advertisement

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Abstract

Advertisements are the main tools to convey messages to consumers. In today's media, TV advertisements have high penetration rate and powerful audiovisual effects. In the design of TV advertisements, the design team is responsible for the design of advertising contents. Therefore, this study explores the cognitive differences in creativity between the design team and consumers and also examines the degree of correlation among creativity, communication, attractiveness, memory, and interest. In order to examine the two purposes mentioned above, the study invited 63 consumers and five advertising experts to review TV advertisements and asked them to score creativity, communication, attractiveness, memory, and interest for each video. The results show that there are cognitive gaps between experts and consumers based on the results of scores, cluster analysis. In addition, as for the scores of consumers, creativity has a positive correlation with attractiveness and memory. Interest has a positive correlation with communication, attractiveness, and memory. However, as for the correlation between the scores of advertising experts and consumers, it is found that only the scores of communication of advertising experts and the scores of the interest of consumers have a positive correlation. Therefore, "creativity", "communication", "attractiveness" are essential elements when designing TV advertisements. The results can be used as a reference for TV commercial advertisement design.

Keywords: TV Advertisement, Creativity, Advertising Effect, Cognitive Differences

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Introduction

From the promotion aspect of the marketing mix, advertisement is the main tool to convey messages to consumers (Lu, 2015; Hsiau et al., 2010). According to a report from Nielsen, a leading company of information, data, and measurement, TV advertisement in Taiwan has the highest budget compared to other platforms and it is still an important communication platform for business owners (Chang, 2018). In addition, TV advertisement has a number of features, including powerful audiovisual effects, high penetration rate, mandatory, products being displayed, easy to connect emotions with viewers, etc. Commercial advertisements, which aim to consumers to promote or sell a product, service or idea, are the most among all categories of TV advertisements. Therefore, this study chooses TV advertisements as the scope of the study.

How do advertisements produce advertising effect during the process of delivering messages? Bendixen (1993) defined the advertising effect as "the impact of advertising messages through the media, or the response of the audience to the content of the message, which can be divided into the influence of the attitude of the audience and the impact on the sales of advertising products". Overall, the measurement indicators of traditional advertising effect can be divided into the following four aspects, including attitude toward the advertisement, attitude toward the brand, advertisement memory, and purchase intention (Ha, 1996). In addition, the AIDMA mode was widely used by advertisers to detect advertising effect (Moriarty et al., 2016), In the AIDMA model, a product would first attract "Attention" of a consumer, and then the consumer would become "Interested". Soon the consumer might "Desire" to have the product and keep it in his "Memory". Finally, upon coming across the product at a store, the consumer would take an "Action" to purchase it (Sumita& Isogai, 2009). The main goal of advertisement is to attract consumers' attention and continually arouse consumers' interests. Therefore, "Attractiveness" and "Interest" are also indispensable features of advertisement.

In the operation of advertisement, "creativity" played an important role (Hsiau et al., 2010). At the same time, a high-quality creative advertisement was easier recalled for consumers (Till & Baack, 2005 Lehnert et al., 2013), and also helped consumers to create positive attitude toward the advertisement and the brand and further to encourage purchase intention (Ang et al., 2007 Baack et al., 2016 Yang & Smith, 2009). Besides creativity mentioned above, according to the creative philosophy of Doyle Dane Bernbach (DDB), an advertising company, there were basic principles for an effective advertisement: "Relevance" (R), "Originality" (O), and "Impact" (I) (Moriarty et al., 2016). Moreover, besides ROI mentioned above, Lu (2015) also proposed three additional characteristics: sales ability, persuasive ability, and simple information. Hence, apart from creativity, "Communication" is also a factor to drive a successful advertisement, which makes consumers easily understand the messages delivered in an advertisement. Hence, based on literature above, "Creativity", "Communication", "Attractiveness", "Interest", and "Memory" will be used for further study.

During communication process of TV advertisements, the contents of TV advertisements are encoded and designed by design team, and then decoded by consumers. However, are there any cognitive differences in creativity between design

team and consumers? Wei & Chang (2000) pointed out that cognitive gaps between these two groups may exist. Not to mention a group of experts who are professionally trained and practically perform TV advertisements. There are several studies on cognitive differences between designers and consumers (Fu et al., 2019; Hsieh & Chang, 2016; Chou & Wang, 2007; Lo & Lin, 2007).

Therefore, this study explores the cognitive differences in creativity on TV advertisement between advertising experts and consumers and also examines the correlation among creativity, communication, attractiveness, memory, and interest.

Method

Step 1: Research samples collection and scoring

This study collected 48 samples that are large differences in the creative performances of advertising contents. They are broadcasted in Taiwan during the period of August 1, 2018 to August 31, 2018 (including those have been broadcasted for nearly 3 years). The advertisements aren't limited to a single product category or single brand to avoid similarities in contents and creative performances, as shown in Figure 1 (Appendix A for details and sources of each sample). Then, this study designed a total of 4 questions based on AIDMA model to score each advertisement, as shown in Table 1. The scoring range is between 1 and 10 in steps of 0.5, as shown in Figure 2. The study invited 30 consumers, 14 males and 16 females, who regularly watched TV advertisements to participate in the survey.



Figure 1: 48 samples of TV advertisements

Table 1: Scoring questions

Scoring questions

- 1. To what extent does this TV advertisement attract your attention at the first glance?
- 2. To what extent does this TV advertisement arouse your interests and make you want to learn about the messages?
- 3. To what extent does this TV advertisement arouse your purchase desire?
- 4. To what extent does this TV advertisement make you want to watch it again?



Figure 2: Score interface

Table 2: TV advertisements sample score results (partial)

Score results (±SD)						
Sample number	Average of the first question	Average of the second question	Average of the third question	Average of the fourth question	Total average	
001	7.47±1.68	6.93±2.12	6.60±2.34	5.62±2.54	6.65±1.89	
002	7.58±1.97	6.60±2.22	6.08±2.45	6.67±2.47	6.73±2.12	
003	6.50±2.12	5.48±2.50	5.43±2.25	5.20±2.35	5.65±2.13	
015	5.87±2.06	4.43±2.38	4.45±2.42	3.37±2.12	4.53±1.94	
016	5.58±1.82	4.07±1.90	4.15±2.18	3.65±2.14	4.36±1.81	
017	5.60±1.79	5.62±2.02	5.28±2.23	4.17±2.35	5.17±1.92	
047	7.13±1.85	6.17±2.56	5.65±2.52	5.13±2.70	6.02±2.19	
048	6.55±2.13	5.58±2.34	5.37±2.45	5.53±2.77	5.76±2.09	

Step 2: Screening by hierarchical cluster analysis

This study adopted Ward's method of the hierarchical cluster analysis to classify samples into three groups, namely "High attractiveness", "medium attractiveness", and "low attractiveness", based on the scores, as shown in Figure 3. Then, this study selected a total of 33 samples in the group "high attractiveness" and "medium attractiveness" for further study because of considering the sample size of further study and the coverage of advertising contents, as shown in Appendix A(new number).

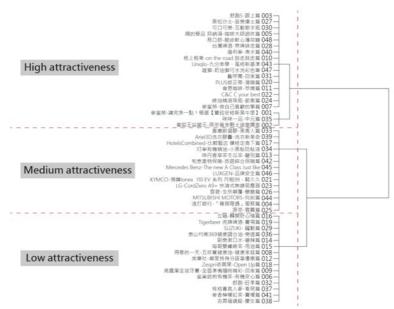


Figure 3: The result of the hierarchical cluster

Step 3: Score on creativity, communication, attractiveness, memory, and interest for the selected 33 samples

Before distributing the formal evaluation survey, the study conducted a pre-test to confirm evaluation question. The final questions of survey are shown in Table 3. In addition, the survey process was divided into two rounds because of considering the large sample size and many scoring items. The first round was to evaluate three dimensions – creativity, communication and attractiveness. The second round survey was conducted 10 days after the first round to evaluate the other two dimensions – memory and interest. The survey adopted 5-point Likert scales with range from "strongly disagree (1)" to "strongly agree (5)" in dimensions of creativity, communication, attractiveness, and interest to evaluate the extent of agreement or disagreement with the statements. As for the dimensions of memory, the scale was the most impressive as "5" and the least impressive as "1". In addition, to avoid sequence effects, the sequence of samples was randomly assigned by Microsoft office Excel, and then evenly distributed to subjects.

In the memory test, this study adopted the "aided recall" approach which was to provide some clues for the respondents to recall (Lu, 2015). This study captured the screens of the advertisements to measure memory. The brand names and logos weren't shown on the screens to evaluate the contents of advertising performances.

The dimensions of attractiveness, memory and interest usually measure the advertising effects, the degree of consumers being affected by advertisements after they watched them. Therefore, the advertising experts only scored the dimensions of creativity and communication.

Table 3: Evaluation question

Dimension	Question			
Creativity	I think this advertisement is "creative".			
Communication	I think this advertisement "clearly communicates product information".			
Attractiveness	I think this advertisement is "attractive".			
Memory	To what extent does this advertisement impress you?			
Interest	I think this advertisement is "interesting" and I want to learn more about product information.			

Analysis and results

Analysis of questionnaire results

The study conducted the consumer survey on those who regularly watched TV advertisements. A total of 80 questionnaires were collected in two rounds, with 63 valid responses. The demographic characteristics of subjects are 30 males and 33 females, mainly aged from 21 to 25 (66%) and then followed by 16 to 20 (12%), and most are students (55%).

The study invited five advertising experts from academia and industry for the advertising expert survey. Three academic experts specialized in advertising design with teaching experience for 14 to 30 years. Two experts were from the industry –the director of filming TV advertisements and the creative director of the advertising company, with working experience for 8 to 30 years.

Then, this study conducted reliability analysis and factor analysis to examine the reliability and validity of each dimension. In the reliability analysis, Cronbach's Alpha were 0.907(creativity), 0.927(communication), 0.932(attractiveness), 0.885(memory), and 0.943(interest), indicating that each dimension had high reliability.

In the factor analysis, this study adopted the principal component analysis and the varimax method. The results showed that five dimensions were significant (p<0.05) in the Bartlett's Test of Sphericity. In addition, the KMO (Kaiser-Meyer-Olkin) were 0.686 in creativity, 0.669 in communication, 0.613 in attractiveness, 0.748 in memory, and 0.779 in interest.

Cognitive differences in creativity between advertising experts and consumers

In order to understand the cognitive differences in creativity between two groups, this study translated creative scores to a linear chart to examine the score differences of each sample between two groups, as shown in Figure 4. It shows that some samples have larger score differences, while the others have smaller differences. Then, Ward's method of the hierarchical cluster analysis was conducted to classify samples into three groups, namely "high creativity", "medium creativity", and "low creativity" based on the creative scores, as shown in Figure 5.

This study organized the result of the hierarchical cluster analysis into a table, as shown in Table 4. In high creativity group, there were seven advertisements rated as high creativity by both experts and consumers group, two advertisements rated as high creativity by consumers while rated as medium creativity (n19) and low creativity (n10) by experts, and three advertisements rated as high creativity by

experts while rated as medium creativity (n4, n26, n32) by consumers. In medium creativity group, there were six advertisements rated as medium creativity by both experts and consumers group, and six advertisements rated as medium creativity by consumers while rated as low creativity by experts (n3, n7, n9, n14, n14, n17). In low creativity group, there were five advertisements rated as low creativity by both experts and consumers group, and four advertisements rated as low creativity by consumers while rated as medium creativity by experts (n8, n20, n29, n31). Based on the analysis above, there were cognitive gaps in creativity between experts and consumers.

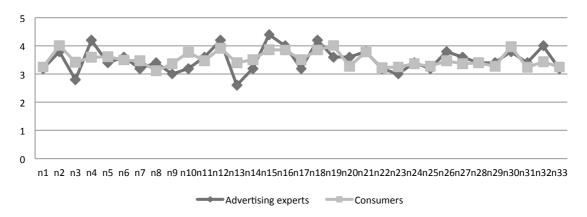


Figure 4: Line chart of creative score differences of advertising experts and consumers

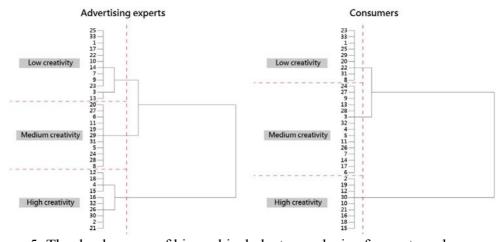


Figure 5: The dendrogram of hierarchical cluster analysis of experts and consumers

Table 4: The cognitive intersection in creativity of advertising experts and consumers

	ng experts or assumers		Advertising experts	
Groupin	ng (amount)	High creativity (10)	Medium creativity (11) Low creativity (12)	
	High	7	1	1
	creativity (9)	(n2,n12,n15,n16,n18,n21,n30)	(n19)	(n10)
Consumers	Medium	3	ity (10) Medium creativity (11) Low creativity 1 1 1 18,n21,n30) (n19) (n10) 6 6 6 32) (n5,n6,n11,n24,n27,n28) (n3,n7,n9,n13,n14) 4 5	6
Consumers	creativity (15)	(n4,n26,n32)		(n3,n7,n9,n13,n14,n17)
	Low creativity	0	4	5
	(9)	U	(n8,n20,n29,n31)	(n1,n22,n23,n25,n33)

Correlation analysis

This study applied correlation analysis to examine the degree of correlation among variables (creativity, attractiveness, communication, memory, and interest) based on consumers' scores. As shown in Table 5, creativity has positive correlation with attractiveness(r = 0.415, p < 0.05) and memory(r = 0.504, p < 0.05). It shows that higher level of creativity on TV advertisements may increase the levels of attractiveness and memory. Moreover, interest has positive correlation with communication (r = 0.479, p < 0.01), attractiveness(r = 0.614, p < 0.01), and memory(r = 0.351, p < 0.05). It shows that higher levels of communication or attractiveness in TV advertisements may arouse consumers' interests and willing to learn more about advertising messages. And it shows that higher level of interesting in advertisements may increase the levels of memory.

Table 5: Correlation analysis of consumers' scores

	Creativity	Communication	Attractiveness	Memory	Interest
Creativity	1	-0.006	0.415*	0.504*	0.166
Communication		1	0.276	0.117	0.479**
Attractiveness			1	0.299	0.614**
Memory				1	0.351*

^{*}p<0.05 **p<0.01

In addition, this study conducted correlation analysis based on the scores of advertising experts (creativity and communication) and the scores of consumers (attractiveness, memory, and interest). As shown in Table 6, only communication and interest has a positive correlation (r = 0.357, p<0.05). It indicates that when advertising experts consider a better communication way to deliver messages in TV advertisements, it may make consumers more interested in learning about advertising messages.

Table 6: Correlation analysis between advertising experts and consumers

	Attractiveness (consumers)	Memory (consumers)	Interest (consumers)
Creativity (experts)	0.265	0.305	0.156
Communication (experts)	0.210	-0.065	0.357*

^{*}p<0.05

Conclusion

This study preliminarily explores cognitive differences in creativity on TV advertisement between advertising experts and consumers and also examines the correlation among creativity, communication, attractiveness, memory, and interest. In the analysis of cognitive differences, it can be seen that advertising experts and consumers have differences in creativity on TV advertisements based on the result of hierarchical cluster analysis.

Besides, it is found that creativity can enhance attractiveness and memory, communication and attractiveness can increase interest, and interest can deepen advertisement memory based on correlation analysis of scores of consumers. Therefore, "creativity", "communication", "attractiveness" are essential elements when designing TV advertisements. In a meanwhile, only communication and interest have a positive correction based on the scores of creativity and communication of

advertising experts and scores of attractiveness, memory and interest of consumers. Consequently, it indicates that there are indeed cognitive gaps between advertising experts and consumers.

For future study, it is suggested to explore which performances on TV advertisements make consumers more creative, attractive, interesting, better memory, and better communication. Besides, demographics of subjects, such as gender, age or lifestyle, may also be one of the factors that cause differences, and it can be explored further in the future.

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APPENDIX A. Research samples source

Original number (New number)	TV advertisement name	Source	Seconds	Downloa date
001(1)	麥當勞-講究多一點!極選蕈菇安格斯黑牛 堡	https://www.youtube.com/watch?v=rQP7qaqmgvA	30	2018/08
002(2)	葡萄王益菌王-原來黃金戰士這麼厲害	https://www.youtube.com/watch?v=ZznvI6D25bs	30	2018/08
003(3)	舒跑 S-跟上篇	https://www.youtube.com/watch?v=Ac4wJXUnBs0	30	2018/08
004(20)	渣打銀行-「尊榮哩遇」服務篇	https://www.youtube.com/watch?v=qNUkZnRDrYg	40	2018/08
005(4)	喝的極品 貝納頌-咖啡大師退休篇	https://www.youtube.com/watch?v=hi9sIZWdH4M	45	2018/08
006	雀巢焙煎有機茶-有機安心篇	https://www.youtube.com/watch?v=ydRPYrRkH4k	20	2018/08
007(5)	麥當勞-做自己喜歡的事篇	https://www.youtube.com/watch?v=IHuC3XSpaMw	30	2018/08
008	得意的一天-五珍寶健康油-健康家庭篇	https://www.youtube.com/watch?v=r0xkG9dNfYc	30	2018/08
009	高露潔全效牙膏-全面準備隨時精彩-回家篇	https://www.youtube.com/watch?v=ZLaJhBFaQ5A	30	2018/08
010(6)	格上租車-on the road 說走就走篇	https://www.youtube.com/watch?v=4vggvH1jJFk	30	2018/08
011(7)	韋恩咖啡-萃煉篇	https://www.youtube.com/watch?v=jFhMqkXVkew	30	2018/08
012	美廉社-鄰里持身分證享優惠篇	https://www.youtube.com/watch?v=M71uyepZ4K8	15	2018/08
013(21)	味丹青草茶冬瓜茶-離別篇	https://www.youtube.com/watch?v=-5xkO8n9dPA	25	2018/08
014	刷樂漱口水-嗆辣篇	https://www.youtube.com/watch?v=EdpcO3b wnA	17	2018/08
015	每朝雙纖綠茶-甩油篇	https://www.youtube.com/watch?v=CFf1BA5zU4I	20	2018/08
016	立頓-轉開好心情篇	https://www.youtube.com/watch?v=rsIvyzWn fc	30	2018/08
017(22)	HotelsCombined-比較飯店價格定高下篇	https://www.youtube.com/watch?v=wwpJIs wkw4	15	2018/08
018	Zespri 奇異果-Open Up 篇	https://www.youtube.com/watch?v=eTzkZ2dp-7g	25	2018/08
019	Tigerbeer 虎牌啤酒-賣場篇	https://www.youtube.com/watch?v=HkLF_cOBU	12	2018/08
020(8)	PLUS 修正帶-滑順篇	https://www.youtube.com/watch?v=ycMVx2EA8e0	15	2018/08
021(23)	KYMCO-預購 Ionex 110 EV 系列 月租 99 ,騎久久	https://www.youtube.com/watch?v=1K3v7mcbkqI	35	2018/08
022(9)	C&C C your best	https://www.youtube.com/watch?v=0zwId5Poi2M	20	2018/08
023(24)	LG-CordZero A9+ 快清式無線吸塵器	https://www.youtube.com/watch?v=2rpmkBZfhyE	25	2018/08
024(10)	綠油精滾珠瓶-節奏篇	https://www.youtube.com/watch?v=29nstJJwTF	20	2018/08
025(25)	原萃-雲霧篇	https://www.youtube.com/watch?v=nfuIyFeB1HA	20	2018/08
026(26)	雪碧-生來顛覆-變臉篇	https://www.youtube.com/watch?v=IN8EogKqTKo	15	2018/08
027(11)	黑松沙士-音樂傻士篇	https://www.youtube.com/watch?v=L0WmhYwKg2A	30	2018/08
028(12)	台灣啤酒-爽啤碎念篇	https://www.youtube.com/watch?v=6kbH8CklMLY	20	2018/08
029	SUZUKI- 躍動篇	https://www.youtube.com/watch?v=b2eGqU vJvs	30	2018/08
030(13)	可口可樂-互動歌手瓶	https://www.youtube.com/watch?v=kaJo-VEojno	25	2018/08
031(14)	龜甲萬-回家篇	https://www.youtube.com/watch?v=REHR92qMuDk	25	2018/08
032	舒跑-旺季篇	https://www.youtube.com/watch?v=aPdPHpb7UAA	17	2018/08
033(27)	喜療瘀凝膠-黑青人篇	https://www.youtube.com/watch?v=heAf883T0	20	2018/08
034(28)	叮寧有機精油-小黑蚊防蚊液	https://www.youtube.com/watch?v=ewcze3PkeAU	25	2018/08
035(15)	味味一品-中元篇	https://www.youtube.com/watch?v=9VDLvagp0AY	30	2018/08
036	泰山均衡 369 健康調合油-樂透篇	https://www.youtube.com/watch?v=V6ODR8-P8Nw	30	2018/08
037	桂格養氣人蔘-看見篇	https://www.youtube.com/watch?v=1uu3Lfy1Rzk	30	2018/08
038	吉胃福適錠-慶生篇	https://www.youtube.com/watch?v=cT-MHRvHi4Q	34	2018/08
039(29)	Ariel3D 洗衣膠囊-洗衣新革命	https://www.youtube.com/watch?v=jGTbC_jQCNw	15	2018/08
040(16)	循利寧-煮水篇	https://www.youtube.com/watch?v=E x 67fvAHc	30	2018/08
041	麥香檸檬紅茶-賣檬篇	https://www.youtube.com/watch?v=V6fumMBrxBw	10	2018/08
042(30)	和泰產物保險-旅遊綜合保險篇	https://www.youtube.com/watch?v=zccJyGOiPTU	6	2018/08
042(30)	Uniqlo-九分美學、風格新基準	https://www.youtube.com/watch?v=FcjHfiAUT5k	15	2018/08
	MITSUBISHI MOTORS-向前篇	https://www.youtube.com/watch?v=ZbsK-O-eGIA	30	2018/08
044(31)	Mercedes Benz-The new A Class Just like	https://www.youtube.com/watch?v=ZbsK-O-eGfA https://www.youtube.com/watch?v=wTXeKOkaPu4	29	2018/08
. ,	LUXGEN-品牌安全篇			
046(33)		https://www.youtube.com/watch?v=gVV35DXQUCs	30	2018/08
047(18)	雄獅-奶油獅可水洗彩色筆	https://www.youtube.com/watch?v=FcHwSp2Mv7w	20	2018/08