

# The Conditioning Effect on Celebrity Multiple Endorsements

Chia-Ching Tsai

**Abstract**—This research adapts experimental design to investigate the effect of conditioning or not and pre-exposure or not on brand attitude, so it is a  $2 \times 2 = 4$  factorial design. The results show that the brand attitude of conditioning group is significantly higher than that of unconditioning group. The brand attitude with pre-exposure is significantly higher than that without pre-exposure. Conditioning or not and pre-exposure or not have significant interaction. No matter the celebrity is pre-exposure or not, the brand attitude is higher under conditioning process.

**Keywords**—Celebrity, Multiple endorsements, Pre-exposure, Classical condition, Second-order conditioning

## I. INTRODUCTION

It is very common for business to use celebrities to be the spokesperson of their own brands. According to the statistics, 20% of the American commercials were performed by the world famous athletes and celebrities from movie, television, music, and entertainment. The situation in England was almost the same. The main characters of one fifth of the marketing activities were celebrities. Kamins and Gupta [1] pointed out that using celebrity as the spokesperson would enhance the attitude of the consumers toward the brand.

In recent years, celebrities have been found to endorse many different brands and products in a certain period. For example, Lin Chi-Ling, the top super model in Taiwan, has been the spokesperson of countless brands and products. Some research thought that if a celebrity endorsed multiple brands would decrease the advertising effect. Tripp, Jensen and Carlson [2] indicated that if a multiple brand spokesperson appeared in many different commercials repeatedly, although the consumers held positive attitude toward that celebrity, it might turn negative as the exposure of that celebrity increased. When the exposure of a certain spokesperson reached a certain level, the consumers might get bored. Keller [3] pointed out the hidden problems of a celebrity endorse for the brands. A celebrity might endorse many different products so to lack some of the specific product implication or might be seen as speculation and insincere which then lost the effect of being a spokesperson.

However, some research indicated that celebrity endorsers might bring positive advertising effect. Um [4] discovered that multiple brands endorsements could strengthen consumers' advertisement attitude, brand attitude, and purchase intention more than single brand endorsement. These researches show that a celebrity endorses multiple brands still has quite an advertising effect. Therefore, the above research still has no specific concrete conclusion on the advertising effect of a celebrity multiple brands endorsements.

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Therefore, this research used classical condition procedure to examine the conditioning effect of celebrity endorsement. Furthermore, the celebrities often endorse multiple brands, when the consumers were watching the endorsement ad of the celebrity, they have already seen other ads of that celebrity. So, second-order condition theory was applied to investigate whether pre-exposure would have the influence on the brand attitude. This research mainly focuses on classical condition theory and second-order conditioning theory to discuss the conditioning effect on celebrity multiple endorsement.

## II. LITERATURE REVIEW

### A. Spokesperson

#### 1. The Definition and Classification of Spokespersons

According to McCracken [5], spokespersons assist specific business to sell the products or to enhance the brand image by his/her popularity or personal achievement through advertising. Friedman and Friedman [6] divided the spokesperson into three categories. First, celebrity is the public figure that his/her achievement is not directly related to the endorsed products, e.g. actors, athletes, politicians, etc. Second, expert is those who have professional knowledge related to the endorsed products, making people believe that his/her recognition to the products is from professional judgment and this knowledge is gained by experiences or training. Third, typical consumer is the general public. It is made believe because he/she is at the similar position with the audience, no special publicity or professional knowledge, and is natural, close, and no overdoes affections. Later on, Freiden [7] added in CEO to become the fourth type.

#### 2. Balance Theory

Mowen, Brown, and Schulman [8] used balance theory to explain the triangle of consumers, spokesperson, and the product. Balance theory is proposed by social physiologist Heider [9], also known as P-O-X theory, O means you, O means the other person, X is the third party or object (including person, matter, object, or concept) between P and O. The balance among the three is defined by the positive or negative relationship of the two. If three sides of the relationship are positive or two sides are negative and one is positive, that is the balance condition. In other words, if the product of the three sides is "positive", it is balance condition; if the product of the three sides is negative, it is imbalance condition. Infer by balance theory, the attitude shown by the spokesperson in the advertisement must be "positive". Also, the advertiser will hire someone that is persuasive to the target consumers to be the spokesperson. Therefore, when the consumers are strongly in favorable of the spokesperson, and the spokesperson can tightly combine with the products, the recommendation effect is the most obvious. The consistent attitude of the three would enhance the favorable impression on the products.

On the contrary, if the consumers hold negative attitude toward the brand, but their favorable celebrity is recommending the products, the three are in the imbalance situation. The anxiety caused by the imbalance acknowledgment would change the consumers' attitude toward the celebrity or the brand to reach balance. If the consumers choose to alter the brand attitude, then the ad purpose is accomplished.

### 3. The Related Research of Celebrity Endorsement

Dyer [10] mentioned that using celebrity as the spokesperson or the recommender in an advertisement was to hope that the consumers would pay attention to or acquire the correct information in the constraint space and time. These popular celebrities would increase the value of the products or the services and also make the consumers identify or notice what the celebrities have spoken or done tangibly and intangibly. To recommend a product or a service can transfer the social image or the symbolic of these male or female stars, celebrities, or athletes to the recommended products or services to bring forth the strong persuasive function.

McCracken [5] thought that the endorsement of the famous celebrities had more effect than those actors or models that had no fame. The vivid and positive image of the celebrities in the heart of the consumers could transmit lively information. McCracken also thought that the celebrities were broadly used in the endorsement seemed to suggest that these were effective. When the consumers processed the advertisement information, they would infer the positive side of the product according to the current image of the celebrities. Besides, McCracken explained the symbolism of the existed status, class, and live style of the celebrities by Meaning Transfer Model and how the cultural meaning was transferred from the celebrities to the endorsed brands. He believed that the previously positive image of the spokesperson would transfer to the promoted brands.

Erdogan and Kitchen [11] pointed out that although with many advantage of celebrity endorsement, there were not always risk-free. With the increasing exposure of the celebrities, the eyes of the consumers might shift to the celebrity spokesperson and might only remember the celebrity spokesperson but the impression of the product itself, making the product was overshadowed by the celebrity. This was the so-called vampire effect. When the business using a celebrity to be the figure head of the product, it might also think how to suitably match and expose the celebrity with the product to avoid that the celebrity might wash off consumers' impression toward the product.

Behr and Beeler-Norrholm [12] discovered that when the spokesperson had the negative social behavior, the public would examine his/her behavior with magnifier. If the anomic actions weren't acceptable, the brand using this celebrity might as well damage its reputation. Actually, it was quite a risk in choosing the celebrity. When the spokesperson appeared to have negative image or impression, he/she might cause bad influence to the brand.

### B. Classical Conditioning and Second-Order Conditioning

#### 1. Definition

Classical conditioning theory was proposed by Russian physiologist Pavlov (Pavlov [13], cited from Schiffman and Kanuk [14]) to explain the regular mode generated from learning. According to Bruewer's [15] explanation on classical condition, the traditional hypothesis of classical condition was that conditioned stimulus (CS) would re-occur with unconditioned stimulus (US) and trigger conditioned response (CR) by conditioned stimulus in the situation of unconscious and automatically.

Second-Order Conditioning has been widely used in the research of associate learning. Second-Order Conditioning (SOC) mainly focuses on the new relationship between two matters that never have co-existed. Condition stimulus 2 (CS2) will have the same condition response (CR) with condition stimulus 1 (CS1), even CS2 has never directly.

#### 2. The Related research on Classical Conditioning and Second-Order Conditioning

Gorn [16] pointed out that in the early stage classical conditioning theory was used in biology and psychology fields. Until late 1970s, classical conditioning theory had already been included in the marketing field and was accepted as a procedure related to advertisement. Gorn matched the pictures of blue pen and brown pen with likable/dislikable music respectively so that the respondents could evaluate the level of likeness toward music when watching the slides. The respondents were asked to choose one color pen as their reward. The results found out that the choice of the pen would be influenced by the music, i.e. the respondents would choose the pen that pair with more likable music. Allen and Madden [17] obtained similar prove by using humorous pictures and the pen.

Shimp, Stuart, and Engle [18] used slides to carry out a series of research. By pairing the pictures and the actual or virtual products in different exposure times, the respondents of the group of conditioning (target product pairs with positive emotional picture) had more positive brand attitude toward the target product than the respondents of the group of randomly control group (four products randomly pair with twelve pictures). This research not only found out that the brand attitude would be influenced as predicted in classical conditioning theory, also showed that only when the respondents perceived the linkage between conditional and unconditional stimulus, the attitude would be conditioned.

Blair and Shimp [19] used classical conditioning as basis to extend the research as second-order conditioning. There were two phases of conditioning. It was to discuss the influence when linking the music with unpleasant experiences by the angle of second-order negative conditioning. The research included two phases. In the pre-conditioning phase, Blair and Shimp paired the theme music and the unpleasant experience repeatedly (conditioning under cold weather); in the second phase, exposed the conditioning group to the situation of a virtual causal wear brand "Garra" (CS) and the theme music "Thanksgiving" (US).

The result showed that the conditioning group would be influenced by the unpleasant experience caused by the pre-conditioning phase and then rejected the brand paired to the theme music.

According to the above literature, this research infers that in the second conditioning phase, the celebrity endorsed brand attitude will be influenced by the previously endorsed products in the first conditioning phase. Hypothesis 1 and Hypothesis 2 are then proposed:

*Hypothesis 1:* Conditioning group will have a more favorable attitude toward the brand than non-condition group.

*Hypothesis 2:* Pre-exposure group will have a more favorable attitude toward the brand than no pre-exposure group.

### III. METHOD

#### A. Research Design

This research adapts experimental design to discuss the influence of conditioning or not and pre-exposure or not on brand attitude. The experimental material is the ad for GARRA orange juice endorsed by Ethan Ruan. The independent variables are conditioning or not and pre-exposure or not, and the dependent variable is the brand attitude toward GARRA orange juice. This study discusses the influence of these two independent variables on the dependent variable. Therefore, it is a  $2 \times 2 = 4$  factorial design. The respondents are the undergraduates from one university of Taiwan's. Every participant is assigned to one group randomly. The respondents in each group watch advertisement through slides and then fill out a questionnaire. The total numbers of subjects are 172.

#### B. Variable Manipulation and Experimental Material

##### 1. Variable Manipulation

###### i. Conditioning or not

The experiment group pairs the conditional stimulus (the virtual brand) and the unconditional stimulus (the celebrity) five times systematically, which, according to Till, Stanley, and Priluck [20], can avoid the respondents get bored but also reach the conditioning effect. The conditional stimulus (the virtual brand) and the unconditional stimulus (the celebrity) of control group are not paired, but randomly are inputted in filler celebrities and filler brand.

###### ii. Pre-exposure or not

Another virtual brand is designed for pre-exposure group as the previously celebrity endorsed brand. The conditional stimulus (the virtual brand) and the unconditional stimulus (the celebrity) are repetitively paired. There are five different designed advertisements for the respondents to watch for five times to cause the pre-conditioning effect. But these five pre-exposure advertisements do not play to the non pre-exposure group.

#### 2. Experimental Material

Because Ethan Ruan is one of the very famous actors of Taiwanese dramas, the advertisements designed for this

research use Ethan Ruan as the celebrity and search his photos on the Internet. This research also picks orange juice, the needed and familiar product in college students' daily life, as the celebrity endorsement product. As to the naming of the brand, this research combines several English alphabets to form a meaningless word, GARRA, as the virtual brand for the orange juice. This is to avoid some Chinese words or English vocabularies may imply positive or negative meaning. According to Shimp, Stuart, and Engle [18] pointed out that if the chosen conditional stimulus is the familiar brand to the respondents, the classical conditioning effect might be suppressed.

The photo of Ethan Ruan with clear facial feature and highly identified is chosen as the material. Also, two photos of Mike Ha and three photos of Vic Chou were chosen to be designed into one photo of Mike Ha and Vic Chou respectively to be the filler celebrities. As for the filler brands, one photo of each of the unknown brands of ball pen, laptop computer and wrist watch is chosen and compose English alphabets as the virtual brand names for these products, which are JEC ball pen, LSK laptop computer, and PZR wrist watch. Moreover, five photos of Ethan Ruan are searched from the Internet and make up a virtual donut brand-MOJO to design five advertisements of Ethan Ruan as the material of pre-exposure.

#### C. Experimental Process and Scales Design

##### 1. Experimental Process

The research use class as one unit and conduct the experiment in class. After a simple and clear explanation of the experiment process and rules before the experiment, the images were projected onto the screen with a projector to start playing the experimental slides. Each slide was played for 7 seconds and then filled out the questionnaire immediately. Collected the questionnaires after the respondents were finished and gave out little thank you gifts to the respondents. The process of the experiment was about 10 minutes. There were 172 questionnaires for the research. Except for 3 invalid ones due to incomplete answers, there were 169 effective questionnaires. The effective return ratio was 98.26%.

##### 2. Scales Design

The questionnaire has two parts. The first part is consisted of attractiveness, credibility, and brand attitude, which is designed according to Till, Stanley, and Priluck [20], and also using Likert scales for measurement. The second part is the personal information of the respondents.

### IV. RESULT

#### A. Reliability

The reliability of the attractiveness, credibility and brand attitude scales are 0.899, 0.965 and 0.929 respectively. All the Cronbach's  $\alpha$  of the above scales are larger than 0.7. According to Hair, Anderson, Tatham, and Black [21], this showed that the scales used for the research all have good reliability.

#### B. Manipulation Test

The average attractiveness of Ethan Ruan is 5.231. The result

of further single sample t test shows that Ethan Ruan's attractiveness is obviously higher than medium value 4 ( $t=14.279$ ,  $p=0.000<0.05$ ). Therefore, to the respondents, Ethan Ruan is pretty attractive. The average credibility of Ethan Ruan is 5.569. The result of further single sample t test shows that Ethan Ruan's credibility is obviously higher than medium value 4 ( $t=19.280$ ,  $p=0.000<0.05$ ). Therefore, to the respondents, Ethan Ruan has quite credit. According to the above figures, Ethan Ruan is quite attractive and has credibility. So, this research chooses Ethan Ruan as the celebrity spokesperson is suitable.

TABLE I  
THE RESULTS OF ANOVA

Source	SS	d. f.	MS	F	p-value
Pre-exposure or not	2.75	1	2.75	3.67	0.06*
Conditioning or not	20.31	1	20.31	27.10	0.00**
Pre-exposure or not × Conditioning or not	3.74	1	3.74	4.99	0.03**
Error	123.68	165	0.75		
Total	152.37	168			

Note: \* indicates  $p < .10$ ; \*\* indicates  $p < .05$

### C. The Effect of Conditioning or not and Pre-exposure or not on the Brand Attitude

This research uses two-way ANOVA to investigate the effect of conditioning or not and pre-exposure or not on the brand attitude. The analysis results of ANOVA are depicted in Table I. According to Table I, conditioning or not has significant main effect on brand attitude ( $F(1, 165)=20.31$ ,  $p=0.00 < 0.05$ ), i.e. conditioning or not has significant influence on brand attitude. According to Table II, the average of brand attitude of conditioning group is 4.65, which is higher than the average of the brand attitude of unconditioning group 3.94. Thus, Hypothesis 1 is supported. Pre-exposure or not also has marginally significant main effect on brand attitude ( $F(1, 165)=2.75$ ,  $p=0.06 > 0.05$ ), i.e. pre-exposure or not has marginally significant influence on brand attitude. According to Table II, the average of the brand attitude with pre-exposure is 4.43, marginally significantly higher than that without pre-exposure 4.16, which supported Hypothesis 2. Besides, conditioning or not and pre-exposure or not have significant interaction ( $F(1, 165)= 3.74$ ,  $p=0.03 < 0.05$ ). According to Table II, no matter the celebrity is pre-exposure or not, the brand attitude of the celebrity and the endorsed product is higher under conditioning process.

TABLE II  
THE AVERAGE OF BRAND ATTITUDE IN EACH GROUP

Pre-exposure or not Conditioning or not	Non pre-exposure	Pre-exposure	Main effect - Conditioning or not
Conditioning	4.37 (0.12)	4.94 (0.12)	4.65
Unconditioning	3.96 (0.15)	3.91 (0.16)	3.94
Main effect - Pre-exposure or not	4.16	4.43	

Note: the value in parentheses is standard deviation

### V. CONCLUSION AND SUGGESTION

This research applies the classical conditioning theory to prove that the repetitive pair of the celebrity (US) and the endorsed product (CS) would link the celebrity and the endorsed product. The good feeling towards that celebrity would shift to that product so as to have better brand attitude. And the pre-exposure celebrity through second-order conditioning would have better brand attitude. The result shows that conditioning or not has significant main effect on the brand attitude, pre-exposure or not also have significant main effect on brand attitude, and conditioning or not and pre-exposure or not have significant interaction. Moreover, no matter the celebrity is pre-exposure or not, the brand attitude of the celebrity and the endorsed product is better under conditioning process. The result is the same with the result of Till, Stanley, and Priluck [20].

All kinds of advertisement endorsed by the celebrity is everywhere in our daily life, and the phenomenon of multiple endorsement is increasing. In recent years, many researches start to study if the multiple endorsements would have positive or negative effects on the advertisement effect or the brand attitude. However, up to now, there is still no consistent conclusion. According to the result of this research, compare to non pre-exposure, the consumers would have better brand attitude under the situation of celebrity pre-exposure. That is in reality if that celebrity has multiple endorsement, it would have better brand attitude. Therefore, it is recommended that the advertiser should first consider the celebrity who has been the spokesperson. Moreover, the brand with lower publicity or new brand can feature the celebrity recently endorsed other brands to speak for the brand so as to rapidly increase brand publicity.

The advertisements designed for the experiment were limited by time, cost, and techniques and weren't like the advertisements designed by the professionals. The future research can pay for professionals in advertisement to design the advertisements for experiments to increase the authenticity of the advertisement. This research used slides to simulate printing advertisement to discuss the advertisement effect of multiple celebrity endorsement. The further research can consider to present advertisements by video or Internet advertisements. Besides, for convenience, this research just used undergraduates as the experiment subjects. The follow up research can broaden the subjects.

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