How People Respond to Different Types of Humorous Advertising

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Author’s contribution

The only author YHL carried out the whole research work. Author YHL wrote the first draft of the manuscript. Author YHL proof read the manuscript throughout all the stages of the review process.

ABSTRACT

Aims: This study examined the different types of humorous advertising on attitude toward advertising and brand in order to analyze the effect on brand recognition and brand recall.

Study Design: This study focused on three types of humorous advertisings: cognitive, affective, and social orientation, and used an experimental method to understand the influence of humorous advertisements on advertising attitude and brand communication effects.

Place and Duration of Study: The study was conducted in companies in the city of Taipei, Taiwan, between May and June 2012.

Methodology: This study used a 4 (affective, cognitive, social and non-humorous advertising) × 2 (low and high degree of advertising involvement) between-subjects factorial experimental design and the group of non-humorous advertisings as control groups. A total of 268 subjects were randomly and equally assigned to one of the four ads. Removing 28 copies of unusable questionnaires because of incomplete answers, 240 copies of the questionnaires were usable, resulting in a response rate of nearly 90%.

Results: Findings indicate that humorous advertisings do promote brand message comprehension, and are superior to those of non-humorous advertising. In addition, the results indicate that different types of humorous advertising have different effects on brand recognition and brand recall.

Conclusion: The different types of humorous ads have statistically significant

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differences on various dimensions of brand communication. The humorous advertising of affective has greater brand recall than those of the humorous advertisings of social and cognitive. Furthermore, presenting an advertisement with humorous elements can transfer the consumers' positive perceptions on the advertising to the brand itself, thus achieving effective brand communication.

Keywords: Humorous advertising; brand recall; brand recognition; experimental design.

1. INTRODUCTION

The media environment has changed dramatically in recent years. Traditional advertising media such as TV, magazines and newspapers are losing their power on catching consumers. Instead, online advertising, such as web banner, social media marketing, mobile advertising are gaining power and growing rapidly. With the power of internet connections and ubiquitous mobile devices, advertisers are forced to rethink and create on-line approach practices to be going viral. Websites, on-line ads/videos, and blogs/bulletin boards are three on-line media often being used by marketers to communicate their brand message [1]. Humorous advertising is a good tool to use in internet and mobile environments for going viral. When advertisement makes audiences laugh, they are more likely to want to share it with others. Thus, humorous appeals are the means by which marketers attempt to inform, persuade and remind consumers – directly or indirectly – about the brands they market.

Examination of broadcast and print advertising suggests that humor is a widely adopted form of commercial appeal and general used in election debate [2,3]. Underlying this popularity is the belief that humor can increase the effectiveness of advertising. The use of humor in advertising has its origins in the early days of business. Studies have shown that audiences are more open to a humorous message, because humor lowers audience defenses, making them more receptive to the message [4]. Funny communication messages are more memorable and can also be shared more frequently than more serious messages [5].

Previous studies have indicated that adopting humor in advertising can enhance consumer concerns and interest them [6], increase the degree of favor toward advertisements or brands [7,8], and maintain longer lasting memories of advertisements [9]. In contrast, some studies speculate that humor in advertising may lower message comprehension and found humorous commercials to be no more effective than comparable serious messages [4,10]. Thus, serious questions can be raised about the generalizability of these results. Cantor and Venus [11] point out that previous studies failed to demonstrate the effective of humorous advertising, because they didn’t manipulate the type of humor and also not control the degree of how much humor is perceived by the respondent. Clearly, the literature needs distinguish among the conditions under which humor effects may vary. However, few studies have addressed the difference of various types of humorous advertisements, but they ignored the humorous message processing would influence audience’s affect and cognition. Information processing theory assumes that consumer will follow the steps of acquisition, integration, and evaluation of information to make a decision [12]. In general, humorous advertising communications can serve as a stimulus-as-coded in the mind of the consumer, thereby achieving advertising effectiveness as relates to cognition. Helson's adaptation-level paradigm argues that stimuli will attract attention when perceived as different from previously established stimulus norms [13]. Thus, when messages are passed on to consumers by humorous ads, consumers will pay more attention to the information that triggers their
interest. This study re-examines humor's influence by focusing on type of humor and the effectiveness of humor in accomplishing brand communications.

Previous studies considered the impact of humor only on low-involvement products, but not on high-involvement products [14,15]. This study proposed that humorous advertising influences both high- and low-involvement products on audience, but only influential paths vary. The humorous ads for low-involvement products easily produce emotional transfer, whereas those for high-involvement products trigger consumer cognitive models to generate emotional transfer [16], because humorous advertising communications can serve as a stimulus-as-coded in the mind of the consumer. When humorous messages are passed on to consumers by ads, consumers pay attention to the brand. The main purpose of humorous ads is to communicate effectively, meaning that the information can be remembered, thereby changing consumer attitudes. Voss [17] even suggests that presenting negative consequences in a humorous way can be effective.

High-risk, high-function, and high-involvement products are often involved in consumer complex buying behavior [18]. Consumers pass through a learning process characterized by first developing beliefs about the product, then attitudes, and then making a thoughtful purchase choice. Thus, marketers of high-involvement products should employ humorous advertising to relieve the individual emotional tension of consumers engaged in complex buying behavior, because humor lowers audience defenses, making them more receptive to the message.

This study proposes that the relationship between attitude toward an advertising (A_ad) and attitude toward a brand (A_br) play crucial roles for high-involvement product on brand communication, and an effectively humorous ad can enhance the A_ad, as well as strengthen brand cognition. Humorous advertisements can attract more consumers and increase A_ad, which is a crucial antecedent of brand attitudes. This study focused on three types of humorous message content: cognitive, affective, and social orientation [7], and used an experimental method to understand the influence of humorous advertisements on advertising attitude and brand communication effects.

This research has relevant implications for both academics and advertising practitioners. From a theoretical perspective, this study expands the domain of humorous ads affecting brand communication. From a managerial perspective, this research explored the rationale of why humorous appeal has an effect superior to that of conventional creative strategies, and why adopting an optimally humorous ad creates brand awareness and brand association.

2. LITERATURE REVIEW AND HYPOTHESES

2.1 Effects of Humorous Ad Types on Advertising Attitude

Weinberger and Spotts [19] found that humorous advertising is more attractive than non-humorous advertising and increases the brand memory of consumers, making consumers feel good by being persuasive. In addition, Speck [7] believed that different types of humorous ads lead to different psychological reactions and produce various advertising effects. This study used a method proposed by Li [20] to classify humorous ads into: affectively humorous ads, cognitively humorous ads, and socially humorous ads. The affectively-oriented humorous ad can effectively induces audience’s strong emotional
reactions; the cognitively-oriented humorous ad can activate audience's mental process leading to the perception of a situation to be funny; the socially-oriented humorous ad shapes the audience has the dominant position in the way of attack, satire, ridicule, contempt, and mockery to increase the difference between social status of different groups. MacKenzie and Lutz [21] also found that attitude toward an ad affects consumer brand attitudes and purchase intentions. Spotts et al. [18], Catanescu and Tom [22] have also considered the type of humorous advertising to be one of the main factors that influence advertising effectiveness, and $A_{ad}$ is one of the indicators used to measure the level of feelings in advertising effectiveness. That is, Speck [7] believed that humor can draw the audience's attention and increase their favor. Humor helps audiences strengthen positive attitudes and promote the ad purchase intention [20,23]. Therefore, humorous advertisings are more effective than non-humorous advertisings regarding advertising attitude.

Affective message appeals are a popular method of drawing attention to any type of advertising [24], whereas cognitive message appeals are typically more useful for improving brand recognition [25]. This study suggested that cognitively humorous advertising generates humor by contending with and resolving contradictory or inconsistent messages. Therefore, the process for solving inconsistent messages requires further cognitive effort to engage in deliberative information processing activity, generating a persuasive effect [26]. By contrast, affectively humorous advertising generates humor by virtue of the evoked emotion, which causes the viewer’s emotions to run high and become soothed while watching ads. Furthermore, the viewer may focus more on the ads themselves and ignore information the advertising product conveys. Therefore, the affectively oriented humorous ad generates persuasive effects based on affective associations or simple inference ties to peripheral cues occurring in ads. However, the purpose of the socially humorous ad is to create a verbal attack, satire, laughter, spite, or deception, which might lead to higher levels of irritation that carelessly produce the discontent in some viewers and listeners; hence, this type of advertising attitude is the least favorable. Therefore, this study proposes that various types of humorous advertising have different effects on advertising attitude. The hypotheses are as follows:

H1: The cognitively oriented humorous advertising invokes a more favorable advertising attitude than the socially oriented humorous advertising does.

H2: The affectively oriented humorous advertising generates a more favorable advertising attitude than the socially oriented humorous advertising does.

2.2 Effects of Humorous Ad Types on Brand Communication

Lutz et al. [16] studied $A_{ad}$ mediation effects and confirmed the relationship among $A_{ad}$, $A_{b}$, and intention to purchase the brand ($I_{b}$). This model suggests that $C_{ad}$ (ad cognition) directly affects $A_{ad}$, and $A_{ad}$ influencing $C_{b}$ (brand cognition) and $A_{b}$. Therefore, two obvious sources affect $A_{b}$. The first is the direct effect of $A_{ad}$, and the second is the indirect impact of $C_{b}$ [27].

MacKenzie and Lutz [21] revealed that advertising attitude influences $A_{b}$ and $I_{b}$. Humor is frequently used in advertising because the audience harbors a positive attitude toward humorous ads. Humor presented in an ad enables consumers to own a positive attitude toward advertising [23,28], thereby facilitating the transfer of a consumer’s positive attitude toward $A_{ad}$ into a positive attitude toward $A_{b}$ [29].

This study proposes that the distinct types of humorous ads have substantially varied influences on various dimensions of the brand communication effects of both brand recall.
and brand recognition. Brand recall is the ability of consumers to remember the brand’s name, facilitating the classification of a group of products [30]. Brand recognition is the ability of consumers to verify a certain brand when a line of the brand claim is provided [26]. Humorous advertising may be a valid strategy for attracting attention, similar to provocation advertising that can enhance brand awareness [31]. However, Vézina and Olivia [31] found that provocation appeal seems to lead to negative reaction to a brand. Based on relevant research, whether or not humorous advertising affects Ab negatively is uncertain.

Speck [7] used the elaboration likelihood model (ELM) to explain the consumer information processing route toward a brand while watching a humorous advertisement. A consumer focusing on the main message of a product or brand involves the central path of the information processing route. By contrast, if the main message is associated with the background of an ad, it involves the peripheral route. Therefore, the cognitive humorous ad has characteristics of cognitive thinking, causing the audience to pay more attention in-depth. The link between humorous ads and brand communication is represented by Ad→C→Ab. It is also relatively easy for customers to associate ads with brands and products. Furthermore, after deliberate thinking, the link between humorous ads and brands increases understanding of the brand message. Therefore, the audiences’ ability to recognize a brand is greater when given brand-related messages or clues. Therefore, cognitive humorous advertising can attract viewers to spend more time attending to the message of a product and brand-related advertising, thereby obtaining more brand recognition.

The purpose of the affectively humorous ad is to generate the audiences’ curiosity, thus placing the focus on information related to advertising. The affective reactions to advertising regarding brand attitude are attained by Ad→Ab. Thus, we know that the association with the product-related message is low. Therefore, when given more than one ad message, the audiences frame perception, enhance experience, and organize memory [32,33], thus giving them a greater ability to recall the brand. Finally, the socially humorous ad generates humor mainly via attack, satire, laughter, spite, or deception; therefore, the socially humorous ad might carelessly produce discontent in some audiences. Consequently, we can infer that audiences have a lower ability of brand recall and recognition. Therefore, this study infers the following hypothesis:

H3: The humorous advertisement of affective orientation creates greater brand recall than other humorous advertisements do.
H4: The humorous advertisement of cognitive orientation produces greater brand recognition than other humorous advertisements do.

3. METHODOLOGY

This study suggested that humorous ads can affect the Ab of the public for high-involvement product. Therefore, we chose cars as research products. In addition, advertising involvement is one of the vital factors that influence consumers’ judgment of advertising information and measure of advertisement effectiveness [34]. Laczniai, Muehling and Grossbart [35] proposed that the advertisement message is the incentive that triggers the follow-up involvement process. This study used a 4 (four types of advertisement) × 2 (both low and high degree of advertising involvement) between-subjects factorial experimental design on the humorous advertisement of affective, cognitive, and social orientations, using non-humorous advertisements as control groups.
As for brand selection, this study chose the medium-level-popularity brand, Hyundai Motors, as a measurement subject because consumers have a high level of brand awareness and positive advertising attitude toward high-level-popularity brands, resulting in a less obvious effect than those for medium-level-popularity brands after watching humorous ads [36].

3.1 Design of Advertisements

Humorous ads are selected according to the definition of three types of humorous ads that previous studies [18,20] have proposed to determine if the ad matches the classification of advertisement. In this regard, researcher has attempted to control degree of humor, using panels of Judges (researchers or advertising professionals) to select the three types of humorous commercials employed in this investigation. Manipulation checks are made to ensure that three humorous treatments are rated as funnier than the versions of the control group, and the three types of humorous commercials classification are based on Chen’s [37] five questions. To reduce the study error, the subjects in our study were asked whether they had seen the chosen advertisements; most of the subjects had never seen them before.

3.1.1 Affectively oriented humorous Ad

The protagonists of this advertisement are a married couple, who trap each other in the house by whatever means necessary to drive the car parked outside the house. The advertisement shows the secretive and hilarious expressions of the husband and wife who just woke up in the morning, as well as a series of funny pranks during their preparation for work, and the husband and wife do not forget to pop their heads to see the car they love outside below. The purpose of this advertisement is to evoke consumers’ driving desire. Considerable human nature and emotion are projected in advertisement, which causes people to feel empathy toward the content of the advertisement after laughing with the funny couple and the exaggerated plot.

3.1.2 Cognitively oriented humorous Ad

In this advertisement, the hero is a knight riding a motorcycle. When the traffic light turns red, he stops between two cars. Two beautiful women in a car to his left car seem to make eyes at him, which pleases the knight. When he turns to the car to his right, he realizes that the women are actually interested in the man in this car. At the same time, the man and women in the cars all look at the knight and laugh. The motorcyclist continues cycling with a lonely look in his eyes. He then realizes that many beauties pass-by all adore those men who are driving cars of the same brand on the street. Suddenly, the motorcyclist spots a large advertisement billboard of the same car standing erect alongside the road. He takes out a knife and later, the audience sees the motorcyclist driving a car, which he parks next to a car whose driver is beautiful. She ogles at him. When the camera angel turns, the audience finds out that the motorcyclist is still riding his motorcycle, but with a large advertisement billboard of that car’s brand in his left hand. Ending with humor, the advertisement makes the audience understand that the original appeal is “standing upon one’s dignity for men”.

3.1.3 Socially oriented humorous Ad

The actress in this ad is a beautiful woman, who is walking elegantly among a crowd. All passersby are following her with their eyes; all of the drivers in the cars on the road nearby are looking at her with adoring eyes. One of the drivers bumps into a car ahead and a tree on the side of the road. However, she is unmoved and continues walking forward elegantly.
At this moment, a car is driven to the beautiful woman's direction, and at this time she keeps staring at the car, hitting a lamppost on the roadside. The image of the woman falling causes the people in the crowd to smile knowingly.

### 3.1.4 Non-humorous Ad

The advertisement of the control group is based on a non-humorous advertisement, which emphasizes the functions of the Hyundai Motor Company.

The measurement of "degree of humor" in the ads adopts the six-point scale measurement of Zhang [38], including five items - not humorous / humorous, not interesting / interesting, not funny / funny, not laughable / laughable, boring / not boring; 1 point means strongly agreed; 6 points refers to strongly disagreed. As the chosen products, cars are expensive and high-involvement products; the selection of nominees was based mainly on people who possess a job and purchasing power. The mean of each advertisement is $M_{\text{affective}} = 5.01$, $M_{\text{cognitive}} = 5.02$, $M_{\text{social}} = 4.96$, $M_{\text{control}} = 2.59$. The degrees of humor of three types of humorous ads are greater than those of the non-humorous advertisement of the control group. Therefore, all of the advertisements are humorous, except for the advertisement of the control group.

The method of humorous advertisement classified by Chen [37] adopts six semantic points of advertisement association levels and five questions to measure the subjects' level of association and thought toward the advertisements they are viewing. If the level of association and the thought required additional effort, the ad close to the cognitively oriented humorous advertisement; otherwise, it close to the affectively oriented humorous advertisement. 1 point means strong disagreement; 6 points represents strong agreement. The average scores of thought and association level for each advertisement are $S_{\text{affective}} = 14.81$, $S_{\text{cognitive}} = 20.94$, $S_{\text{social}} = 18.78$, $S_{\text{control}} = 13.61$. The average score of the cognitive group is significantly greater than the average score of the other three groups. Based on the score of affective advertisement, which is less than those of the cognitive and social groups, this ad can be judged to be an affective orientation. The total score of social advertisement is between those of affective orientation and cognitive orientation.

### 3.2 The Selection and Arrangements of the Filled Ads

The subjects may have been aware of the purpose of this study while watching the humorous advertisements, causing an error in the results; hence, the other filled ads were selected and display to subjects. In this way, the effect of different types of humorous ads can be examined. Therefore, the subjects in each group were given a different humorous advertisement to watch. The ads were arranged as follows: one filled advertisement, one humorous advertisement, and two filled advertisements.

### 3.3 The Level of Advertising Involvement

The various humor types and processes described by Speck's taxonomy are linked to consumer involvement and motivation [39]. Therefore, this study adopted the level of advertising involvement as an independent variable for analysis. The primary scale of advertising involvement is PII [40]. The advertising involvement was divided into two groups with cluster analysis. When the number of cluster from the second to the first group, the agglomeration coefficient increased to 0.966; hence dividing the involvement degree into two
groups was more appropriate. There was a significant difference between the high and low degree of advertising involvement ($M_{\text{high}} = 4.02 > M_{\text{low}} = 2.68$, $P < 0.05$); therefore, this result was consistent with the needs of experimental design of this study.

3.4 Measuring the Dependent Variable

3.4.1 Advertising attitude

Brackett and Carr [41] presumed that the entertainment, information, irritation, and certainty of an advertisement influence a consumer's evaluation of advertising attitude; therefore, the forms of measurement were revised according to the measurement of the advertising attitude that Atkin and Block [42] performed. The forms of measurement can be seen below.

3.4.2 Brand recall

Following the approach of Malaviya, Kisielius, and Sternthal [43], this study examined whether subjects were able to recall the brand name of the car in the humorous ads after watching all of the ads, by listing all of the associations that they could remember in the targeted ads. A score of one was given for any subject who could correctly write "the brand name of the targeted car and correctly choose the association of the targeted advertisement". Furthermore, half point were awarded for subjects who have only one correct answer from the two items.

3.4.3 Brand recognition

These forms of measurement are based on the method proposed by Malaviya et al. [43], which asks the subjects, after watching all of the ads, whether they are able to distinguish the brand attributes of the targeted humorous ad (three items) from the total ads (12 items). The rate of correct answers is the measurement of scores that determines whether the subjects are able to select the brand attributes of the targeted car in humorous ad. As for the list of brand attributes, advertisement practitioners were requested to view the targeted and filled advertisements, and then separately list the brand attributes that the targeted humorous ads mention (brand attributes), the attributes that the filled advertisements note (filled attributes), and the attributes that are not noticed in all of the advertisements (virtual attributes).

3.5 The Design of the Questionnaire

The questionnaire of this study was divided into seven parts: brand recall, brand recognition, the degree of humor in an advertisement, the level of association in the advertisement, the degree of advertising involvement, attitude toward the ad, and basic demographic information. In addition, the questionnaire had four versions of questionnaires according to the four types of ads. In each questionnaire, only brand attributes of the ad, in the brand recognition part varied; but the other parts were the same.

3.6 Participants and Experimental Procedures

This research was conducted from May 1 to May 25, 2012. Ads were arranged just like TV commercial and played on a computer. First, the subjects were asked to watch preparatory ad films; they were then asked to complete the questionnaires. The survey time in each
group lasted from 25 to 30 minutes. The survey was administered mainly at the following locations in Taipei City: Chunghwa Telecom, Yuanta Bank, Kuang Chuan Dairy Co., Yes 123 Job Bank, and Insight Brand Consulting. All subjects had jobs with purchasing power. A total of 268 subjects were randomly and equally assigned to one of the four ads. Removing 28 copies of invalid questionnaires because of incomplete answers, 240 copies of the questionnaires were usable, resulting in a response rate of nearly 90%.

4. RESULTS

In this study, the effective sample size was 240, of which women accounted for 57.5% of subjects, while men make up to 42.5%; distribution of age 40 to 31 accounted for 58.3% as the majority; as for the marital status, the married accounts for 61.1%; have accounting for 80.8% by the persons who own driver’s licenses; speaking of the educational degree, the university (junior college) level accounts for 80.4% as the majority; in the industry leaves, financial and insurance industry take mostly up to 51.3%, followed by services sector accounted for 25.4%; the general staff take the most part of the positions accounted for 67.9%; for the part of the monthly income, the payment from $50,000 to $30,001 accounted for 46.7% as the majority, followed by $50,001 ~ $80,000 accounted for 34.2%.

The study used a number of important socio-demographic characteristics to conduct mean tests for the humorous degree of Ads’ campaign. The results showed the difference between the mean of married and the mean of single is significantly \( (M_{\text{married}}=4.81, M_{\text{single}}=3.98, p=0.001). \) It also can see that bachelor’s degree report higher mean than other groups \( (M_{\text{high-school}}=3.61, M_{\text{bachelor}}=4.54, M_{\text{master}}=4.50, p=0.054). \) However, no significant differences in the humorous degree of Ads’ campaign were found between male and female. There were significant differences among the mean from the four monthly income brackets \( (M_{\text{NT$30000}}=3.37, M_{\text{NT$30000-50000}}=4.46, M_{\text{NT$50000-80000}}=4.79, M_{\text{NT$100000}}=5.20, p=0.001). \) The results have shown that demographic factors played substantial effects in the ads’ campaign.

The scale of this study demonstrates a high level of internal consistency, with the Cronbach's \( \alpha \) values being greater than 0.84 and the variance extracted being higher than 0.65 on its respective dimensions. The item-total correlations range from 0.5 to 0.93 and the factor loadings range from 0.62 to 0.96.

4.1 Manipulation Test

The experimental ad is divided into four kinds: three different types of humorous advertisements, and a non-humorous advertisement; joined with the level of advertisement involvement, which totally reaches up to eight groups. The test indicates that the three different types of humorous advertisements have no significant difference \( (F = 1.945, P>0.05) \) on degree of humor; to compare with the control groups, the means of the degree of advertising humor of the three different types of humorous advertisements are significantly higher than the ones of the control groups \( (M_{\text{effective}} = 5.07, M_{\text{cognitive}} = 5.24, M_{\text{social}} = 5.05, M_{\text{control}} = 2.62). \) Accordingly, on the extent of the degree of advertising humor in this study is successfully manipulated.

The study aims is to see whether the level of thought and association have differences by judging the type of its types of humorous advertisements. The test results show that the level of thought and association of each advertisement has a significant difference \( (F = 4.595, P<0.05). \) Furthermore, this study find out that the level of thought and association of
cognitive orientation is greater than the affective orientation and the non-humorous advertisements of the control group (\(M_{\text{affective}} = 2.76, M_{\text{cognitive}} = 3.26, M_{\text{social}} = 3.00, M_{\text{control}} = 2.70\)). Consequently, on the extent of the types of humorous advertisements in this study is successfully manipulated.

4.2 The Analysis of Variance on Advertising Attitude

In Table 1, the study uses the advertising attitude as the dependent variable, along with the usage of the types of advertisements and advertising involvement as independent variables to do 2-way ANOVA. There is no 2-way interaction effect in this model.

**Table 1. Analysis of variance of advertising attitude**

| Source                | Sum of square | df  | Mean square | F test | Significance |
|-----------------------|---------------|-----|-------------|--------|--------------|
| Types of ads. (A)     | 15.27         | 3   | 5.09        | 11.20  | 0.000***     |
| Advertising involvement (B) | 19.08       | 1   | 19.08       | 41.97  | 0.000***     |
| (A) * (B)             | 1.89          | 3   | 0.63        | 1.39   | 0.25         |

*** \(P <0.001\)

Table 1 lists the types of advertisements that have a significantly main effect (\(F = 11.20, P <0.05\)) on advertising attitude, which also shows that different types of humorous advertisements are statistically significant at the .05 level on advertising attitude. According to the *post hoc* paired comparison, the significance of the cognitively oriented humorous ad is higher than those of socially oriented (\(M_{\text{cognitive}} = 4.21 > M_{\text{social}} = 3.82, P <0.05\)), which shows that the cognitively oriented humorous ad has a more favorable advertising attitude than that of the socially oriented humorous ad. Therefore, the hypothesis H1 is supported. Socially humorous ad and affectively humorous ad are below the significant differences in advertising attitude (\(M_{\text{social}} = 3.82, M_{\text{affective}} = 4.01, P >0.05\)). Therefore, the hypothesis H2 is not supported. Furthermore, three different types of humorous advertisements are significantly higher than the non-humorous advertisements in advertising attitude (\(M_{\text{control}} = 3.52, P <0.05\)).

4.3 The Analysis of Variance on Brand Recall

In Table 2, the study lists the brand recall as the dependent variable, along with the usage of the types of ads and advertising involvement as independent variables to conduct a 2-way ANOVA. Table 2 lists the types of ads that have a significantly main effect on brand recall (\(F = 3.63, P <0.05\)), showing that different types of ads have a significant effect on brand recall. Additional information from the paired comparison indicates that the significance of the affectively oriented humorous ad is greater than that of the cognitively oriented humorous ad (\(M_{\text{affective}} = 0.73 > M_{\text{cognitive}} = 0.60, P <0.05\)), meaning that the affectively humorous ad has greater brand recall than the cognitively humorous ad. Furthermore, the significance of the affectively humorous ad is greater than the socially humorous ad in brand recall (\(M_{\text{affective}} = 0.73 > M_{\text{social}} = 0.60, P <0.05\)), showing that the affectively humorous ad has greater brand recall than the socially humorous ad. Therefore, hypothesis H3 in this study is supported.
Table 2. Analysis of variance of brand recall

| Source                  | Sum of square | df | Mean square | F test | Significance |
|-------------------------|---------------|----|-------------|--------|--------------|
| Types of ads. (A)       | 0.68          | 3  | 0.23        | 3.63   | 0.014*       |
| Advertising involvement (B) | 0.32      | 1  | 0.32        | 5.18   | 0.024*       |
| (A) * (B)               | 0.29          | 3  | 0.10        | 1.56   | 0.201        |

*P <0.05

4.4 The Analysis of Variance of Brand Recognition

Table 3 lists the types of ads that have a significantly main effect on brand recognition (F = 13.76, P <0.05). We concluded that the different types of advertisements have a significant impact on brand recognition.

Table 3. The analysis of variance on brand recognition

| Source                  | Sum of square | df | Mean square | F test | Significance |
|-------------------------|---------------|----|-------------|--------|--------------|
| Types of ads. (A)       | 2.31          | 3  | 0.77        | 13.76  | 0.00***      |
| Advertising involvement (B) | 0.07       | 1  | 0.07        | 1.23   | 0.268        |
| (A) * (B)               | 0.23          | 3  | 0.08        | 0.35   | 0.26         |

** P <0.01; *** p <0.001

Using an additional paired comparison, this study found that the brand recognition of the cognitively humorous ad is statistically significant greater than that of the affectively humorous ad (M_{cognitive} = 0.86 > M_{affective} = 0.75, P <0.05). Furthermore, the brand recognition of the humorous ad of cognitive orientation is statistically significant greater than that of the humorous ad of social orientation (M_{cognitive} = 0.86 > M_{social} = 0.70, P <0.05), showing that the cognitively humorous ad has higher brand recognition than that of the socially humorous ad. Therefore, hypothesis H4 is supported.

Moreover, the three different types of humorous ads are significantly higher than those of the non-humor ads in brand recognition (M_{cognitive} = 0.86, M_{affective} = 0.75, M_{social} = 0.70, M_{control} = 0.58, P <0.05); that is, the humorous ads have higher brand recognition than those of the non-humorous ads.

5. CONCLUSION AND IMPLICATIONS

The three different types of humorous ads are significantly higher than the non-humor ads in advertising attitude. Thus, the humorous ads have a high advertising attitude. Attitude towards the ad is a crucial antecedent to brand attitudes [21]. Hence, humorous advertising is more attractive than non-humorous advertising and increases the brand memory of consumers, thus making consumers feel good more easily persuaded. In another respect, the results also suggest that humorous advertising can translate into a valuable segmentation strategy, because younger people, among others, show more positive reaction towards humorous appeal. Therefore, humorous appeal has a superior effect to those produced by conventional creative strategies.
5.1 The Effect of Different Humorous Ads on Brand Communication

Different types of humorous ads for brand communication effects have a significant impact, which agrees with Speck [7], and Weinberger and Gulas [2]. The humorous ad of cognitive orientation has more favorable brand recognition effects than those of the humorous ad of affective orientation and humorous ad of social orientation. Specifically, the ELM suggests that the likelihood of message elaboration occurs as a function of separable elements of a consumer’s motivation and ability to process information. When a message receiver is both motivated to process message content and has the ability to process the content, the central route to persuasion is hypothesized to occur. These conditions of motivation and ability can foster message-relevant thinking, activate cognitive responses, create changes in cognitive structure, and eventually lead to an enduring impact on a consumer’s attitudes toward the communicated topic. The humorous ad of cognitive orientation draws more attention to thinking and the message component; hence, it achieves a greater level of brand recognition effect.

Based on the results of this study, the different types of humorous ads have statistically significant differences on various dimensions of brand communication effects. The humorous advertisement of affective orientation has greater brand recall than those of the humorous advertisement of social orientation and cognitive orientation. Furthermore, presenting an advertisement with humorous elements can transfer the consumers’ positive perceptions on the advertisement to the brand itself [29], thus achieving effective brand communication.

5.2 Managerial Implications

A favorable advertising effect helps people remember the brand as well as the ad. The key lies in the associations the advertisement arouses regarding the product or brand, so that the consumers feel impressive. Thus, humor is one of the elements that allow the advertisements to attract people’s attention; with proper strategy, humor can increase advertising effectiveness. Joshi and Hanssens [44] found that advertising spending has a positive, long-term impact on a firm’s market capitalization and may have a negative impact on the valuation of a competitor of comparable size. This study also proposed that humorous ads influence high involvement products, but influential paths vary on low involvement products. The humorous ads of low-involvement products easily produce emotional transfer, but those of high-involvement products must trigger the consumers’ cognitive models to generate emotional transfer. The main purpose of humorous ads is to achieve a state of effective brand communication, meaning that the brand could be recalled and recognized, thus changing the attitude of consumers.

According to the results, different categories of products associated with different humorous ads create various types of advertising communication. $A_{ad}$ and $A_{b}$ of the humorous ad of cognitive orientation elicit responses from consumers and achieve the most favorable advertising results; the humorous ad of affective orientation causes the audience to recall the brand easily, creating a desire to purchase that product; the humorous ad of social orientation has a poor communication effect because it may cause discontent in some audiences. Therefore, we recommended that business owners should use advertising humor effectively, to generate resonance and positive association with the product and brand image. Persuasion mechanisms induce the consumer to incorporate both cognitive and non-cognitive elements in his or her attitude toward a brand when using humorous elements.
While designing a marketing strategy, the business owners could segment the targeted markets, as well as develop an appropriate strategy for the targeted customers and purpose of the advertisement. To raise brand awareness and brand associations, business owners could focus on the symbolic part of the brand and adopt the humorous ad of cognitive orientation; to awaken the positive recognition of a brand, the business owner could effectively use the humorous ad of affective orientation.

5.3 Study limitations

Because the brand and product in this research already existed on the market, the subjects may have established preconceptions of them. This study did not account for the previous brand attitude, and the subjects were likely affected by their experience with the brand. Future studies may benefit from conducting research on different product categories.

Based on literature review, three critical factors influence advertising effectiveness: advertising-related, consumer-related, and situation-related factors. This study considers only advertising-related and consumer-related factors regarding types of ads and advertising involvement. Situational factors are the most difficult to identify because of the vast variety with which they exert influence on human information processing. Future study can examine the effect of brand communication on target brands when a particular ad with a good or poor brand image displayed before the ad of target brands. Future studies could attempt to combine various types of products with distinct media and make a comprehensive comparison of distinct types of brand communication.

COMPETING INTERESTS

Author has declared that no competing interests exist.

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