2012 International Conference on Economics and Finance Research
IPEDR Vol.32 (2012) © (2012) IACSIT Press, Singapore

Do Expertise and Message Sidedness Compensate for Physical Attractiveness?

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Abstract: This study investigated if expertise and message sidedness compensate for physical attractiveness, and observed the interactive effects. The results indicated high expertise does not compensate for low physical attractiveness, but enhance high physical attractiveness. The two-sided messages enhance high physical attractiveness, but one-sided messages compensate for low physical attractiveness.

Keywords: Physical Attractiveness, Expertise, Message Sidedness, Endorser, Ad Effectiveness

1. Introduction

Using highly attractive models to advertise products is very common, especially for female-targeted products related to physical attractiveness. Baker and Churchill (1977) proposed that highly attractive models create better attitudes toward the ad, product, and purchase intention than normally attractive ones, which were echoed by Caballero and Pride (1984), and Petorshins and Crocker (1989). Nevertheless, Richins (1991), Bower (2001), and Bower and Landreth (2001) found that highly attractive models are not as effective as expected. Bower (2001) concluded that female subjects would make social comparisons to highly attractive models in ads, which would trigger a negative affect harmful to ad effectiveness. Obviously, the assumed advantages of highly attractive models have been inconsistently supported.

In addition to physical attractiveness, Ohanian (1991) indicated that a model's expertise was another important factor that would affect ad effectiveness. Chebat, Filiatrault, Laroche, and Watson (1988) suggested that the higher the expertise, the stronger persuasiveness is generated as well as positive attitude toward ads (Homer and Kahle, 1990). However, few studies addressed the two characteristics of models. Thus, besides following the past literature to investigate the ad effectiveness of physical attractiveness and expertise, this study examines the interaction between them.

Furthermore, besides models, the contents presented in an ad include messages that advertisers would like to deliver. Some studies pointed out that two-sided messages do disclose the drawbacks of products, but consumers are more likely to trust the ad (Kamins, 1989; Kamins et al., 1989), leading to stronger purchase intention (Kamins, 1989). Swanson (1987), however, pointed out that there is no significant difference between one-sided and two-sided messages. Therefore, the assumed advantages of two-sided messages were also inconsistently supported. This study examines two-sided messages and how they should match with physical attractiveness as well.

2. Hypotheses and methods

2.1. Hypotheses

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This study proposes the following hypotheses:

H1: A highly attractive models (HAM) demonstrated better ad effectiveness than a normally attractive models (NAM).

H2: High expertise induces higher ad effectiveness than low expertise

H3: Two-sided messages create better ad effectiveness than one-sided messages.

2.2. Experimental design

This study recruited female undergraduates as samples like Bower (2001). Study 1 examined the impact of physical attractiveness (highly attractive and normally attractive) and expertise (high and low), and study 2 investigated the effect of physical attractiveness and message sidedness (one-sided and two-sided) on ad effectiveness. The present study used two 2×2 between-subjects factorial designs.

2.3. Study 1

2.3.1. The selection of models

Full-color photographs of models were selected on the Internet, and unclear ones were excluded. Photographs were further identified for those who were not the spokesperson for certain products. Five full-color photographs numbered from 1-5 were selected.

Thirty undergraduates were enrolled. This study projected the models' photographs on the screen and every participant needed to rate each models' physical attractiveness after viewing one photo before moving to the next, counterbalance was considered. They administered the scale in the classroom over a five minute period. In the end, a token of appreciation was presented to the subjects, and a 100% response rate was obtained.

The scale for assessing the models' physical attractiveness was designed according to Bower and Landreth (2001). Two five-point Likert items were included. Cronbach's α of physical attractiveness scale was 0.885. The model that scored the highest are highly attractive and the one who scored significantly lower is normally attractive. Finally, model No. 5 scored the highest, 3.667 and was selected as a HAM. Model No. 4 scored 3.030, significantly lower than the HAM (p=0.001) and was selected to represent a NAM.

2.3.2. Manipulation of expertise of models

According to Goldsmith et al. (2000) and Ohanian (1990), this study called the model in experimental stimuli Miss Lin. For manipulation of expertise of models, this study introduced that Miss Lin has been a beauty therapist for international beauty institutions for five years and has beauty licenses from the UK (high expertise treatment), additionally, Miss Lin is a staff member of a company that usually collects beauty information from newspapers and magazines (low expertise treatment).

Each subject was randomly assigned to either a high or low expertise treatment composed of 45 subjects each. The respondents were administered the scale in the classroom over a five minute period. In the end, a token of appreciation was presented to the subjects, and a 100% response rate was obtained.

For testing if the manipulation of expertise was suitable, the pretest was used first. This scale was designed according to Goldsmith et al. (2000) and Ohanian (1990). Five five-point Likert items were used to evaluate the expertise level of the model. Cronbach's α of expertise was 0.871. Higher scores indicate higher expertise. The high expertise treatment scored 3.711 and the low expertise one scored 2.282. Furthermore, a t-test showed that p value＝0.000, indicating the proper design of expertise levels.

2.3.3. Experiment

(a) Stimuli and measurement

To prevent experimental errors caused by the individual preference of real brands, this study used a virtual brand called Dr. B facial foam. Four full-color print ads were designed, which included a model's photo and expertise information. Except for the manipulated variables, the rest remained the same. These ads appeared to be prepared professionally.

The five-point Likert items for attitude toward ad and attitude toward brand were designed based on Holbrook and Batra (1987), six items and Leclerc et al. (1994), five items respectively. For the sake of convenience, attitude toward ad is abbreviated as Aad and attitude toward brand is abbreviated as Ab, hereafter. For manipulation checks, the scales of physical attractiveness and expertise are also included.

(b) Procedure

Two hundred and thirty undergraduates were recruited from one of the colleges in Taiwan as the participants. The experiment began with a brief introduction stating that the researcher was employed to realize your impression of each advertisement you will be shown. Print ads were projected on the white screen and subjects were requested to watch the ad before rating them. The respondents were administered the scales in the classroom during a ten minute period. Finally, small gifts were given to the subjects to show appreciation for their participation.

2.4. Study 2

The models selected in Study 1 were again used in Study 2. Likewise, one pretest was used to test if the manipulations of message sidedness are suitable.

2.4.1. Manipulation of message sidedness

According to Kamins et al. (1989), the message, "Including precious sea mud makes you look more beautiful," which is the slogan, and "No soap, mild, and complete clean," are designed as one-sided messages. In the two-sided messages, the slogan was changed to; "Including precious sea mud and being a little bit expensive makes you look more beautiful," the others were kept unchanged.

Each subject was randomly assigned to a one-sided or two-sided message group for a total of 40 and 39 subjects, respectively. The respondents were administered the scale in the classroom, over a five minute period. In the end, a token of appreciation was presented to the subjects and a 100% response rate was obtained.

The scale for message sidedness was designed according to Kamins et al. (1989); it consists of two five-point Likert items. Cronbach's α of message sidedness was 0.765. Higher scores indicate identification with negative messages and two-sided messages. The one-sided treatment scored 2.321 and the two-sided one scored 3.326. Additionally, a t-test showed a p value＝0.000, evidence of proper design for message sidedness.

2.4.2. Experiment

There were four full-color print ads designed, including a model's photo and one of the sidedness messages. The scales of Aad, Ab, physical attractiveness, and message sidedness were used. One hundred and fifty-two undergraduates were recruited as the participants. The rest is the same as with Study 1.

3. Results

3.1. The result of Study 1

3.1.1. Reliability and manipulation checks

Cronbach's α for physical attractiveness, expertise, Aad, and Ab were 0.812, 0.863, 0.859, and 0.815, respectively, higher than 0.7 indicating reliability according to DeVellies (2003).

The mean of physical attractiveness for the HAM was 3.766 and that for the low expertise treatment was 2.321. The mean of expertise for a high expertise treatment was 3.796 and that for a low expertise treatment was 2.337. Besides, this study found p values were both 0.000, indicating that the manipulations were successful.

3.1.2. The impact of physical attractiveness and expertise on ad effectiveness

Panel A of Table 1 indicates the ad effectiveness and found no matter in terms of Aad or Ab, a HAM works better than a NAM and the high expertise model caused a greater effect than the low one. MANOVA indicated that the significant effects of both physical attractiveness (Wilks' lambda= 0.887, F=14.397,

p=0.000) and expertise (Wilks' lambda= 0.820, F=24.678, p=0.000) on ad effectiveness were observed. Therefore, hypothesis 1 and hypothesis 2 were supported. There was significant interaction between physical attractiveness and expertise (Wilks' lambda= 0.885, F=14.637, p=0.000).

The test of between-subjects effects shows that physical attractiveness had significant effects on Aad (F=28.316, p=0.000) and Ab (F=12.342, p=0.001), and a significant effect of expertise on Aad (F=49.498, p=0.000) and Ab (F=16.094, p=0.000). The significant interactive effects between expertise and physical attractiveness on Aad (F=20.433, p=0.000) and Ab (F=24.538, p=0.000) were both observed.

The simple main effect analysis indicated a HAM was significantly more persuasive than a NAM when the model had high expertise (M_{HAM} = 3.431, SD= 0.503 vs. M_{NAM} = 2.718, SD= 0.614, F(1, 226)=50.38, p=0.000); but it was not more persuasive when the model had low expertise (M_{HAM} = 2.594, SD= 0.528 vs. M_{NAM} = 2.536, SD= 0.550, F(1, 226)=0.06, p=0.799) for Aad. The HAM induced significantly more favorable Ab than the NAM when the model had high expertise (M_{HAM} = 3.372, SD= 0.478 vs. M_{NAM} = 2.785, SD= 0.631, F(1, 226)=36.31, p=0.000), but did not when the model had low expertise. (M_{HAM} = 2.750, SD= 0.459 vs. M_{NAM} = 2.850, SD= 0.534, F(1, 226)=1.51, p=0.221) Figure 1 and Figure 2 portray the interactions respectively.

3.2. The result of Study 2

3.2.1. Reliability and manipulation checks

Cronbach's α for physical attractiveness, expertise, Aad, and Ab were 0.828, 0.816, 0.796, and 0.764, respectively, indicating reliability according to DeVellies (2003).

The mean of physical attractiveness for a HAM was 3.808 and that for a NAM was 2.341. The one-sided message treatment scored 2.263 and the two-sided message scored 3.503 on message sidedness. This study found p values were both 0.000, showing the successful manipulations.

3.2.2. The impact of physical attractiveness and message sidedness on ad effectiveness

Panel B of Table 1 indicates that the HAM works better than the NAM and the two-sided message has a greater impact than the one-sided message. MANOVA indicated both of the significant effects of physical attractiveness (Wilks' lambda= 0.889, F=9.183, p=0.000) and message sidedness (Wilks' lambda= 0.649, F=39.681, p=0.000) on ad effectiveness, which means hypothesis 1 and hypothesis 3 were supported. The significant interaction between physical attractiveness and message sidedness was shown (Wilks' lambda= 0.927, F=5.784, p=0.004).

The test of between-subjects effects showed that physical attractiveness had significant effects on Aad (F=18.489, p=0.000) and marginally significant effects on Ab (F=3.454, p=0.065). Message sidedness significantly influenced Aad (F=57.053, p=0.000) and Ab (F=57.908, p=0.000). The significant interaction between physical attractiveness and message sidedness on Ab (F=4.661, p=0.032) was shown.

The simple main effect analysis indicated the HAM is significantly more persuasive than the NAM in a one-sided message (M_{HAM} = 3.300, SD= 0.426 vs. M_{NAM} = 3.321, SD= 0.354, F(1, 226)=50.38, p=0.000), but is not in a two-sided message (M_{HAM} = 2.911, SD= 0.373 vs. M_{NAM} = 2.625, SD= 0.504, F(1, 226)=0.06, p=0.799) for Ab. Figure 3 illustrates this interaction.

4. Conclusion and discussion

Like the previous literature (Baker and Churchill, 1977; Caballero and Pride, 1984; Petorshins and Crocker, 1989; Richins, 1991; Bower, 2001; Bower and Landreth, 2001), this study focused on the attractiveness-related product, and found physical attractiveness significantly influenced ad effectiveness in the expected direction. Expertise brought about a significant main effect on ad effectiveness, which corresponds with those of past studies (Ohanian, 1990). Message sidedness has a significant main effect on ad effectiveness in the predicted direction, confirming Kamins et al. (1989). In summary, this study supports that high attractiveness and high expertise of models and two-sided messages brought about better ad effectiveness. Therefore, physical attractiveness and expertise of models and message sidedness does matter in developing a successful advertisement strategy.

Interactions of physical attractiveness and expertise on Aad and Ab were both observed. The results show that the HAM works significantly better than the NAM when the model has high expertise; but does not when the model has low expertise, which means a HAM is supposed to have high expertise, or the ad effectiveness would decrease to that of a NAM. High expertise does not compensate for the lower level of attractiveness. Interaction of physical attractiveness and message sidedness on Ab was also shown. The study indicates the HAM induces significantly more favorable Ab in one-sided messages, but does not in two-sided messages. The two-sided messages compensated for the lower level of physical attractiveness because the NAM has similar persuasiveness with the HAM in two-sided messages.

Besides investigating the ad effectiveness of levels of physical attractiveness, which a lot of the past research focused on, this result adds the following nuance: a HAM should have high expertise, if not, the ad effectiveness of a HAM is insignificantly different from that of a NAM; a NAM should match with the two-sided messages, which made the persuasiveness close to a HAM. This study selected facial foam, which is attractiveness-related as experimental material. Future studies may go on to choose other types of products. Besides, this study used expertise and message sidedness as moderators. There are still many other influential moderators. However, there has been little discussion, but it deserves future studies.

Referring to the studies on theories regarding how affection affects motives and behavior would be helpful to seek for theory support or as a base for future research. The results would be easy to link to the related research streams contributing to the related knowledge.

5. References

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Table 1. The ad effectiveness of each cell

Panel A: Study 1								
Ad Effectiveness	Physical Attractiveness				Expertise			
	Highly (n=122)		Normally (n=108)		High (n=110)		Low (n=120)	
	M	SD	M	SD	M	SD	M	SD
Aad	2.99	0.66	2.62	0.59	3.09	0.66	2.57	0.54
Ab	3.05	0.56	2.82	0.58	3.10	0.63	2.80	0.50
Panel B: Study 2								
Ad Effectiveness	Physical Attractiveness				Message Sidedness			
	Highly (n=75)		Normally (n=77)		One-sided (n=94)		Two-sided (n=58)	
	M	SD	M	SD	M	SD	M	SD
Aad	2.93	0.55	2.60	0.54	2.54	0.51	3.14	0.45
Ab	3.07	0.44	2.88	0.57	2.76	0.47	3.31	0.39

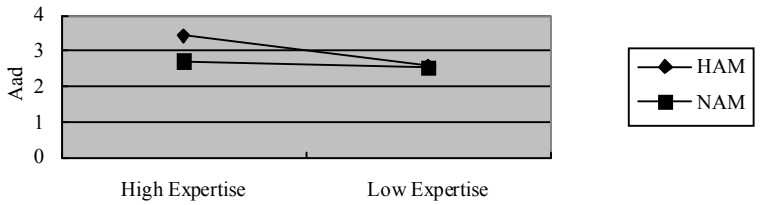

Fig. 1: Interactive effect of physical attractiveness and expertise on Aad

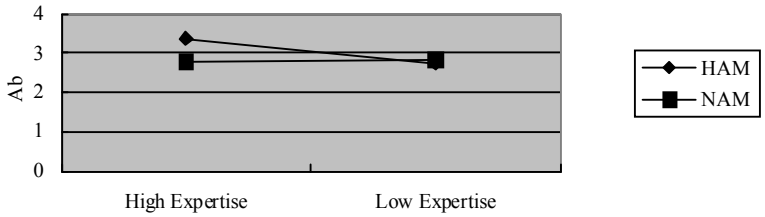

Fig. 2: Interactive effect of physical attractiveness and expertise on Ab

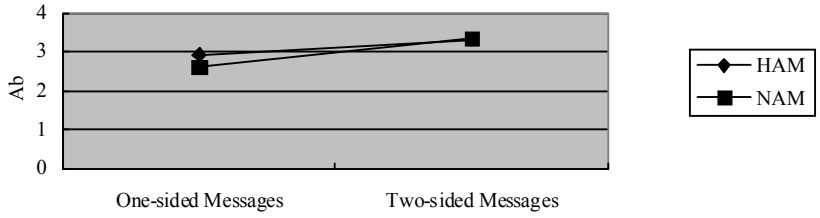

Fig. 3: Interactive effects of physical attractiveness and message sidedness on Ab