Being Famous or Being Liked? The Influence of Celebrity Endorsement on Consumption Decision

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Abstract: With the growth of online shopping, celebrity endorsements have become increasingly important in influencing consumer decision-making. Through a survey questionnaire, this study analyzes the impact of celebrity endorsements on consumers' willingness to purchase a new and unfamiliar product. The findings indicate that the absence of celebrity endorsements can enhance consumers' purchasing intentions in the context of a new product for which individuals have not yet formed a clear preference. Consumers are more inclined to buy products endorsed by celebrities they like, regardless of their degree of popularity, compared to products endorsed by celebrities they dislike. Among the many policy implications, this research aims to advise businesses to exercise greater caution when deciding on whether to employ celebrity endorsements.

Keywords: celebrity endorsement, consumption decision, online shopping

1.   Introduction

With the development of the internet, online shopping has become increasingly convenient. When users search for a specific type of product on shopping platforms, the system presents them with a plethora of options. Among products that serve the same function but come from different brands, consumers often prefer well-known brands due to their recognition and influence. To enhance the competitiveness of lesser-known brands, merchants frequently enlist celebrities for endorsements. The rise of social media platforms has amplified the influence of celebrities, allowing consumers to interact with them and receive endorsement messages more directly. Consumers typically develop a sense of identification with their favorite or popular celebrities, perceiving their lifestyles and values as aligned with their own. But is it effective in influencing consumers' decisions through celebrity endorsements, and can it increase people's willingness to buy unknown products? We will discuss whether celebrity endorsements of products from unknown brands influence consumers' decisions.

As we can see from Melissa SamirAraigy's research, they discussed the extent to which celebrity endorsements affect the genders. It doesn't focus on different types of celebrities, but it's important to make a distinction [1]. Therefore, our paper will increase the types of celebrities, make celebrities more specific, and find out the influence of different celebrities on consumers' decision-making.

In Anmol Randhawa and Javeed Ahmed Khan's paper, they find that in India, celebrity endorsements are more effective when famous personalities are used rather than film stars and

cricketers [2]. But, in our paper, we want to find out which kind of celebrity endorsement has the greatest influence on consumers' purchasing behavior

The focus of this discussion is whether celebrity endorsements influence consumer decision-making. According to the Oxford Dictionary, a celebrity is defined as a well-known person who excels in various fields. In this study, we will employ five survey questionnaires to analyze and collect data. First, we will select four celebrities from an app specifically designed to evaluate public figures, each possessing distinct characteristics: one is well-known and liked, the second is well-known but disliked, the third is not well-known but liked, and the fourth is neither well-known nor liked. Our aim is to analyze through the research report whether the impact of celebrity endorsements on consumer decisions varies based on the celebrities' characteristics. The product selected for this study is a necklace from a fictional brand, mitigating concerns related to essential goods that consumers must purchase regardless of celebrity endorsement, as well as issues stemming from the brand effects of major brands influencing consumer behavior.

The main result we got from the questionnaire was that celebrity endorsement does affect consumers' consumption decisions. However, for consumers, personal preferences have a greater impact on consumer decision-making. This proves that people are more willing to buy products endorsed by their favorite celebrities than products endorsed by famous celebrities.

2.   Field data and experimental design

For the experimental study, we aimed to investigate how businesses could increase their sales by selecting celebrities, so our criterion is whether customers would buy the product. We suggest that the impact of any celebrity would vary to some extent, but studying all the existing celebrities in the world is not feasible. Instead of conducting individual experiments on each celebrity, we chose to group similar celebrities together and compare them across these larger groups. Some of us felt that a celebrity's popularity is the most important factor, while others believed that the attractive features of a celebrity, such as an actor's acting skills or physical attributes, or even their public image, are the deciding factors. We concluded that there are two variables that are important: the first is the overall image of the celebrity in the public eye, or likability. The second is the celebrity's level of fame, which includes both fans and haters as contributing groups. However, isn't it possible for someone to dislike a very famous celebrity? These two variables cannot represent all celebrities. Indeed, there is no direct causal relationship between these two variables, so in order to compare and contrast their effects, we combined the two variables into four experimental groups: high famous and liked, high famous and disliked, low famous and liked, and low famous and disliked.

This raises the question of how to measure whether a celebrity is famous and liked or not. We plan to follow the public's opinion. "Hupu" is a well-known Chinese sports and entertainment forum, but it is better known for a feature that allows users to freely choose public figures, historical figures, or even works of art, and rate them from 1 to 10. "Hupu" has over 100 million registered users and 80 million active users. Each user's rating is recorded, and in short, it is a platform where anyone can rate anything. We plan to use this platform as a reference by looking at a celebrity's total score and average score to determine whether they meet the requirements of the four experimental groups, and finally select the most typical examples that meet the requirements. For the control group, there is no celebrity endorsement product. For the experimental group, we finally selected the following four celebrities with data as of May 2024: Stephen Chow, who has 53045 comments, with an average score of 9.8; Sun Qian, who has 2031 comments, with an average score of 7.8; Zhang Daba, who has are 28116 comments, with an average score of 2.3 and Qi Yixiang, who has 574 comments, with an average score of 3.1 as the celebrities who are famous and liked, not famous but liked, famous but not liked, and not famous but not liked, respectively, to serve as the endorsers in the experiment. We

can judge a celebrity's popularity by the number of comments they receive and their level of popularity by the average score (out of 10).

Now that the celebrity endorsers for the product have been determined, then we determine the products the celebrities will endorse in the experiment. We believe that the products should have the following characteristics: first, the target audience should be people of all ages, and second, the products should be as affordable as possible so that they are not too expensive for most people in society, and the brand itself should not be a brand that has a good or bad impression among the experimental subjects. Controlling for these variables can ensure that the product itself does not immediately cause people to decide to buy or not buy it upon seeing it for the first time, thus maximizing the impact of the celebrity on product sales. To meet the above three restrictions, we selected a relatively inexpensive bracelet as our product and used the "Ellefante" brand. To elaborate, the bracelet is a type of jewellery that is generally well-received, and we placed a price limit on it. Furthermore, the "Ellefante" brand is a completely fictional brand that we randomly thought of in real life. Because the experimental subjects are unlikely to have a good or bad impression of a product from a non-existent brand, we can ensure that the brand effect will not be affected.

Thus, we have our independent variables: celebrities of different categorizations mentioned above; our dependent variables, the consumer's desire to buy; the influence of celebrities on the consumer's desire to buy; and the consumer's own assessment of the significance of such an influence.

We design age, gender, education level, monthly online shopping frequency, and monthly online shopping expenditure ratio in the survey questionnaire. We separated the experimental subjects by age at 30 years old, because most people over 30 years old are economically independent have certain life experiences and will not engage in impulse buying. We divided the education level by college degree, because when people have gone to college and received higher education, they will have certain thinking and independence and will consider whether their behavior is appropriate. We divided the monthly online shopping frequency by 10 times per month and the monthly online shopping expenditure ratio by 25% of monthly expenditure, as these experimental subjects are considered to be frequent online shoppers and, therefore, have some online shopping experience and will be more experienced in purchasing products.

We conduct the experiment as an online survey questionnaire because this is sufficient for us to obtain the necessary data, and it can also significantly increase the volume of data compared to other methods. Five questionnaires are created, with one corresponding to each celebrity. Only one questionnaire will be answered by each experimental subject.

At the end, we gathered a total of 407 responses for our 5 groups. With 54, 57, 173, 73, 50 responses for the controlled group, treatment group 1, 2, 3, & 4 respectively.

Table 1 shows the basic control information for each group in our study. Our questionnaire included the following control variables: gender, age, education level, and the average number of online shopping per month, as well as the proportion of online shopping expenditure in monthly income.

In the control group, we simply asked the experimental participants about their purchasing desire after seeing the bracelet. In the treatment group, we asked the experimental participants about their purchasing desire after knowing that the celebrity endorsing the bracelet in their corresponding questionnaire had endorsed the selected bracelet.

Table 1: Summary statistics

	Number (1)	Mean (2)	SD (3)	Min (4)	Max (5)
Panel A: Control Group					
Age	54	0.167	0.376	0	1

Table 1: (continued)

Gender	54	0.722	0.452	0	1
Education	54	0.833	0.376	0	1
Frequency	54	0.093	0.293	0	1
Proportion	54	0.278	0.452	0	1
Panel B:Treatment Group1					
Age	57	0.298	0.462	0	1
Gender	57	0.351	0.481	0	1
Education	57	0.333	0.476	0	1
Frequency	57	0.140	0.350	0	1
Proportion	57	0.316	0.469	0	1
Panel C:Treatment Group 2					
Age	173	0.694	0.462	0	1
Gender	173	0.694	0.462	0	1
Education	173	0.671	0.471	0	1
Frequency	173	0.329	0.471	0	1
Proportion	173	0.358	0.481	0	1
Panel D:Treatment Group 3					
Age	73	0.548	0.501	0	1
Gender	73	0.589	0.495	0	1
Education	73	0.589	0.495	0	1
Frequency	73	0.342	0.478	0	1
Proportion	73	0.507	0.503	0	1
Panel E:Treatment Group 4					
Age	50	0.240	0.431	0	1
Gender	50	0.580	0.499	0	1
Education	50	0.300	0.463	0	1
Frequency	50	0.380	0.490	0	1
Proportion	50	0.520	0.505	0	1

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3. Results

We obtained data through survey questionnaires and conducted regression calculations to control for the comparison group and treatment group. Here are the regression results we obtained for both groups.

Table 2: Regression results

Dependent Variable: Purchase desire				
	(1)	(2)	(3)	(4)
Famous and favorite celebrity endorsements	-1.124*** (0.486)			
Not famous and favorite celebrity endorsements		-1.178*** (0.433)		
Not famous and disliked celebrity endorsements			-2.653*** (0.401)	
Famous but disliked celebrity endorsements				-1.652*** (0.483)
R Square	0.047	0.032	0.259	0.103
Observations	111	227	127	104

Note: Standard errors are in parentheses under coefficients; *, **, and *** represent 10%, 5%, and 1% significant levels, respectively.

Table 2 shows the data obtained after regression without including the control variables, where all the results are significant as they are all less than 0.05 and have three celebrities. (the celebrity is a symbol of significance)The coefficient of *famous and favorite celebrity endorsements* is -1.124, which is statistically significant at the 1% level. The coefficient of famous but disliked celebrity is significant negative ($\beta = -1.652$, $p < 0.01$); and that of not famous but liked is also significantly negative ($\beta = -1.178$, $p < 0.01$) By contrast, the coefficient of *No famous and disliked celebrity endorsements* is significantly negative with -2.653, which is statistically significant at the 1% level. The result means that the not famous and not liked celebrity can absolutely cut down the willingness to purchase of consumers; these findings suggest that companies should choose the right celebrity who is well-known and also has a positive remark among people. We find that after celebrity endorsement, people's purchasing desire has decreased, which can be found in the graph that all the results are negative. In all the treatment groups, we found that people tend to buy products endorsed by their favorite celebrities, but the influence of whether the celebrity is famous or not on the consumer is not significant. In the remaining two treatment groups, people tend to buy products endorsed by unknown celebrities for celebrities they don't like.

Table 3: Regression results (include all variables)

Dependent Variable: Purchase desire				
	(1)	(2)	(3)	(4)
Famous and favorite celebrity endorsements	-1.314*** (0.676)			
Not famous and favorite celebrity endorsements		-1.416*** (0.059)		
Not famous and disliked celebrity endorsements			-3.253***	

Table 3: (continued)

			(0.503)	
Famous but disliked celebrity endorsements				-2.016***
				(0.605)
Gender	-0.405***	-0.277***	0.357***	0.289***
	(0.540)	(0.411)	(0.431)	(0.532)
Age	0.682***	0.831***	0.944***	1.312***
	(0.682)	(0.430)	(0.521)	(0.609)
Education	0.09***	0.666***	-0.909***	-0.637***
	(0.696)	(0.422)	(0.524)	(0.583)
Frequency	0.959***	-0.487***	-0.138***	0.229***
	(0.848)	(0.471)	(0.575)	(0.672)
Proportion	0.158***	0.778***	0.437***	-0.399***
	(0.570)	(0.429)	(0.477)	(0.564)
R square	0.066	0.075	0.299	0.159
Obervation	111	227	127	104

Note: Standard errors are in parentheses under coefficients; *, **, and *** represent 10%, 5%, and 1% significant levels, respectively. The table 3 include the control variables like gender, age, education, frequency, proportion.

Table 3 shows the results after including the basic information, and the same is true for the data after regression. We also found that the data after regression is significant. We found that celebrity endorsements would have a negative impact on people's desire to purchase products. We also found that the size of the relationship between the likelihood of purchasing products endorsed by different celebrities is not changed. Consumers are still more likely to purchase products endorsed by celebrities they like, and they will still choose to purchase products endorsed by unknown celebrities when they don't like the celebrity. From the data in the two tables, our group found that after endorsement, consumers' data related to their consumption desire are all negative. In the data of four groups of celebrities endorsing different products, if we arrange the difference of coefficients in purchase desire caused by different celebrities endorsing the same product from high to low, from famous and liked celebrity is significant($\beta = -1.314, p<0.01$) to not famous but favorite celebrity is also significant negative($\beta = -1.416, p<0.01$), to famous but disliked celebrity with -2.016 which is statistically significant at the 1% level. and the least is the coefficient of not famous and disliked celebrity, the most negative ($\beta = -3.253, p<0.01$). We can easily find that the data of the purchase desire of the celebrity who is well-known and liked, i.e., the celebrity who is both liked and famous, is the largest, even though it is negative. This is consistent with our hypothesis. Therefore, we can conclude that for real brands, products endorsed by celebrities that people like can generate more sales. For the consumer's own preferences, this indicator is more likely to guide their consumption. Comparing well-known but unpopular celebrities with well-known but popular celebrities, it is not difficult to find that even if the endorser is very well-known, people tend to buy products endorsed by celebrities who align with their own preferences. Even if the comparison is made between an unknown but popular celebrity and a well-known but unpopular celebrity, the same conclusion can be drawn. This comparison clearly shows that personal preferences are more influential than the

endorser's fame in shaping consumers' purchase intentions. Moreover, if a celebrity is not liked but is very well-known, consumers display stronger resistance to products endorsed by that celebrity, and their purchase intentions decrease the most. In summary, based on the above conclusions, the most important thing for merchants to consider when hiring endorsers is the celebrity's social reputation, i.e., how much people like or dislike him or her. Even if a celebrity is very well-known, if the public has a bad impression of that celebrity, hiring him or her as an endorser is likely to reduce product sales. If merchants can hire well-known and popular celebrities to endorse their products, it is likely to promote sales.

4. Discussion

Celebrity endorsement has been accepted to be a *"uiquititous feature of modern day marketing"* [3]. This paper presents evidence that celebrity endorsements do not necessarily help businesses increase sales of their products and that people's purchasing tendencies towards products are different when different celebrities are hired to endorse them. We designed four categories of celebrities to endorse a fictional brand bracelet and investigated whether celebrity endorsements affect people's purchase intentions for a product. The results show that: (a) No matter what celebrity endorsement, it will reduce people's desire to buy a product. (b) Among the products endorsed by celebrities, people are more willing to buy the products endorsed by their favorite celebrities, but whether the celebrities are famous or not will have a great change in people's purchase desire. (c) If the celebrity people don't like endorsing the product, people will be more willing to buy the product endorsed by the unknown celebrity.

We explain why people have the highest purchasing desire without celebrity endorsement. The purchase attitude is influenced by the celebrity endorsement factors, product evaluation and brand recognition [4]. We believe that volunteers who are not familiar with the brand we created, "Ellefante", have a high probability of imagining it to be a niche, unknown brand. However, it is unlikely for a small brand to have a well-known celebrity endorse it. Therefore, volunteers are likely to think that the brand has invested a lot of money in hiring celebrities to endorse its products rather than improving product quality, which will increase consumers' distrust and scepticism towards the brand, thereby lowering their purchasing desire. In other words, if a businessman hires a celebrity to endorse his product, customers will think that the product itself has certain defects or is unable to attract customers and needs to be promoted through celebrity endorsement. It was clear that the customers' need is stimulated after seeing a product promoted as a product placement, but too obvious a product placement creates avoidance of the product, which leads them not to do further research about the product and to conduct an evaluation of alternatives [5].

5. Conclusion

Through surveys, we found that when a celebrity endorses a product, people are more likely to buy it if they like the celebrity. However, whether the celebrity is well-known or not has little impact on people's purchasing desire. When a person dislikes the celebrity endorsing a product, they are more likely to buy from an unknown celebrity. Since only a small percentage of people know the disliked celebrity, when a customer does not recognize the celebrity, their liking for the celebrity remains neutral. People may choose an unknown celebrity over a well-known and disliked celebrity, even if the unknown celebrity is also disliked.

Based on all these conclusions, we believe that when businesses decide whether to use celebrity endorsements, they should carefully consider their options. Choosing a celebrity based on popularity or fame may not necessarily increase product sales. If a celebrity endorsement is necessary, it is best to choose a celebrity that is well-liked by the general public.

There are some shortcomings in this paper's experiment. Therefore, these shortcomings may lead to uncertainty in the experimental data.

First of all, we did not maintain the same number of people and control conditions in each group, which may lead to certain experimental errors. Increasing the number of experimental samples will reduce this error.

Secondly, we chose bracelets as the control variable in the experiment, and we selected a bracelet that is more suitable for women in the questionnaire for volunteers to choose. Therefore, if three male celebrities are hired to endorse it, the effect of promotion and the degree of attracting consumers may not be as good as that of female celebrities endorsing it.

References

[1] Araigy, M. S. (2018, November). The influence of celebrities on consumer buying decision through social media. International Journal of Humanities and Applied Social Science (IJHASS), 8-30.

[2] Randhawa, A., & Khan, J. A. (2014). Impact of celebrity endorsement on consumer buying behavior. International Journal of Business Management, 170-189.

[3] McCracken, G. (1989). Who is the celebrity endorser? Cultural foundations of the endorsement process. Journal of Consumer Research.

[4] Balakrishnan, L., & Kumar, C. S. (2011, May). Effect of celebrity-based advertisements on the purchase attitude of consumers towards durable products (A study with reference to the city of Chennai). World Review of Business Research, 98-112.

[5] Jargalsaikhan, T., & Korotina, A. (2016, May). Attitudes towards Instagram micro-celebrities and their influence on consumers' purchasing decisions. Jönköping University International Business School (Master Thesis in Business Administration).