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# Virtual Celebrities for Fashion Branding in China

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**Abstract.** Luxury fashion brands heavily use celebrity endorsements for promotion. However, there are risks that a real-person celebrity may trigger controversial issues which may negatively affect the endorsed brand. Virtual influencers look very close to real people thanks to development of technology. Thus marketers have an opportunity to adopt virtual celebrities instead of real-person celebrities to avoid risks of scandals caused by human beings. It is of interest to find out whether virtual celebrities have similar influencing effect as real-person celebrities over customers' purchase decision in the fashion industry? Will customers' attitude and perceptions towards both types of celebrities be the same? Will virtual celebrities replace real-person celebrities? As Gucci and LV adopt both real-person celebrities and virtual celebrities, we use video ads of Gucci and photo ads of LV for comparison. The results show that virtual celebrities may still lag behind real-person celebrities from the perspectives of a modified customer action model and characteristics of celebrities. However, the appearance of meta-human virtual celebrities and enhancing recognition of virtual celebrities may help improve the effectiveness of virtual celebrities.

**Keywords:** celebrity endorsement, virtual celebrity, meta-human celebrity, attractiveness, trustworthiness, expertise, modified customer action model

## 1. Introduction

China has experienced high growth in sales of luxury products over the past few decades. Especially in the past two years, the domestic sales in 2020 increased 48% and then 36% in 2021 (Bain & Company 2022). For luxury fashion market in China, a report estimated that the growth would have been 88% in 2021; the average of 1.5 million buyers in China would have been US\$6,255 in 2021 (Jing Daily 2021). In the highly growth market, celebrity endorsement has been one common method to attract attention among the customers. A report found that over 400 million consumers in China search for celebrity-endorsed luxury and fashion brands in Taobao marketplace between July and September 2017 (Jing Daily 2017).

However, in 2021, there were various scandals of top celebrities which put some luxury brands in embarrassing positions. For example, Zheng Shuang, a real-person celebrity in China, was discovered to have abandoned two children born to surrogacy outside China. This issue raised waves of criticism. Prada was forced to terminate the appointment (BBC, 2021). Kris Wu was the first global spokesperson of Louis Vuitton (LV), and he was the endorser for the menswear of the brand in almost every season. Virgil Abloh, the creative director of LV, also customized clothes for Kris Wu's concert back in

2019. However, all cooperative brands' contracts were terminated due to the negative news exposed by several victims, that his private life is chaotic and that he has deceived minors.

Alternative ways to celebrity endorsements have been considered to help overcome the potential risks of real-person celebrities. One way is adopting virtual influencers. There are different ways in defining virtual influencers. We would like to follow the definition below: "A virtual influencer, at times described as a virtual persona or virtual model, is a computer-generated fictional character that can be used for a variety of marketing-related purposes, but most frequently for social media marketing, in lieu of human "influencers". Most virtual influencers are designed using computer graphics and motion capture technology to resemble real people in realistic situations." (Wikipedia, 2022). There are different types of virtual celebrities, including animated characters, gaming characters, virtual idols and more. These virtual celebrities are also emerging from 2D to 3D modelling and animation, having some implementing AR and VR technology as well.

Virtual influencers have been around a long time ago. Different virtual celebrities have different degrees of realistic shading and texturing. Some virtual celebrities, such as Noonouri and Hatsune Miku, were shaped as a relatively artificial figure of celebrities. The shading of

their skin and eyes would be less realistic. Due to recent technological developments, virtual influencers such as Lightning from Final Fantasy, Ayayi and Lil Miquela were shaped as a relatively realistic figure of celebrities. The shading and texturing of their skin and overall outlook would be more meticulous and like look very close to real people. This provides the opportunity for companies to adopt virtual celebrities instead of real-person celebrities.

The advantages of virtual influencers over human beings are that they have a lower chance of creating scandals and saying something wrong, able to appear in multiple places at once, easier to control and never aged.

Fashion brands have used virtual celebrities to endure their products. For example, Lil Miquela has been endorser for Prada and Calvin Klein. Noonoori has worked with most of the top brand in the fashion industry, including Dior, Balenciaga, Versace, Fendi, Marc Jacobs and Gucci. In China, fashion brands have also adopted virtual influencers in recent years. Since over half of Ayayi's followers are the young generation between the ages of 18 to 24, who love chasing after fashion trends (China Marketing Insight, 2021), fashion brands such as LV and Burberry "invited" Ayayi to endorse their products.

It is of interest to find out whether virtual celebrities have similar influencing effect as real-person celebrities over customers' purchase decision in the fashion industry? Will customers' attitude and perceptions towards both types of celebrities the same? Will virtual celebrities replace real-person celebrities?

## 2. Literature Review

A series of studies on effectiveness of celebrity endorsement are related to Kelman's (1961) model which includes three source attributes: credibility, attractiveness and power, and three receiver processing modes: internalization, identification and compliance. Andrews and Shimp (2018) interpreted that credibility includes two dimensions: expertise and trustworthiness; attractiveness includes three dimensions, similarity, familiarity and liking. Credibility means to what the extent of a receiver trusts and believes in the source. Expertise means the receiver's consideration of knowledge, experience or skills owned by the source; trustworthiness means whether the receiver perceives the source honesty, having integrity and believability. When the receiver accepts the source's position as his or her own, it is internalized. Attractiveness means virtuous characteristics of the source which the receiver has self-concept that he or she has association with the source (i.e. identification). Similarity means the receiver's affect that the he or she is similar to the source; familiarity means the receiver's affect that the source is well-known to him or her; liking means the extent the receivers like the source. Power refers to the source which the receivers consider to offer rewards or punishments, through which the receiver will have compliance, i.e. the receiver is persuaded by the source such that the receiver can have favourable reaction from the source. Through internalization, identification

and compliance, the receiver's attitudes toward the brand will be changed.

## 3. Methodology

In order to test whether virtual celebrities and real-person celebrities are having similar influential power or whether virtual celebrities can replace real-person celebrities for fashion brands, basic characteristics of celebrities are adopted. The respondents' opinions of various characteristics of celebrities related to attractiveness, trustworthiness and expertise are included in the survey. The celebrities' characteristics included in this survey are mainly based on the basic framework of Ohanian (1990). The three main dimensions are: "attractiveness", "trustworthiness" and "expertise". We also adopted a simplified version of Wei and Lu's (2013) elements of a modified customer action model by including six stages: attention, interest, desire, memory, search, and share. Moreover, we added two elements: measuring the celebrity's representation of a brand (representation) and the wish of communication with the celebrity (interaction) during the social media era.

We chose two luxury fashion brands, Gucci and LV, for the studies. One main reason is that the two brands invited both real-persons and virtual figures for promotion activities. Gucci invited various celebrities for promotion, including Noonoori, a global virtual celebrity, and Yang Mi, a famous female movie actress in China. Both celebrities participated in promotion activities in China. We picked videos of Noonoori and Yang Mi in the survey. As the advertising video of Noonoori has a length of roughly 30 seconds, we cut down the video of Yang Mi's promotion video to roughly the same length for better comparison. For LV, we chose promotion pictures of Ayayi, a Chinese virtual celebrity, and Liu Yifei, another famous female actress in the survey. This is a 2x2 study on comparing virtual celebrity and real-person celebrity on both video and picture promotions. Please refer to Appendix 1 for the four celebrities.

University students from City University of Hong Kong and Chu Hai College of Higher Education are invited to participate in the survey. A total of 225 effective respondents were collected. Credits were offered to the students who participated in the survey. Students were chosen for the survey because students represent a very sizeable target market with substantial disposable income and their views are important to advertisers in strategy formulation.

## 4. Results

Among the 225 respondents, 183 (81.3%) had heard of virtual celebrity and 99 (44%) had seen that virtual celebrity was adopted for a fashion brand. For the two real-person celebrities, 192 (85.3%) recognized Yang Mi while 172 (76.4%) recognized Liu Yifei. For the two virtual celebrities, 12 (5.3%) recognized Noonoori while 36 (16%) recognized Ayayi.

Items from the survey have been transferred to eight elements of the modified consumer action model and

three celebrity endorsement dimensions. When there are more than one item transferred to an element (or dimension), an average is calculated.

Our main aim is whether virtual celebrity able to replace real-person celebrity. Thus we compare the evaluation of the 3 dimensions as well as modified customer action model for Gucci and LV.

*Gucci – Yang Mi vs Noonoouri*

The statements on the celebrity endorsers and items of characteristics are measured in 7-point Likert scales: from 1 highly agree to 7 highly disagree. A smaller value means that the respondent tends to agree with the statement while a larger value means that the respondents tend not to agree with the statement. A value 4 means neutral. Table 1 lists the mean value of Noonoouri and Yang Mi and the difference between the two means. The means for Yang Mi are all under 4 and two (attention and attractiveness) are even under 3. In contrast, the means for Noonoouri are most over 4 (attention and attractiveness) except two under 4. Apparently all means of Yang Mi are smaller than those for Noonoouri, and all are significant at 1% level.

Table 1: Comparison between Noonoouri and Yang Mi

	Noonoou ri	Yan g Mi	Noonoou ri – Yang Mi <sup>#</sup>	s.d. of mean differenc e
Attention	3.73	2.98	0.75***	1.73
Interest	4.40	3.37	1.03***	1.83
Memory	4.15	3.38	0.77***	1.95
Search	4.44	3.74	0.70***	1.65
Desire	4.96	3.90	1.07***	1.55
share	4.32	3.96	0.36***	1.92
Representatio n	4.55	3.37	1.14***	1.81
Interaction	4.74	3.60	1.17***	1.86
Attractiveness	3.95	2.71	1.24***	1.41
Trustworthine ss	4.47	3.27	1.20***	1.43
Expertise	4.39	3.08	1.30***	1.51

<sup>#</sup>Note: \*\*\*: 1% significance

*LV – Ayayi vs Liu Yifei*

Among all the instruments and dimensions, Liu Yifei has all the means under 4 (Table 2). For Ayayi, all characteristics dimensions and most of instruments are also under 4 except desire and interaction. Even though in mean comparisons, Ayayi’s values are higher than those of Liu Yifei, only trustworthiness and expertise are different at 1% significance level. Attention, interaction and attractiveness are different at 5% level; memory and

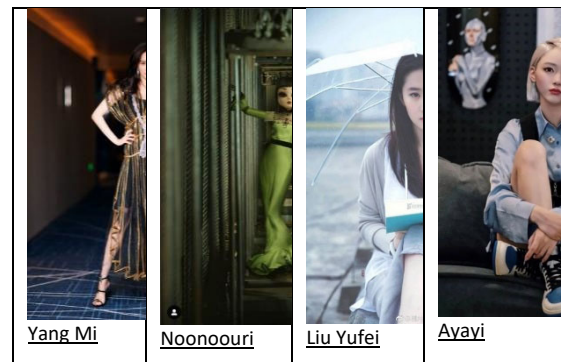
desire are only different at 10% level while interest, search, share, and representation are not significantly different. Overall speaking, Liu Yifei is mainly significantly better compared with Ayayi in celebrity characteristics dimensions.

Table 2: Comparison between Ayayi and Liu Yufei

	Ayayi	Liu Yifei	Ayayi – Liu Yifei <sup>#</sup>	s.d. of mean difference
Attention	3.56	3.29	0.27**	1.82
Interest	3.75	3.62	0.13	1.77
Memory	3.79	3.55	0.24*	1.94
Search	3.98	3.87	0.12	1.68
Desire	4.18	3.98	0.20*	1.64
share	3.96	3.95	0.01	1.72
Representation	3.83	3.67	0.16	1.60
Interaction	4.10	3.81	0.29**	1.83
Attractiveness	3.52	3.00	0.52**	1.46
Trustworthiness	3.91	3.25	0.66***	1.53
Expertise	3.84	3.18	0.66***	1.51

<sup>#</sup>Note: \*\*\*: 1% significance; \*\*: 5% significance; \*: 10% significance

**Appendix 1**



*Effects of Recognition of celebrities*

The unfavourable virtual celebrities compared with real-person celebrities may be due to the low recognition of virtual celebrities. Only 12 (5.3%) recognized Noonoouri and 36 (16%) recognized Ayayi. All values of recognizing Noonoouri are smaller than those who not able to recognize Noonoouri. The differences are all significantly different at 1% for the 8 instruments while attractiveness is significantly different at 5% level. However, trustworthiness and expertise are not significantly different. Similarly, the values of those able to recognize Ayayi have even more amazing evaluation of Ayayi. All means of differences are significant at 1% level.

## 5. Concluding Remarks and Discussions

Fashion brands, especially luxury brands, heavily use celebrities for promotion. Traditionally, famous film stars were adopted. However, in recent years, following the development of IT and AI technology, virtual celebrities are also used in promotion. Gucci and LV are among two brands adopt both real-person celebrities and virtual celebrities in China. We compared the evaluation of virtual celebrities with real-person celebrities from the perspectives of a modified customer action model and characteristics of celebrities. Video ads for Gucci (Noonouri vs Yang Mi) and photo ads for LV (Ayayi vs Liu Yufei) were compared for two pairs of celebrities.

The main results are not favourable for virtual celebrities. The results are especially hugely different between Noonouri and Yang Mi, for which Noonouri has significantly worse evaluation in all elements for the modified customer action model and all dimensions of celebrity characteristics. The results are relatively better for Ayayi comparing with Liu Yufei, mainly significantly worse among the three celebrity characteristics while the elements of the modified customer action model.

The relative “better” evaluation for Ayayi may be partly due to the fact that the comparing real-person celebrity, Liu Yufei, is relatively less than influential than Yang Mi in China (in 2019, Yang Mi in the ranking of “power of influence” was No.4 while Liu Yufei was only No.16; Dauxeconsulting, 2020). Another possible reason is that Ayayi is the first meta-human virtual celebrity in China while Noonouri is closer to a traditional virtual celebrity (apparently not a human being). A third possible reason is that relatively fewer respondents recognized Noonouri compared with Ayayi even though both have low recognition rate. When we compared the evaluation scores between recognized and non-recognized respondents, most scores are significantly favourable among those able to recognize the virtual celebrities.

The results have mixed implications for marketers. The results hint that virtual celebrities may not replace real person celebrities, at least in the recent future.

However, the results hint the potential values of virtual celebrities. As the evaluation of Ayayi, a meta-human virtual celebrity, is relatively better than Noonouri, a traditional virtual celebrity, the meta-human virtual celebrities may have better performance in the future. Moreover, the results show that there are still not many respondents, mainly young people in our survey, recognized the virtual celebrities. It offers a bigger room of improvement for virtual celebrities when more effort was put in promoting a virtual celebrity.

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