

# THE COMPARISON OF PRODUCT PLACEMENT EFFECTIVENESS ON VIRTUAL INFLUENCER IN WEST JAVA AND YOGYAKARTA

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## ABSTRAK

Penelitian ini mengkaji perbandingan pengaruh penempatan produk pada konten Instagram *virtual influencer* terhadap ingatan merek dan *brand salience* untuk merek Gucci dan Nike di Jawa Barat dan D.I Yogyakarta. Penelitian sebelumnya belum menyoroti efektivitas penempatan produk melalui *virtual influencer* di platform Instagram dan sebagian besar berfokus pada *human influencer* dengan menggunakan media tradisional seperti film, program televisi dan lagu. Secara teoritis, penelitian ini didasarkan pada teori *hybrid message* yang menjelaskan bahwa penempatan produk yang disisipkan dalam konten non-komersial dianggap lebih kredibel sehingga mampu memengaruhi kesadaran merek. Penelitian ini menggunakan metode kuantitatif dengan desain eksperimen pre-test dan post-test. Data dikumpulkan dari 631 mahasiswa di kedua wilayah melalui eksperimen lapangan. Akun Instagram *virtual influencer* bernama Allysa Gladys digunakan sebagai perlakuan, dengan konten yang menampilkan produk dari kedua merek tersebut. Analisis data dilakukan menggunakan uji beda t berpasangan. Hasil analisis menunjukkan bahwa penempatan produk secara signifikan meningkatkan ingatan merek dan *brand salience*, dengan efektivitas tertinggi terjadi di D.I Yogyakarta. Penelitian ini memberikan kontribusi terhadap literatur pemasaran digital, khususnya di negara berkembang, serta menawarkan panduan praktis bagi pemasar dalam memanfaatkan *virtual influencer* untuk meningkatkan kesadaran merek.

**Kata Kunci:** Penempatan Produk; Ingatan Merek; Salience Merek; Virtual Influencer; Instagram.

## ABSTRACT

*This study examines the comparative effects of product placement on virtual influencer Instagram content towards brand recall and brand salience for Gucci and Nike in West Java and D.I Yogyakarta. Previous studies have not specifically addressed the effectiveness of product placement through virtual influencers on Instagram, with most research focusing on human influencers using traditional media such as films, television programs, and songs. Theoretically, this study uses the hybrid message theory, which posits that product placements embedded in non-commercial content are perceived as more credible and therefore capable of influencing brand awareness. A quantitative method with a pre-test and post-test experimental design was employed. Data were collected from 631 university students in both regions through a field experiment. An Instagram account of a virtual influencer named Allysa Gladys was used as the treatment, featuring content that displayed products from both brands. Data analysis was conducted using paired sample t-tests. The results indicate that product placement significantly enhances brand recall and brand salience, with the highest effectivity observed in D.I Yogyakarta. This research contributes to the digital marketing literature, particularly in developing countries, and offers practical insights for marketers in utilizing virtual influencers to boost brand awareness.*

**Keywords:** Product Placement; Brand Recall; Brand Salience; Virtual Influencer; Instagram.

## 1. INTRODUCTION

### Background

The advancement of technology has led to a significant shift from traditional media to digital media, raising questions about the effectiveness of traditional media in promotional activities (Guo et al., 2019). Digital media provides consumers with the flexibility to select the promotional content they wish to consume (Kononova et al., 2016). Consequently, marketers are required to adapt to digital strategies in order to deliver promotional messages effectively. One strategy that

has experienced substantial growth in the digital era is product placement (Chen & Haley, 2014; PQ Media, 2024).

Product placement is a form of marketing that integrates promotional elements into media content (Balasubramanian, 1994). This strategy has been recognized since the 1930s (Galician & Bourdeau, 2004) and has continued to evolve as it is considered more effective in delivering promotional messages in a subtle manner. Promotional content is presented naturally as if it were part of the narrative, so that audiences do not consciously realize they are being exposed to marketing messages (Chan, 2012). According to Devlin and Combs (2015), product placement creates a mutualistic symbiotic relationship between marketers and media owners, in which companies generate revenue while marketers gain a more engaging promotional channel with greater potential for investment. Initially, product placement was widely used in conventional media such as films, radio, television, and music videos (Chan, 2020; Coker & Altobello, 2018; Vashist, 2017). However, along with technological developments, digital media particularly social media has become a primary platform for implementing this strategy. Social media now functions as both an information source and a two-way communication tool that enables users to create and distribute content independently (Kemp, 2025). Forms of social media include websites, blogs, and social networking platforms (Liu et al., 2015). In Indonesia, the number of social media users as of February 2025 reached 143 million, representing approximately 97.5% of the total population that is media-literate (We Are Social, 2025).

Social media enables the massive dissemination of promotional content (Russell, 2019), making it one of the most important tools in digital marketing strategies (Liu et al., 2015). Several global brands, such as Gucci, an Italian luxury fashion brand, and Nike, an American sportswear brand, have leveraged Instagram as a promotional medium. Coelho et al. (2016) stated that Instagram is a convenient and user-friendly platform, thus effective as a medium for marketing communication. Data also indicate that Instagram is the most preferred social media platform among users in Indonesia (We Are Social, 2025).

In promotional practices on Instagram, the phenomenon of influencer marketing has emerged, namely the use of public figures or influencers to deliver promotional messages through their content. This phenomenon has grown rapidly in Indonesia, which ranks fifth globally in terms of the number of influencer followers (We Are Social, 2025). Alongside technological advancement, a new form of influencer has also emerged virtual influencers, who share similar characteristics with human influencers but exist in digital form. Virtual influencers began to gain global recognition in 2018, such as Lil Miquela (@lilmiquela), while in Indonesia, examples include Lentari Pagi (@lentaripagi). The presence of virtual influencers has attracted attention due to their unique visuals and innovative communication style (Thomas & Fowler, 2021).

This phenomenon opens opportunities for further research, particularly because studies on this topic in developing countries, including Indonesia, remain very limited (Jin & Muqaddam, 2019). Although several prior studies exist (Cotter, 2019; Thomas & Fowler, 2021; Rodgers, 2021; Arsenyan & Mirowska, 2021; Sands et al., 2022), most have focused on conventional media rather than social media platforms such as Instagram (Guo et al., 2019). Moreover, research on product placement remains underexplored in Asian contexts (Karrh et al., 2001) and in developing countries (Srivastava, 2016), including within the context of social media (Liu et al., 2015). Existing studies have predominantly employed survey methods for data collection (Nadeak & Setiawan, 2024; Purnomo, 2023; Hardany & Najoran, 2023; Herningtyas et al., 2021; Perwitasari & Paramita, 2020), with limited use of experimental methods.

This study was specifically conducted in two regions, West Java and D.I Yogyakarta, which were selected based on differences in demographic and economic characteristics. West Java is the province with the largest population in Indonesia (CNBC, 2025), while D.I Yogyakarta is among the top ten provinces with advanced human resources (BPS, 2025). Differences in provincial minimum wages and lifestyle patterns between the two regions were considered to examine potential variations in the effects of marketing strategies. In addition, this study specifically focuses on luxury fashion and sportswear products, categories that have been relatively underexplored in previous research.

### **Research Purpose**

This study aims to empirically examine the effect of product placement in virtual influencers on brand recall and brand salience for Gucci and Nike in two regions, namely West Java and D.I Yogyakarta. In addition, it seeks to determine whether there are differences in the effects of product placement between the two regions. Specifically, this study is designed to address the following two research questions:

1. Does product placement with virtual influencers have a positive effect on brand recall for Nike and Gucci in West Java and Yogyakarta?
2. Does product placement with virtual influencers have a positive effect on brand salience for Nike and Gucci in West Java and Yogyakarta?
3. Is there a difference between the effect of product placement with virtual influencers on brand recall and brand salience for Gucci and Nike in West Java and Yogyakarta?

### **Literature Review**

This study employs the Hybrid Message theory by Balasubramanian (1994), which explains that product placement is a form of marketing communication capable of addressing the shortcomings of both advertising and publicity. Through product placement, marketers can subtly embed messages and control content without the audience explicitly recognizing the sponsorship, thereby creating a more credible impression. Product placement is measured by consumers' brand recall, which serves as an indicator for evaluating the effectiveness of this strategy (Gupta & Lord, 1998). Accordingly, the higher the level of recall after exposure, the more effective the product placement is in conveying promotional messages.

This study also draws upon the Spreading-Activation Theory of Semantic Processing developed by Collins and Loftus (1975) to explain the variable of brand salience. The theory posits that there is a semantic relationship between consumers and brands, wherein cognitive processes occur when brand-related information is activated in an individual's memory. This activation becomes stronger when consumers are repeatedly exposed to brand stimuli (Keller, 1993). In this process, exposures in the form of sounds, images, or texts associated with a brand trigger the activation of existing memory networks. When individuals are consistently exposed, associations with the brand are formed and reinforced, such that when consumers encounter a particular product category, the brand name with the strongest associations will spontaneously come to mind.

### **Product Placement**

Product placement is a marketing strategy that embeds promotional material into specific media as a response to the limitations of traditional advertising, which is often perceived as less credible and overly intrusive (Balasubramanian, 1994). This strategy allows promotional messages to be conveyed naturally and implicitly, making them less easily recognized as advertisements by the audience. According to Russell (1998), product placement can be categorized into three main forms: visual placement (displaying the product on screen), audio placement (embedding the brand

in dialogue), and plot connection (integrating the product into the storyline). These approaches are designed to subtly deliver messages without disrupting the consumer experience.

Chen and Haley (2014) define product placement as a paid commercial message embedded within media content. This approach enables promotion to be received implicitly (Srivastava, 2016), both in conventional media such as television and film (Devlin & Combs, 2015), as well as in digital formats such as social media and online content (Song et al., 2019). As an alternative strategy, product placement is considered more effective than traditional advertising because it allows promotional messages to be tailored to both media and audiences (Cokki et al., 2023). Its effectiveness depends on seamless content integration, implicit delivery, and content flexibility (Karrh, 1998), making it an efficient and minimally disruptive marketing communication strategy.

### **Virtual Influencer**

Technological advancements have driven a shift from human influencers to virtual influencers, which are AI-based digital entities designed to resemble humans (Arsenyan & Mirowska, 2021). Similar to human influencers, they create content on social media and leverage their followers to persuasively deliver brand messages (Casaló et al., 2020; Sands et al., 2022). Virtual influencers are developed using Computer-Generated Imagery (CGI) and 3D animation technologies (Mrad et al., 2022). They possess appealing visuals, significant followings, and the ability to attract attention and foster digital interactions comparable to human influencers (Cokki & Hazain, 2025). With these characteristics, virtual influencers serve as effective influential figures in building relationships and shaping audience perceptions on social media.

### **Brand Recall**

Brand recall refers to an individual's ability to remember a brand after prior exposure (Aliagas et al., 2021). In Aaker's (1991) brand awareness pyramid, brand recall is positioned above brand recognition and below top-of-mind awareness. Recall is formed through visual, auditory, or other informational exposures that trigger memory access (Bagozzi & Silk, 1983). Davtyan et al. (2016) distinguish between two stages: brand recall and brand familiarity (recognition through repeated exposure). Several studies suggest that recall requires external cues (Babin & Carder, 1996), however, Gamage et al. (2023) argue that recall can occur automatically if strong cognitive associations already exist. Thus, brand recall represents a cognitive process that reflects an individual's ability to recognize and remember a brand based on prior experiences or information.

### **Brand Salience**

Brand salience represents the highest level of brand memory, occurring when a brand is the first to be recalled or mentioned within a specific product category (Alba & Chattopadhyay, 1986; Romaniuk & Sharp, 2004). This concept reflects not only awareness but also the extent to which a brand enters consumers' consideration set during the decision-making process (Hong et al., 2008; Ehrenberg et al., 2002). Brand salience consists of two main dimensions: uniqueness and prominence (Ngo et al., 2021), which can be reinforced through consumer experiences and marketing communication strategies (Moran, 1990). When these aspects are achieved, a brand occupies the most prominent position in consumers' minds (top of mind) (Miller & Berry, 1998).

### **The relationship between product placement and brand recall**

Brand recall is widely used as an indicator to measure the effectiveness of product placement (Gupta & Lord, 1998; Karrh, 1998; Russell, 1998). These studies support the use of brand recall as a dependent variable in analyzing the impact of product placement. Accordingly, brand recall serves as a key measure for evaluating how effectively product placement builds consumer

perception of a brand. Product placement is considered effective if it enhances consumers' ability to remember the featured brand. Factors such as position, size, frequency, and the degree of integration within content have been shown to influence recall levels (Bressoud et al., 2010; Gamage et al., 2023). Strategic and prominent placement can strengthen memory activation, improve recall, and even enhance audience appreciation of the media used (Chan, 2020; Vashist, 2017). Thus, the effectiveness of product placement largely depends on how the product is displayed within media content.

**H1:** Product placement with virtual influencers has a positive effect on brand recall.

**H1a:** Product placement with virtual influencers has a positive effect on Nike brand recall in Jakarta and Yogyakarta.

**H1b:** Product placement with virtual influencers has a positive effect on Gucci brand recall in Jakarta and Yogyakarta.

### **The relationship between product placement and brand salience**

Alba and Chattopadhyay (1986) argue that effective product placement can enhance brand salience, strengthen memory, and influence consumer decision-making. This is supported by Jraisat et al. (2023), who emphasize that brand salience not only improves recall but also shapes positive brand perceptions. Other studies suggest that brand salience can be elevated through effective advertising and market dominance (Miller & Berry, 1998), as well as product innovation and differentiation (Remaud & Lockshin, 2009). Romaniuk and Sharp (2004) further highlight the importance of consistent brand placement within relevant contexts to reinforce brand associations in consumers' minds. Thus, product placement plays a strategic role in building brand salience and strengthening brand positioning in the market.

**H2:** Product placement with virtual influencers has a positive effect on brand salience.

**H2a:** Product placement with virtual influencers has a positive effect on Gucci's brand salience in Jakarta and Yogyakarta.

**H2b:** Product placement with virtual influencers has a positive effect on Nike's brand salience in Jakarta and Yogyakarta.

Based on the relationships between the variables, the research model is as follows:

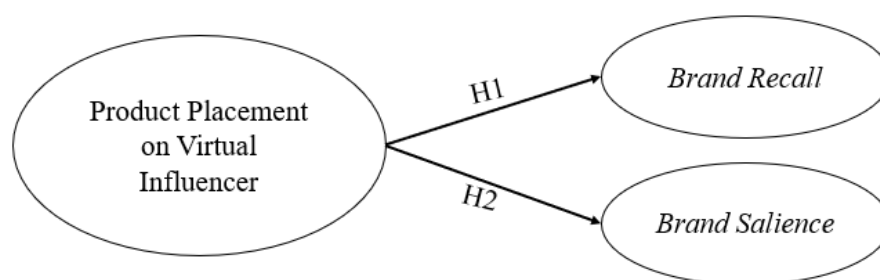


Figure 1. Research Model

## **2. RESEARCH METHOD**

### **Research Design**

This study employs a causal design using a pre-test and post-test experimental method without a control group (Malhotra, 2010). Measurements were conducted before and after treatment on a single experimental group randomly selected, with no control group due to time and resource constraints. The experiment was carried out over eight months, from August 2024 to March 2025.

Data validity was maintained through four screening questions and two manipulation check questions to assess participants' understanding of the treatment.

### Participant

This study applied a field experiment with a convenience sampling technique, involving students from Universitas Padjadjaran (West Java), Universitas Negeri Yogyakarta, and Universitas Gadjah Mada (D.I Yogyakarta). Participants were recruited through three stages: initial recruitment, direct approach, and referral, with incentives in the form of pins and e-money balance. The total number of participants was 631, consisting of 300 from West Java and 331 from D.I Yogyakarta. In West Java, 39 participants were eliminated due to refusal, lack of an Instagram account, or failure in the manipulation check. In D.I Yogyakarta, 121 participants were excluded for similar reasons, including incorrect brand identification. The majority of participants were 18–24 years old, predominantly female, and active on Instagram for 1–2 hours per day. The average duration of Instagram use was 4–6 years in West Java and 7–9 years in D.I Yogyakarta.

Table 1. Participant

Description	West Java	D.I Yogyakarta
Age	18 – 24 years old	18 – 24 years old
Gender	Female	Female
Length of Instagram Use	1 – 2 hours per day	1 – 2 hours per day
Duration of Instagram Use	4 – 6 years	7 – 9 years

The selection of these two regions was based on differences in provincial minimum wages, with West Java set at Rp 2,191,232 (Arnani, 2024) and D.I. Yogyakarta at Rp 2,264,080 (Nabilla, 2025). These differences were considered to examine whether variations exist in the effects of the applied marketing strategy. In terms of lifestyle, West Java has relatively adequate transportation infrastructure, whereas in D.I. Yogyakarta, most residents still rely on private vehicles. Nevertheless, food and commodity prices in D.I. Yogyakarta are relatively lower compared to West Java (Nabilla, 2025; Antara, 2025).

### Treatment

The treatment in this study consisted of Instagram content from the virtual influencer @allysagladys featuring product placements of Gucci (Figure 2) and Nike (Figure 3). These contents, designed with different concepts and backgrounds, were independently planned and produced by the researcher over six months, from initial design to final upload preparation. Brand selection was based on concept suitability, influencer visuals, and brand popularity. To create the visual content and captions, the researcher used Leonardo AI, Clipboard, Adobe Firefly, Let's Enhance, and ChatGPT. Gucci and Nike were chosen because they could be optimally visualized within the two main concepts: sporty and girl crush.

The treatment was administered by exposing participants to the Instagram content for five minutes. During this period, participants were observed without interruption. After the exposure session ended, participants were not allowed to re-view the content and were immediately instructed to complete the questionnaire as part of the research data collection process.



Gambar 2. Penempatan Produk Gucci  
Sumber: Allysa Gladys (n.d)



Gambar 3. Penempatan Produk Nike  
Sumber: Allysa Gladys (n.d)

## Procedure

The procedure began with an explanation of the experiment and the distribution of a barcode link directing participants to a questionnaire containing a consent form, participant characteristics, and research questions. Participants then completed a pre-test, followed by the treatment stage, which involved exposure to content for five minutes through the researcher's device. Afterward, participants completed a manipulation check, and only those who passed proceeded to the post-test. Upon completing the entire questionnaire, participants received an expression of gratitude from the researcher and were given an incentive in the form of a pin. Each experimental session lasted approximately 10 minutes.

## Measurement

Brand recall and brand salience were measured before and after the treatment. Measurement was conducted by asking participants to mention three luxury fashion and sportswear brands they remembered after the exposure. Brand recall was measured using a binomial scale with two categories, coded as 0 and 1. A score of 0 was assigned if participants failed to mention one or both target brand categories, and a score of 1 if they successfully mentioned both (Gamage et al., 2023; Kongmanon & Petison, 2022; Davtyan et al., 2021; Chan, 2020). Meanwhile, brand salience was measured using an ordinal scale with four codes: 3, 2, 1, and 0. A score of 3 was assigned if the brand was mentioned first, 2 if second, 1 if third, and 0 if the brand was not mentioned at all (Babin & Carder, 1996; Johnstone & Dodd, 2008; Hong et al., 2008; Valentini et al., 2018; Suhardi et al., 2022). The two brands used in the experimental content were Gucci and Nike.

The data were collected using questionnaires administered before and after the treatment. Participants were asked to mention "three luxury fashion and sportswear brands they remembered." The data were analyzed using a paired t-test to examine differences before and after the treatment, with the aid of Statistical Product and Service Solution (SPSS) version 29. In addition, effect sizes were calculated using Cohen's *d* to determine the magnitude of the treatment's impact on brand recall and brand salience (Lakens, 2013). Effect sizes were classified as small ( $d = 0.20$ ), medium ( $d = 0.50$ ), and large ( $d = 0.80$ ) (Cohen, 1998).

### 3. RESULT AND DISCUSSION

#### Data Analysis Result

Table 1. Brand Recall Data Analysis Result

West Java						
Brand	BR Before	BR After	Mean Before	Mean After	t-statistic	Cohen's d
Overall	310	403	0,5939	0,7720	-8,611*	0,4727
Gucci	128	180	0,4904	0,6897	-6,506*	0,4947
Nike	182	223	0,6973	0,8544	-5,644*	0,4496
D.I Yogyakarta						
Brand	BR Before	BR After	Mean Before	Mean After	t-statistic	Cohen's d
Overall	220	373	0,5251	0,8902	-14,493*	0,4919
Gucci	99	201	0,5762	0,8190	-8,480*	0,5106
Nike	121	172	0,4737	0,9617	-12,310*	0,4408

BR: Brand Recall; \*p-value < 0,01.

Overall, brand recall increased in both regions after the treatment. In West Java, the average brand recall rose from 0.5939 to 0.7720 ( $t = -8.611$ ,  $p < 0.01$ ,  $D = 0.4727$ , H1 supported). In D.I. Yogyakarta, the increase was from 0.5251 to 0.8902 ( $t = -14.493$ ,  $p < 0.01$ ,  $D = 0.4919$ , H1 supported). For Gucci, the increase higher in D.I. Yogyakarta, from 0.5762 to 0.8190 ( $t = -8.480$ ,  $p < 0.01$ ,  $D = 0.5106$ , H1a supported), compared to West Java, which increased from 0.4904 to 0.6897 ( $t = -6.506$ ,  $p < 0.01$ ,  $D = 0.4947$ , H1a supported). A similar pattern was observed for Nike, with a higher increase in D.I. Yogyakarta from 0.4737 to 0.9617 ( $t = -12.310$ ,  $p < 0.01$ ,  $D = 0.4408$ , H1b supported) than in West Java from 0.6973 to 0.8544 ( $t = -5.644$ ,  $p < 0.01$ ,  $D = 0.4496$ , H1b supported).

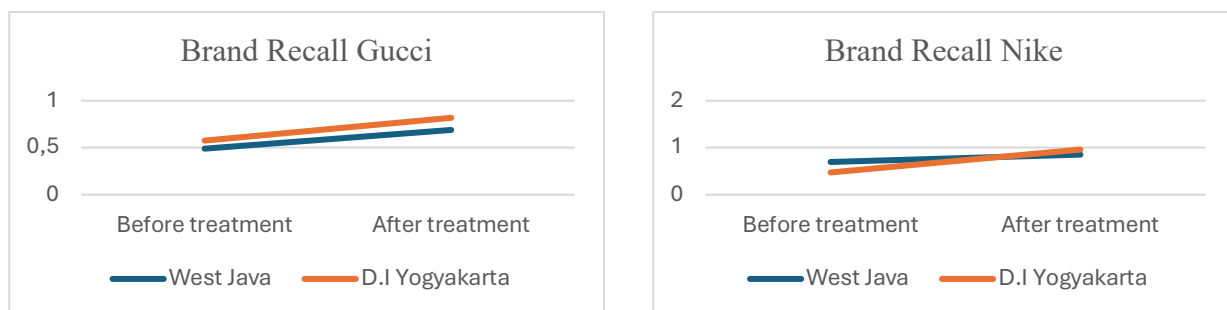


Figure 3. Comparison of Gucci and Nike brand recall in West Java and D.I. Yogyakarta

The comparison of brand recall improvement for Gucci after treatment was evident in both regions, but it was higher in D.I. Yogyakarta ( $\Delta BR = 0.2428$ ) than in West Java ( $\Delta BR = 0.1993$ ). This indicates that exposure to virtual influencer content in D.I. Yogyakarta was more effective in strengthening Gucci's brand recall compared to West Java. As a luxury fashion brand, Gucci is relatively uncommon among university students; therefore, most participants did not recall it prior to exposure. However, after being exposed to virtual influencer content, participants' memory was activated, enabling them to recall Gucci immediately.

The comparison of brand recall for Nike was higher in D.I. Yogyakarta ( $\Delta BR = 0.488$ ) than in West Java ( $\Delta BR = 0.1571$ ). This finding indicates that exposure to virtual influencer content for Nike was more effective in D.I. Yogyakarta than in West Java. As a sportswear brand already familiar to university students and relatively more affordable compared to Gucci, Nike was



generally recalled prior to the treatment. Therefore, the treatment primarily served to reinforce participants' existing memory of the Nike brand.

Table 2. Brand Salience Data Analysis Result

West Java						
Brand	BS Before	BS After	Mean Before	Mean After	t-statistic	Cohen's d
Overall	702	918	1,3448	1,7586	-7,382*	1,2808
Gucci	305	432	1,1686	1,6552	-5,941*	1,2351
Nike	397	486	1,5211	1,8621	-4,460*	1,3232
D.I Yogyakarta						
Brand	BS Before	BS After	Mean Before	Mean After	t-statistic	Cohen's d
Overall	520	935	1,2411	2,2315	-14,493*	1,3989
Gucci	260	540	1,2381	1,8810	-8,480*	1,5734
Nike	260	395	1,2440	2,5837	-12,310*	1,0985

BS: Brand Salience; \*p-value < 0,01.

Overall, brand salience increased in both regions following the treatment. In West Java, brand salience rose from an average of 1.3448 to 1.7586 ( $t = -7.382$ ,  $p < 0.01$ ,  $D = 1.2808$ , H2 supported), while in D.I. Yogyakarta it increased from 1.2411 to 2.2315 ( $t = -14.493$ ,  $p < 0.01$ ,  $D = 1.3989$ , H2 supported). For Gucci, the increase was higher in D.I. Yogyakarta, rising from 1.2381 to 1.8810 ( $t = -8.480$ ,  $p < 0.01$ ,  $D = 1.5734$ , H2a supported), compared to West Java, which rose from 1.1686 to 1.6552 ( $t = -5.941$ ,  $p < 0.01$ ,  $D = 1.2351$ , H2a supported). For Nike, the average increase was greater in D.I. Yogyakarta, rising from 1.2440 to 2.5837 ( $t = -12.310$ ,  $D = 1.0985$ , H2b supported), although the effect was more consistent in West Java, with an increase from 1.5211 to 1.8621 ( $t = -4.460$ ,  $D = 1.3232$ , H2b supported). These findings indicate that exposure in D.I. Yogyakarta was more effective in strengthening brand salience, particularly for Gucci.

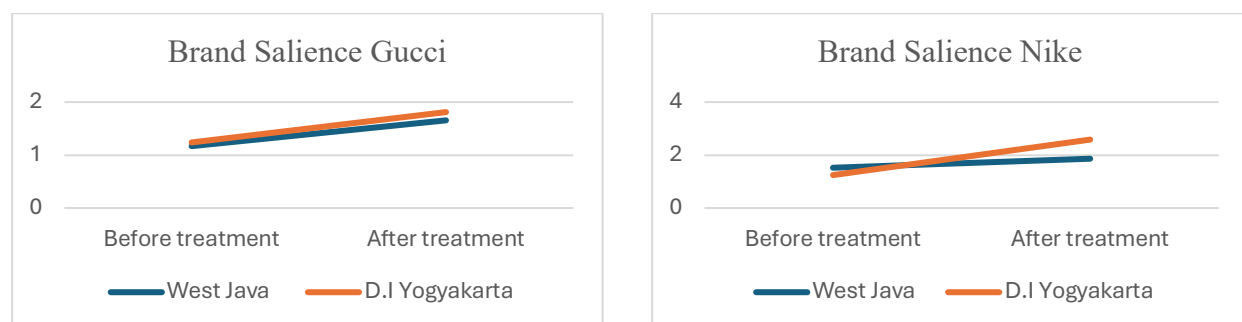


Figure 4. Comparison of Gucci and Nike brand salience in West Java and D.I. Yogyakarta

The increase in Gucci's brand salience was higher in D.I. Yogyakarta ( $\Delta BS = 0.6429$ ) compared to West Java ( $\Delta BS = 0.4866$ ). This indicates that exposure to virtual influencer content in D.I. Yogyakarta was more effective in strengthening Gucci's brand salience than in West Java. The increase in Nike's brand salience was substantially higher in D.I. Yogyakarta ( $\Delta BR = 1.3397$ ) compared to West Java ( $\Delta BR = 0.341$ ). This finding indicates that exposure to virtual influencer content in D.I. Yogyakarta exerted a stronger impact in enhancing Nike's brand salience.

### Hypothesis testing result

The findings indicate that participants had better recall of Gucci and Nike after the treatment. This result aligns with Bressoud et al. (2010), which stated that product placement practices can

enhance brand recall, particularly when products are displayed on large screens. Similar studies by Gupta and Lord (1998), Davtyan et al. (2016), and Gamage et al. (2023) consistently demonstrated that product placement has a positive and significant effect on brand recall.

This study is further supported by Chan (2020), who stated that brand recall is higher when brands are fully displayed rather than partially. In addition, Coker and Altobello (2018) found that the effectiveness of product placement increases when products are presented with appealing visuals and in relevant contexts. Vashist (2017) supported these finding by showing that explicit product placement is more effective in enhancing brand recall compared to implicit placement. Consistent with these findings, Mackay et al. (2009) emphasized that product placement strategies are among the most effective marketing techniques for building brand awareness.

The test results for the second hypothesis, including its two sub-hypotheses, indicate a positive and significant effect. Product placement through virtual influencers significantly affect the brand salience of Gucci and Nike. These findings are consistent with Johnstone and Dodd (2000), who highlighted that repeated exposure increases the likelihood of a brand being remembered in the long term and enhances the probability of it becoming top of mind. Similarly, Hong et al. (2008) demonstrated that product placement can strengthen brand salience when the product is well-integrated into the content, making it more effective in shaping perceptions and enhancing consumer memory.

Although the results differed between Gucci and Nike, the findings align with Karrh (1998), who stated that brands already familiar to the audience tend to be easily recalled than those rarely encountered. These results are further supported by Viceli and Shaw (2010), who explained that when audiences already possess prior knowledge or experience of a brand, associations are more easily formed. Consequently, when a brand is displayed in a context aligned with existing consumer associations, brand recall is reinforced and more easily triggered.

All hypotheses in this study were supported and have significant effects. These findings are consistent with Statista (2025), which reported Nike as the world's most valuable sportswear brand. Furthermore, according to the Top Brand survey (2023), Nike ranked second among the best sportswear brands in Indonesia. Nike's high popularity, combined with its relatively affordable pricing, makes it more recognizable and accessible to university students as the primary target market. Conversely, Gucci, as a luxury with significantly higher prices, tends to be less accessible to this market segment. Accordingly, the treatment in this study reinforced existing memory. This indicates that most participants already had prior knowledge of both brands, with exposure through virtual influencers served to strengthen brand recall.

The findings also show that product placement through virtual influencers on Instagram was more effective in enhancing brand recall and brand salience in D.I. Yogyakarta compared to West Java. This higher effectiveness is influenced by the intensity of Instagram use among students as the primary platform for social interaction and digital content consumption (We Are Social, 2025), as well as the cultural values and lifestyle in D.I. Yogyakarta that are more adaptive to global trends. These results are in line with Jin and Muqaddam (2019), who emphasized that the effectiveness of product placement is influenced by audience engagement with the platform and cultural values with the brand image. While previous studies have primarily focused on traditional media in enhancing brand recall (Gupta & Lord, 1998; Russell, 2002), this study expands current understanding by demonstrating visually oriented social media platforms such as Instagram to exert stronger effects, particularly in developing countries.

#### 4. CONCLUSION AND RECOMMENDATION

The findings indicate that all hypotheses were supported. Product placement through virtual influencers had a positive effect on brand recall and brand salience for Gucci and Nike in both West Java and D.I Yogyakarta with more significant changes observed for Gucci. These results suggest that the effectiveness of product placement is also influenced by external factors such as lifestyle and purchasing power. This study further reveals that social media serves as an effective platform for product placement strategies, while virtual influencers were well-received by the public and proved to be effective promotional media, particularly in the context of marketing global fashion brands.

This study has several limitations. The participants were limited to university students. The findings cannot be generalized to the broader consumer segment. The variables examined were also limited to brand recall and brand salience. In addition, the exposure duration in of the experimental content was relatively short, which may not fully represent real-world consumer exposure to the treatment. Therefore, future research should involve more diverse samples and extend the exposure duration to obtain more comprehensive results. Future studies are also encouraged to explore other artificial intelligence technologies, employ different brands, and incorporate additional variables such as product placement prominence (Gupta & Lord, 1998; Vashist, 2017), brand attitude (Mackay et al., 2009; Balasubramanian et al., 2014), and brand recognition (Davtyan et al., 2016; Babin & Carder, 1996). Moreover, adopting more varied experimental designs would yield richer insights. From a practical perspective, marketers can leverage virtual influencers as a promotional strategy strategy by displaying products or logos clearly, using engaging visual elements, and applying explicit product placements to strengthen consumer associations.

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