



Article

Eye Tracking Study on the Impact of CARE Model on Brand Recall in Influencer Marketing

Article History:

Name of Author:

Rajat Bandopadhyay¹, Nishita Jain²

Affiliation:

¹Assistant Professor, Symbiosis Centre for Media & Communication (SCMC), Symbiosis International (Deemed University), Maharashtra, Pune, India

²Research Scholar, Faculty of Media and Communication, Symbiosis Centre for Media & Communication (SCMC), Symbiosis International (Deemed University), Maharashtra, India

Corresponding Author:

Dr. Ketaki Kulkarni

nishitawassan@gmail.com

How to cite this article: Bandopadhyay R, et al. Eye Tracking Study on the Impact of CARE Model on Brand Recall in Influencer Marketing. *J Int Commer Law Technol.* 2025;6(1):988–1002

Received: 7-10-2025

Revised: 18-10-2025

Accepted: 05-11-2025

Published: 20-11-2025

©2025 the Author(s). This is an open access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0>)

Abstract: This Eye-Tracking study explores the impact of influencer marketing through Instagram reels, focusing on the consumer and their ability to identify branded posts and their respective brand recall abilities. The study was conducted among 18 participants and reveals that influencer marketing effectively enhances brand recall and suggests a link between the Covert Advertising Recognition Effects Model (CARE) with Brand Recall. As evident in the study, using such innovative methods to study influencer marketing on social media can provide insights into consumer perception and their ability to recall brands, and how it can be used to make brands more information-centric to engage audiences and turn them into potential future buyers. Moreover, the study also revealed that the selection of relevant influencers and their effectiveness in the methods of promoting brands, along with the use of relevant hashtags, are crucial for effective marketing. Future research can expand the scope of the study to include a larger group of social media users and other platforms for eye-tracking studies. The relationship between brand recall abilities and covert advertising recognition effects also needs further investigation at a larger scale with more diverse audiences for different social media platforms.

Keywords: Influencer Marketing, Instagram Reels, Eye-Tracking Study, Brand Recall, Covert Advertising Recognition Effects (CARE).

INTRODUCTION

Instagram is a popular social media platform with millions of registered users. The application (App) allows users to share their photographs and videos, and allows online sellers and businesses to reach out to their customers. According to the Influencer Marketing Benchmark Report 2023, various brands and marketing agencies are onboarding nano and micro-influencers, and the influencer marketing industry is bound to grow to 21.1 billion dollars in 2023 (Geyser, 2023). The platform today functions as a hub for businesses, organizations, and popular

brands to effectively connect with their target audience. With rising popularity and usage, the app has included specific features for content creators, business owners, and advertisers to use the platform effectively to engage and interact with their stakeholders. The increase in the number of users on social media is happening across the world, and a similar boost of social media is enabling the rise of Indian influencers. Thus, enabling brands to rope in influencers and reach out to their respective target audience. India has seen a rapid rise in the number of Instagram influencer accounts (Vaidya, 2020), and

according to Statista, India has recorded a total of 229 million Instagram account users as of January 2023, against 143 million in the United States (Countries with Most Instagram Users 2023 | Statista, 2023).

Users engage with branded content on influencer accounts based on a lot of factors, such as being familiar with a type of brand and the level of credibility the influencer has with a verified account, the number of followers, and the way the influencer engages with viewers online. Studies have shown that Indian users engage in seeking information and exhibiting active participation in Instagram influencer accounts with the motive of seeking gratification (Lele & Hadole, 2023).

Literature Review

Introduction to Brand Recognition & Recall

A brand is created to be identified through several attributes that give it a unique identity and make it stand out from its competition (Sammur-Bonnici, 2015). Consumers identify a brand through their various attributes and then get influenced to make the actual purchase. The element of recognition is identified by the consumer through a visual cue, which includes logo, packaging, product, or advertisements and jingles, and this is where brand recognition plays a vital role. (Smith & Aaker, 1992). Most importantly, it is the consumers and buyers who are more likely to purchase products belonging to certain brands that they can easily identify (Macdonald and Sharp, 2000). Brand recall is the ability of a customer to remember a brand name. It includes remembering various aspects of the brand, such as logo, color, and the products belonging to the brand, along with recognition. Brand recall is also credited for helping consumers make buying decisions (Khurram et al., 2018).

Eye Fixation and Recall

As of today, brand recall has not been studied extensively in the context of social media marketing, and there are a few studies that have outlined a positive correlation between eye fixation and memory recall. Previous studies have shown that longer fixations lead to a strong recall by viewers; thus, it is suggested that the longer a viewer watches content online, gives them the ability to recall (Tversky, 1974). However, one recent study has also shown limitations in the ability to recall ads featured on YouTube (Tangmanee, 2016).

Influencer Marketing and Social Media

Influencer marketing strategies have gained a lot of popularity over the last decade. Influencer marketing

has been utilized by many brands as a part of their outreach and online selling. Thus, it is essential to understand the meaning of social media influencers and how they add value to a brand in online marketing. Simply put, social media influencers are content creators and are known for their significant numbers of online followers, with their unique persona, identity, and niches, which means influencers will choose to have a personality of their own and focus on a particular genre of content for their relevant target audience, and influencers make income through brand endorsements. They create content that may be visual, textual, or narrative-based and that is considered authentic by their followers or online users seeking information or advice. Influencers produce content for numerous social media platforms such as X (formerly Twitter), Facebook, Instagram, LinkedIn, etc. (Duffy, 2020). As discussed before, influencer marketing has become a popular way of promoting brands, and every influencer has a definite number of followers on social media, based on which they are categorized as Nano, Micro, and Macro. Where Nano influencers have less than 10,000 followers, Micro-influencers have between 10,000 to 1,00,000 followers and Macro influencers have more than 1,00,000 followers (Geyser, 2022)

Eye Tracking in Influencer Marketing Studies

Studies have linked eye-tracking with market research and brand awareness studies (Pretorius and Calitz, 2011; Białowas & Szyszka, 2019). Eye tracking studies have been implemented in several pieces of research relating to consumer behavior studies in online shopping. Some of these studies suggested the impact of visual brands on online buyers and their ability to recall the brand names. (Zhou & Xue, 2021; Hayk Khachatryan & Alicia L. Rihn, 2017; Myers, 2020; Chae et al., 2012). The advantage of eye-tracking technology is its ability to track the eye movements of the consumer or, in this case, the user, as they watch for visual cues on social media, which provides visual data of eye fixation and the duration of the watch time. There are existing studies where the eye-tracking method has been used to study influencer marketing, one of which has primarily focused on identifying sponsored content (De Veirman & Hudders, 2019), and some studies have revealed that disclosures like 'Sponsored Post' or "Paid Partnership" labels get more attention from online users as they watch such posts on social media and were able to differentiate between commercial and non-commercial posts (Boerman & Müller, 2021).

The Current Study

This paper focuses on influencer marketing, particularly on Instagram as a platform, and how

Instagram reels made by influencers impact brand recall and the purchase intent of consumers. This study will analyze the ability of online users to identify brand partnership posts through visual cues, as suggested in the Covert Advertising Recognition Effects Model (CARE), and whether these reels enable the ability to recall the brand names by the users. It will bridge the gap by examining how users view the influencer posts by tracking their eye movements and establishing a connection between their eye fixation points and brand recall ability, along with the intent to purchase after watching them. For this study, we will focus on influencer accounts from Instagram as, according to Buffer, Instagram is ranked no. 4 among the top 24 social media platforms in the world as of January 2024 (Oladipo, 2024) additionally Instagram is also popular in India with millions of young internet users actively watching Instagram content daily according to a report published on Forbes (Wong, 2024).
Scope and Objectives of this study

The objective of the study would be,

- To establish the role of CARE in the Brand Recall
- To ascertain the extent to which users can distinguish between paid partnership posts and non-commercial posts
- To establish the connection between brand recall and the purchase intent of users
- The following hypothesis can thus be generated for the study based on the CARE model: -
- H1: The Brand Recall by Instagram users does not depend on the CARE model
- H2: The Brand Recall by Instagram users is dependent on the CARE model.
- The dependent variable in this hypothesis would be the ability to recall a brand, while the independent variable would be the ability to identify and distinguish between paid partnership posts and non-commercial posts by users.

CARE = Covert Advertising Recognition and Effects
Brand Recall = Ability of the user to the unaided brand recall.

Theoretical Framework

CARE Model

The CARE model has been used to study the persuasive impact of social media influencers on customer engagement and purchase intent of the consumers, based on the credibility of the influencer. This model proposes two approaches to recognizing advertisements- one in which the approach is a disclosure-driven approach in which the viewers

recognize advertisements via attention to the ad, while the second approach is based on the context of the message presented in the advertisement and its understandability by the viewer and the purchase decisions made by the user after watching the covert advertisement. (Wojdyski & Evans, 2020).

Exception Taxonomy and Prioritization

Consistent exception occurrences signal systemic issues, warranting dedicated analysis. Conversely, isolated instances, even if significant, demand limited investigative resources. A well-defined exception type taxonomy streamlines this prioritization process. Classification parameters typically encompass exception type, severity, expected frequency, recurrence monitoring, and an urgency matrix that facilitates automated resolution capability mapping or

technology-assisted triage. Category-wise SLA determination, decision automation, and further advice can enhance routing efficiency. Severity categories range from critical—systemic risk necessitating immediate resolution or ban—through high and medium levels, indicative of poor user experience or reputation impact. Diminished and low severity assess less business-sensitive third-party network flows, avoiding secondary resolution burden when associated with more critical counterparts. Level recurrences are also scrutinized. Documented SLAs integrate with ticketing engines for observability, enabling statistical tracking against defined thresholds. Two-dimensional escalation matrices—time-to-resolution and service-class-based—inform decisioning and routing rules, ensuring clear escalation pathways. A set of remediation and technology systems capable of automating resolution within defined SLAs links to each state, enabling end-to-end-ticketing integration.

Research Methodology

Methodology of the Study: Eye-tracking

This study will utilize Eye tracking, which is used in studying the behavior of viewers and content consumers of TV, Films, and the Internet. This method is effective in understanding how viewers consume content and this in turn helps content creators, and producers to make appropriate decisions to make better content. The eye-tracking study is carried out with screen-based eye-tracking devices that are attached to a computer screen/monitor or by having subjects wear eye-tracking glasses or by using eye-tracker webcams. Eye tracking study has been used to understand the behavior of Instagram users and their ability to distinguish visual cues of promoted and non-promoted posts (Boerman & Müller, 2021), this research will be implementing the same for the sake of this study. In this study, the area of interest was defined into three categories: -
1. The area featuring the video reel. 2. The area of the

captions containing the text, hashtags, and engagement sections that include buttons such as the ‘Like’, ‘Share’, and ‘Comment’. 3. Area of the negative space that is beyond the boundary of the post that features the remaining part of the browser and desktop.

Selection of Influencer Accounts on Instagram:

In this study, one influencer from each category, such as macro influencer, micro-influencer, and nano influencer, was selected from websites such as The Good Creator

(<https://goodcreator.co/instagram-influencers/nano-influencers>) and Whizco (<https://www.whizco.in/blogs/macro-Influencers-In-India>). Influencers were shortlisted based on the number of followers as of September 2023, and particularly products from popular brands that are utilized or known to all ages and genders in the B2C segment. Thus, the following influencers were selected for the study: -

Name of Influencer	Influencer Type	Instagram Profile Link
Shenaz Treasurywala	Macro	https://www.instagram.com/shenaztreasury?utm_source=ig_web_button_share_sheet&igsh=ZDNlZDc0MzIxNw==
Jatin Israni	Micro	https://www.instagram.com/jatinkiduniya?utm_source=ig_web_button_share_sheet&igsh=ZDNlZDc0MzIxNw==
Dhaval Zaveri	Nano	https://www.instagram.com/zaveri_dhaval?utm_source=ig_web_button_share_sheet&igsh=ZDNlZDc0MzIxNw==

One reel from each influencer’s profile mentioned above was shortlisted for the eye-tracking study:

Name of Influencer	Link of the Instagram Reel
Shenaz Treasurywala	https://www.instagram.com/reel/Ct9fcfkJhL-/?utm_source=ig_web_copy_link&igshid=MzRlODBiNWFlZA==
Jatin Israni	https://www.instagram.com/p/CSwPwbVINCY/?utm_so

	urce=ig_web_ copy_link&ig shid=MzRIO DBiNWFIZA ==
Dhaval Zaveri	https://www.i nstagram.com /reel/Cw4f5A QopXg/

The above-shortlisted video reels were opened as separate tabs in the browser of the computer which was tracked by the Tobii software dashboard.

Sampling

The sampling process in this study involved 18 volunteers of the age group between 18-30. The volunteers were invited to participate in the experiment through an email invite to a local city college, where the teaching faculty allocated them to participate in the experiment. It was ensured that the participants were users of the Instagram app. The volunteers were paid a stipend to participate in the research, and they were also provided with a complete orientation about the experiment before the session through online meetings and during the day of the session at the venue. As mentioned above Tobii system was employed for this study, where the participating volunteers were given hands-on guidance about the procedure through a trial run before the commencement of the session.

Observation of Eye-Tracked Data

The observation of visuals recorded in the eye-tracking instrument for each participant is described based on the area mentioned above of interests

Area of Interests:

- 1) Area consisting of the video content reel
- 2) Area consisting of the caption text along with the name of the influencer, Hashtags, and cions - Like, Comment, and Share
- 3) Area beyond the video reel and the caption sections as mentioned above

Participants 1 to 9	Participants 10 to 18
---------------------	-----------------------



Figure 1. Eye Tracking Visual Data

Results from the Survey Questionnaire.

The study results were derived from conducting rigorous statistical analysis of a total of 18 responses to the survey questionnaire. The questionnaire used to collect the primary set of data includes different types of questions that enquire about the respondents' demographic details, their interpretation of the three influencers selected for the study, and their perception of the CARE model in Brand Recall. These aspects of the questionnaire are discussed in the sections below.

Demographics

The demographics of any set of data represent the respondents' basic characteristics and can help generate more insights into the study.

Frequencies of Age					
Age	Counts		% of Total		Cumulative %
18-20	3		16.7 %		16.7 %
20-25	15		83.3 %		100.0 %

The respondents include 83.3% in the age group of 20 to 25 years and the remaining 16.7% are in the age group of 18-20 years.

Frequencies of Occupation						
Occupation		Counts		% of Total		Cumulative %
Student		17		94.4 %		94.4 %
student + employed		1		5.6 %		100.0 %

The occupation of the respondents shows that 94.4% are students without any employment option, and only one of the 18 respondents is a student who is also employed.

Frequencies: How often do you see commercial partnership posts on Instagram?							
How often do you see commercial partnership posts on Instagram?			Counts		% of Total		Cumulative %
Often			9		50.0 %		50.0 %
Rarely			1		5.6 %		55.6 %
Sometimes			5		27.8 %		83.3 %
Very often			3		16.7 %		100.0 %

The next question enquires about how often the respondents notice commercial paid partnership posts on Instagram. It is seen that 50% agree to have often experienced such types of posts. It is only 5.6% stated to have rarely experienced such posts.

Frequencies of Do you remember the brands that are advertised or shown in commercial partnership posts?							
Do you remember the brands that are advertised or shown in commercial partnership posts?			Counts		% of Total		Cumulative %
Often			4		22.2 %		22.2 %
Sometimes			14		77.8 %		100.0 %

The next question enquires about their initial brand recall ability. It asks the respondents whether they remember the brands that are shown in the partnership posts. 77.8% agreed that they have sometimes remembered the brands being advertised in the partnership posts.

Now, as the demographics are being observed, the next set of questions is investigated below.

Eye Tracking Study Results

In this section, the results from the eye-tracking study conducted concerning the three influencers – Dhaval Zaveri-Nano Influencer, Jatin Israni-Micro-Influencer, and Shenaz Treasurywala- Macro-Influencer. The results generated are as follows.

The posts from each of the influencers are being shown to the respondents, are the seven essential elements often observed in such commercials are investigated.

Frequencies of Paid Partnership Label						
Paid Partnership Label		Counts		% of Total		Cumulative %
No		5		27.8 %		27.8 %
Yes		13		72.2 %		100.0 %

The first element that is asked for is the notice of paid partnership label, and 72.2% responded positively to identifying its presence.

Frequencies of Hashtag label example #Ad							
Hashtag label example #Ad		Counts		% of Total		Cumulative %	
No		3		16.7 %		16.7 %	
Yes		15		83.3 %		100.0 %	

The next component is that of the hashtag label. It is one of the most essential components of such commercials, and 83.3% agree to have noticed the same as well.

Frequencies of the Company/brand handle tagged							
Company/brand handle tagged		Counts		% of Total		Cumulative %	
No		4		22.2 %		22.2 %	
Yes		14		77.8 %		100.0 %	

For finding out the company or brand handle tagged in the post, 77.8% can recognize it.

Frequencies of Coupon code for discount							
Coupon code for discount		Counts		% of Total		Cumulative %	
No		12		66.7 %		66.7 %	
Yes		6		33.3 %		100.0 %	

The coupon codes being provided along with the paid advertisement created is however noticed by only 33.3% of the respondents.

Frequencies of Collaboration tag							
Collaboration tag		Counts		% of Total		Cumulative %	
No		12		66.7 %		66.7 %	
Yes		6		33.3 %		100.0 %	

The next element is that of the collaboration tag, which is again being observed by only 33.3% of the respondents.

Frequencies of Asking for Registration							
Asking for registration		Counts		% of Total		Cumulative %	
No		13		72.2 %		72.2 %	
Yes		5		27.8 %		100.0 %	

The next option is about an enquiry on the asking for registrations slab and it is seen that 72.2% do not recognise the same.

Frequencies of Other (Celebrity Endorsement)							
Other (Celebrity Endorsement)		Counts		% of Total		Cumulative %	
No		17		94.4 %		94.4 %	

Frequencies of Other (Celebrity Endorsement)							
Other (Celebrity Endorsement)		Counts		% of Total		Cumulative %	
Yes		1		5.6 %		100.0 %	

Lastly, in terms of any other element majority agree not to notice it.

Hereby, out of the options provided, the considered influencers in their paid partnership commercials can generate proper ideas among the respondents about the label they are associated with, the hashtag of the ad, and the recognition of the brand. Other aspects, such as discounts, registration, and collaboration tags, are not significantly observed.

Influencer-Based Analysis

In this section of the study, the influencers considered for the study are investigated in detail to understand their impact on the respondents.

The first influencer considered is Shenaz Treasurywala and the results are as follows-

Frequencies of Shenaz Treasurywala							
Shenaz Treasurywala		Counts		% of Total		Cumulative %	
Bingo		1		5.6 %		5.6 %	
Digital reliance, Windows 11		1		5.6 %		11.1 %	
Hp		1		5.6 %		16.7 %	
Laptop		1		5.6 %		22.2 %	
MacBook Air		1		5.6 %		27.8 %	
Microsoft		2		11.1 %		38.9 %	
Reliance		1		5.6 %		44.4 %	
Reliance Digital Windows in 11		1		5.6 %		50.0 %	
Reliance digital		4		22.2 %		72.2 %	
Windows 11		1		5.6 %		77.8 %	
Windows 11 laptop		1		5.6 %		83.3 %	
Windows 9		1		5.6 %		88.9 %	
Windows, AI Bing, Reliance Digital		1		5.6 %		94.4 %	
Windows, AI Bing, Reliance Digital Store		1		5.6 %		100.0 %	

Frequencies of Which of the following brands have you seen in paid partnerships with the following Instagram influencer accounts? (Including Today) Shenaz Treasurywala							
Which of the following brands have you seen in paid partnerships with the following Instagram influencer accounts? (Including Today) Shenaz Treasurywala		Counts		% of Total		Cumulative %	
Bingo!		1		5.6 %		5.6 %	
Garnier		1		5.6 %		11.1 %	
None, I did not see any brand		1		5.6 %		16.7 %	
Reliance Digital		14		77.8 %		94.4 %	
Skechers		1		5.6 %		100.0 %	

The two tables above show that for Shenaz Treasurywala, the paid partnerships involve mostly the digital set of products. Whether it is Reliance Digital, which scores 77.8% in terms of the most noticed brand, to getting involved with Windows, Microsoft, and Bing, the product focus is mostly technical. It is Reliance Digital that is the most noticed paid partnership amongst all.

Frequencies of Jatin Israni							
Jatin Israni		Counts		% of Total		Cumulative %	
Bingo		17		94.4 %		94.4 %	
Skechers		1		5.6 %		100.0 %	

Frequencies of Which of the following brands have you seen in paid partnerships with the following Instagram influencer accounts? (Including today) Jatin Israni							
Which of the following brands have you seen in paid partnerships with the following Instagram influencer accounts? (Including today) Jatin Israni		Counts		% of Total		Cumulative %	
Bingo!		15		83.3 %		83.3 %	
Mama Earth		1		5.6 %		88.9 %	
Reliance Digital		1		5.6 %		94.4 %	
Skechers		1		5.6 %		100.0 %	

The next influencer considered is that of Jatin Israni. The list of brands associated with the paid partnership here is quite different from the previous influencer. In this case, the clear brand noticed is that of Bingo, which is a chips brand. It leads the other categories with a high percentage and can be considered the most effective brand in terms of Jatin Israni.

Frequencies of Dhaval Zaveri							
Dhaval Zaveri		Counts		% of Total		Cumulative %	
Decathlon		1		5.6 %		5.6 %	
Event		1		5.6 %		11.1 %	
Windows 11		1		5.6 %		16.7 %	
Skechers		15		83.3 %		100.0 %	

Frequencies of Which of the following brands have you seen in paid partnerships with the following Instagram influencer accounts? (Including Today) Dhaval Zaveri							
Which of the following brands have you seen in paid partnerships with the following Instagram influencer accounts? (Including Today) Dhaval Zaveri		Counts		% of Total		Cumulative %	
Skechers		16		88.9 %		88.9 %	
Skin Elements		1		5.6 %		94.4 %	
Zee5		1		5.6 %		100.0 %	

The next influencer is that of Dhaval Zaveri, and in this category as well, the brand that is most reflective out of all is that of Skechers. More than 80% respondents in both tables have agreed to identify it in their paid partnerships. The respondents are then asked to select their favourite out of the three influencers and the brand that they think they recalled the most from their paid partnerships.

Frequencies of Which one of the three influencers mentioned above do you like the best								
Which one of the three influencers mentioned above do you like the best				Counts		% of Total		Cumulative %
Dhaval Zaveri				7		38.9 %		38.9 %
Jatin Israni				4		22.2 %		61.1 %
Shenaz Treasurywala				7		38.9 %		100.0 %

Here, there are 38.9% votes for Dhaval Zaveri and Shehnaz Treasurywala, while 22.2% for Jatin Israni.

Frequencies of Out of your favorite influencer mentioned in the previous question, which of their advertised brands can you recall most clearly								
Out of your favourite influencer mentioned in the previous question, which of their advertised brands can you recall most clearly				Counts		% of Total		Cumulative %
Bingo		4		22.2 %		22.2 %		
Reliance Digital		6		33.3 %		55.6 %		
Skechers		6		33.3 %		88.9 %		
Windows 11		2		11.1 %		100.0 %		

Now reflecting on the brands that are most recalled from these influencers, it is found that with 33.3% Reliance Digital and Skechers are found to be the most recalled. Bingo is the second one with 22.2% followed by Windows 11 with 11.1%.

Covert Advertising Recognition and Effects

The above section provides a detailed idea about the respondents' perception of the three influencers provided for the purpose of the study. Now, in order to understand the impact of covert advertising recognition and effects with the aid of brand recall is used.

A total of six items have been used to understand the covert advertising effects, and the descriptives are as follows-

Descriptives										
	N		Mean		Median		SD		Minimum	
I can easily distinguish between regular content and covert advertising in online platforms by these influencers	18		3.22		3.00		1.114		1	5
I feel confident in recognizing when a brand is subtly integrated into their Influencer Videos	18		3.28		3.00		1.179		2	5
I am aware of the various techniques used by influencers to embed their products or messages in media content.	18		3.28		3.00		0.958		2	5
I have, at times, realized that I was exposed to covert advertising only after it was pointed out.	18		3.33		3.00		1.237		1	5
I actively search for signs of covert advertising when consuming online content.	18		3.28		3.00		0.958		2	5

Descriptives														
			N		Mean		Median		SD		Minimum		Maximum	
I believe recognizing covert advertising enhances my ability to make informed consumption choices.			18		3.28		3.00		1.074		2		5	

The mean score for these items shows that for four items, there is a score of 3.33, and the lowest is at 3.22. All the items show that the covert advertising effects are relatively high.

Here, the association of covert advertising effects of the mentioned influencers is being analysed with respect to the age, occupation, and brand recall ability of the respondents using One-Way ANOVA. The results are as follows-

One-Way ANOVA - Age									
		F		df1		df2		p	
Covert Advertising Effects		2.06		1		13.2		0.174	

One-Way ANOVA – Brand Recall									
		F		df1		df2		p	
Covert Advertising Effects		1.52		1		6.02		0.024	

The ANOVA results clearly show that with a p-value of 0.024 which is less than 0.05, the brand recall abilities of the respondents can differentiate the levels of covert advertising effects. However, it is not based on the age or occupation of the respondents.

The analysis conducted here shows the important deductions from the eye-tracking study conducted. The discussion of these results is provided in the next section

Result

The study focused on two hypotheses based on the theory of Covert Advertising Recognition and Effects (CARE) model

H1: The Brand Recall by Instagram users does not depend on the CARE model

H2: The Brand Recall by Instagram users is dependent on the CARE model.

The One-Way ANOVA Test showed us a statistically significant relationship between respondents' ability to remember and recall brands and identify the covert advertising promotional aspects of the Instagram posts ($p = 0.024 < 0.05$). This indicates that participants with a higher ability to remember brands also showed a greater awareness about covert promotional cues (as measured by the six CARE-model items). With this discovery, it is clear that H1 is rejected and H2 is accepted. The findings provide us with empirical evidence that the CARE model (Hashtags, labels, etc.) is applicable in Instagram marketing deployed through content creators and influencers, and such promotional posts have a strong impact over consumers and their ability to recall brands that are being promoted.

Discussion

The world of branding has seen new heights with the emergence of social media platforms and influencers. In the current times, the number of users on social media platforms such as Instagram makes a critical difference in the brand's popularity levels. It has become mandatory for brands to invest in their social media marketing platforms in order to grasp the interest of their consumers on many levels. One of the most effective ways of marketing on social media platforms is the use of influencers. They have an impact on brand awareness levels equivalent to that of celebrity advertisements, and they are followed by traditional marketing practices. The idea of the study has been to understand the impact of Instagram influencers on brand recall and covert advertising effects among consumers. The study attempted to conduct an eye-tracking analysis where a total of 18 students in the age group of 18 to 25 years were subjected to detailed scrutiny. The study has shortlisted a total of three Instagram influencers and has used them to analyse their content on the platform. The Instagram accounts one of each category Nano Influencer include Dhaval Zaveri, in the Micro Influencer category it is Jatin Israni and for the Macro Influencer category it is Shenaz

Treasurywala and their Eye tracking study was conducted, after which a survey questionnaire was circulated to study their ability to recall brand, identify commercial posts and identify if they would make purchase decisions after watching the posts by Instagram influencer account.

The eye-tracking data obtained from Tobii showed that most participants have scanned both areas of interest 1 and 2 and have watched the reel section featuring an influencer, the brand logo, while in area of interest 2, the participants have read the captions and underlying text associated with the reel post, along with the hashtags. It is also evident from the obtained visual data that most participants tend to see the middle area of the reels, and most participants read the captions and hashtags. Participants, on average, have also viewed the engagement section, consisting of icons such as comment, like, and share. The detailed analysis of the study showed that out of the three categories of influencers, it is the nano and the macro categories that are considered equally impactful among the respondents in terms of paid commercials. It is also surprising to notice that while for the nano and micro influencer, the brand being highly noticeable is quite evident, for the macro influencer there is a greater identification of brands, as put forward by the respondents. For the three categories, the brands that are highlighted include Skechers (88.9%), Bingo (94.4%), and Reliance Digital (77.8%). The respondents believe that these three influencers in different categories can provide them good idea about the paid partnerships that they are displaying (77.2%), the company or brand that they are working for (83.3%), and also the hashtag associated with the partnership (77.8%). But other information, such as how to avail coupons or register further is still not generated with around a positive response from 33.3% of the respondents. This shows that although the brands and companies are being recalled by the respondents, the other elements are still lacking. This might impact the respondent's state of interest in the future.

Thus, the present eye-tracking study provides empirical evidence that the Covert Advertising Recognition and Effects (CARE) model is a relevant framework for understanding brand recall in Instagram influencer marketing. The significant association of brand recall ability with the covert advertising recognition effects- Mandatory $p = 0.024$ -confirms that consumers who better identify cues of commercial intent (paid partnership labels, branded hashtags, tagged brand handles) also exhibit stronger unaided brand recall. These findings corroborate Wojdyski and Evans' 2020 assertion that recognition of advertising format is a critical antecedent to persuasive outcomes in masked advertising environments. Participants fixated

heavily on both the video reel and the caption area, with hashtags (83.3%), brand handles (77.8%), and paid partnership labels (72.2%) receiving the highest attention among disclosure elements. These findings correspond with Boerman and Müller 2021, who found that explicit disclosures attract ample visual attention on Instagram. However, secondary action-oriented cues, such as coupon codes and collaboration tags, were noticed by only about one-third of participants, suggesting that whereas brand identification is strong, conversion-oriented information goes largely unnoticed in short-form reel content. Interestingly, nano and macro influencers were equally favored by the respondents, with Skechers (nano influencer) and Reliance Digital (macro influencer) acquiring the highest recall rates of 88.9% and 77.8%, respectively. This defies the traditional assumption that only macro or celebrity endorsers drive superior recall and suggests that authenticity and niche relevance may be equally or more important than follower count in the Indian context. The results underpin the growing sophistication of Gen-Z Instagram users: they are largely aware of covert advertising practices-mean CARE item scores ≈ 3.22 -3.33 on a 5-point scale-and selectively process commercial cues for informational value rather than rejecting sponsored content outright.

CONCLUSION

The main motive of the study has been to shed light on modern marketing methods in the social media field. The study has been able to gather information from its primary respondents across different categories of influencers who form an integral part of the digital marketing space at present. The underlying idea behind the study has been to determine the brand recall abilities of the respondents from the content provided by such influencers. This is an evidence-based study that has not been fully explored in India. There are very niche studies that have explored Instagram Reels-based influencer marketing and its connection with the CARE model and how it significantly predicts brand recall. The rejection of H1 and acceptance of H2 confirm that the ability of consumers to recognize covert advertising cues directly improves unaided brand recall. Key practical implications emerge thereby: Brands and influencers must focus on clear but non-intrusive disclosure cues-paid partnership labels, branded hashtags, and tagged handles-because those receive maximum visual attention and trigger recall.

The action-oriented information nowadays receives less attention in the short video format and needs to be placed more prominently or more often. This includes coupons, links to registration, and collaboration tags. Nano- and macro-influencers can be similarly effective in brand recall if the influencer-

brand fit is just right, thus offering cost-effective alternatives to brands. This study demonstrates the value of eye-tracking methodology in uncovering subconscious processing of commercial content on social media and opens avenues for larger-scale, multi-platform research incorporating physiological measures and actual purchase behavior. In conclusion, influencer marketing on Instagram remains a potent tool for building brand recall among young Indian consumers-only provided that brands and influencers make strategic use of recognizable covert advertising cues in the context of authentic content.

The future course of research can be directed toward expanding the scope of the study to include a larger group of social media users. Including other platforms for eye-tracking studies such as LinkedIn, X, YouTube and Facebook, can also provide a holistic idea of the domain. Moreover, the relationship highlighted between the brand recall abilities of users and covert advertising effects needs to be investigated in future studies.

Conflict of interest

We as authors, Rajat Bandopadhyay and Nishita Jain, declare no conflict of interest regarding the research paper entitled "Eye Tracking Study on the Impact of CARE Model on Brand Recall in Influencer Marketing". The funding received for this research was purely based on internal research funding provided by the university for its employees and has no external funding from any other funding agencies. Thus, we declare that this does not potentially influence the results or conclusions of this research. There are no potential individuals or entities or external stakeholders apart from the authors of this article that could create a conflict of interest. We have also not previously published any research on this topic that could be perceived as conflicting with the current work. Thus, we would like to declare that there are no conflicts of interest from any side in either form.

Acknowledgment

We would like to sincerely express our gratitude to our mentor, Dr. Sreeram Gopalkrishnan, Director of the Symbiosis Center of Media and Communication, for motivating us to conduct this experiment.

We would like to express our gratitude to Dr. Aradhana Gandhi, Professor of Marketing & Retail - Symbiosis Institute of Business Management (SIBM Pune) & Professor In-charge - Symbiosis Centre for Behavioural Studies (SCBS) Symbiosis Institute of Business Management, for providing us with the opportunity to conduct this experiment at their Tobii equipment lab at SCBS, we would also like to thank the research scholars of SCBS for providing us with required training of using Tobii eye tracking equipment, which was essential for successful conduction of this study.

Next, we would like to thank Sanika Kulkarni, lecturer at Marathwada Mitra Mandal's College of Commerce, Pune, and also her student volunteers who participated in this experiment. We would like to thank our colleagues at SCMC, Kabir Upamanyu and Juhi Rajwani, for their guidance, support, and encouragement throughout this research project. Lastly, we would like to thank Symbiosis International University, Pune, for providing us with the opportunity to utilize the employee research fund to organize this whole experiment.

REFERENCES

1. Belanche, D., Flavián, C., & Pérez-Rueda, A. (2020). Brand recall of skippable vs non-skippable ads in YouTube. *Online Information Review*, 44(3), 545–562. <https://doi.org/10.1108/OIR-01-2019-0035>
2. Boerman, S. C., & Müller, C. M. (2021, October 11). Understanding which cues people use to identify influencer marketing on Instagram: an eye tracking study and experiment. *International Journal of Advertising*, 41(1), 6–29. <https://doi.org/10.1080/02650487.2021.1986256>
3. Gamage, D., Jayasuriya, N., Rathnayake, N., Herath, K. M., Jayawardena, D. P. S., & Senarath, D. Y. (2023). Product placement versus traditional TV commercials: new insights on their impacts on brand recall and purchase intention. *Journal of Asia Business Studies*, 17(6), 1110–1124. <https://doi.org/10.1108/JABS-04-2022-0126>
4. Geyser, W. (2022, November 15). Nano vs. Micro-Influencer Marketing: What's the Difference? *Influencer Marketing Hub*. <https://influencermarketinghub.com/nano-vs-micro-influencer-marketing/>
5. Kato, T. (2023). Contribution of concept recall to brand loyalty: An empirical analysis of design and performance. *Journal of Consumer Behaviour*, 22(4), 895–904. <https://doi.org/10.1002/cb.1983>
6. Kilipiri, E., Papaioannou, E., & Kotzaivazoglou, I. (2023). Social Media and Influencer Marketing for Promoting Sustainable Tourism Destinations: The Instagram Case. *Sustainability*, 15(8), 6374. <https://doi.org/10.3390/su15086374>
7. Kamboj, S. (2019, August 1). Applying uses and gratifications theory to understand customer participation in social media brand communities. *Asia Pacific Journal of Marketing and Logistics*; Emerald Publishing Limited. <https://doi.org/10.1108/apjml-11-2017-0289>
8. Lele, & Hadole. (2023, April). INSTAGRAM USAGE INTENTIONS BY YOUNG INDIANS: A USER GRATIFICATION THEORY APPROACH. *TOJDEL*. Retrieved July 20, 2023, from <https://www.tojned.net/journals/tojdel/articles/v11i02/v11i02-64.pdf>
9. Myers, S. D., Deitz, G. D., Huhmann, B. A., Jha, S., & Tatara, J. H. (2020). An eye-tracking study of attention to brand-identifying content and recall of taboo

- advertising. *Journal of Business Research*, 111, 176–186. <https://doi.org/10.1016/j.jbusres.2019.08.009>
10. PUSPANATHAN, C. A., KHOR, K. K., & SPR RAMENDRAN, C. (2024). THE ABILITY OF A BRAND RECALL TO MEDIATE BETWEEN PRODUCT PLACEMENT AND MULTI-ETHNIC MOVIEGOER'S CONSUMER PURCHASE INTENTIONS. *International Journal of Management Studies*, 31(1), 299–334. <https://doi.org/10.32890/ijms2024.31.1.11>
 11. Smith, M. J., Buckton, C., Patterson, C., & Hilton, S. (2023). User-generated content and influencer marketing involving e-cigarettes on social media: a scoping review and content analysis of YouTube and Instagram. *BMC Public Health*, 23(1), 530. <https://doi.org/10.1186/s12889-023-15389-1>
 12. Statista. <https://www.statista.com/statistics/578364/countries-with-most-instagram-users/> Verma, M. (2023, March 27).
 13. The State of Influencer Marketing 2023: Benchmark Report. Influencer Marketing Hub. <https://influencermarketinghub.com/influencer-marketing-benchmark-report/>
 14. Vaidya, R. (2020, December 11). The rise of the Indian influencer. *Vogue Business*. <https://www.voguebusiness.com/consumers/the-rise-of-the-indian-influencer>
 15. Wojdyski, B. W., & Evans, N. J. (2020). The Covert Advertising Recognition and Effects (CARE) model: Processes of persuasion in native advertising and other masked formats. *International Journal of Advertising*, 39(1), 4-31. DOI: 10.1080/02650487.2019.1658438.