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Research Paper

Virtual Reality Advertising Effect on Consumer Experience and Brand Recall: The Mediating Role of Immersion.

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ABSTRACT

As the market becomes more digital, Virtual Reality (VR) advertising has become a great way to improve the customer experience and help customer remember your brand. This research looks at how VR advertising affects how customer perceive a brand and how well they remember it, with an emphasis on how immersion plays a role. Using Structural Equation Modeling (SEM) to look at data from 350 respondents, the results show that VR advertising greatly improves both the experience of consumers and their ability to remember brands. Also, immersion is seen as a partial mediator, which means that feeling more present and engaged in the VR experience makes the link between seeing ads and brand outcomes stronger. The findings add to the increasing corpus of research on immersive marketing and consumer intention by showing how immersive experiences might connect new types of advertising with real customer reactions. The research shows that marketers need to create really immersive VR experiences that not only keep customers interested but also help them remember the brand. The study also shows how important it is to find the right balance between advanced technology and user-centered design in order to get the most out of marketing. Future studies should look at how VR may be used in other industries, how different demographics respond to it, and how immersive advertising affects customer loyalty over time.

Keywords: Virtual reality, advertising, consumer experience, brand recall, immersion

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1. INTRODUCTION

In today's very competitive digital market, businesses are always looking for new ways to get customer more involved with their brands, help them remember them better, and make the whole brand experience better. Virtual Reality (VR) is one of these new technologies that is changing how marketing works (Cowan et al., 2024). VR advertising creates immersive, interactive spaces where customer may connect with businesses in new and interesting ways (Terefe et al., 2025). VR is different from conventional advertising because it lets customer actively participate, which creates deeper emotional connections and more lasting experiences (Hanji et al., 2024). Because of this, it has a lot of power to change how customer think about, feel about, and stay loyal to a brand.

Immersion, or how present customers feel in the virtual world, is a key part of how well VR advertising works. Immersion makes the event seem more genuine and emotional, which makes ads more interesting and memorable (Shuang et al., 2024). According to research (Luo & Xia et al., 2024), immersive VR experiences may make consumers more engaged, have better brand sentiments, and remember things better. In this case, immersion is a mediating element that makes the connection between VR ads and customer reactions stronger.

As organizations adapt to new technologies, it's important to know how VR might affect relationship marketing and brand loyalty (Adula & Kant, 2025). VR lets businesses recreate real-life situations, provide tailored information, and meet the needs of a wide range of customers, especially in fields like automotive, retail, and entertainment. But there are still problems like users being uncomfortable, technology being hard to access, and material not being relevant (Guo et al., 2024). Also, the success of VR ads may depend on the culture and how comfortable the user is with immersive technology (Mansoor et al., 2024).

This research looks at how virtual reality advertising affects how customer feel about a company and how well they remember it, with a focus on how immersion plays a role. The goal of this study is to provide marketers and industry leaders ideas on how to use VR technology to improve

customer connection, build loyalty, and keep their brand unique in a digital world that is becoming more international.

2. EMPIRICAL LITERATURE REVIEW

2.1 Virtual reality advertising and immersive consumer experience

Virtual reality (VR) is a game-changing technology in contemporary advertising that gives marketers a new way to create fully immersive and engaging experiences for their customers (Kant et al., 2025). Traditional advertising mediums depend on passive viewers, whereas VR puts customer in a fake world where they may interact with the brand. This engagement strengthens emotional ties, boosts cognitive processing, and makes things easier to remember (Hanji et al., 2024). VR ads not only grab customer's attention better, but they also make them spend more time with branded material, which changes how they think and what they want to buy (Wongkitrungrueng & Suprawan, 2024).

Immersion, or the feeling of being surrounded and present in a virtual world, is a key part of how well VR advertising works. Immersion makes the experience more genuine and deep, which helps customer engage with the brand on a deeper emotional and psychological level (Cowan et al., 2024). Lee et al. (2024) say that immersive VR environments improve the customer experience by activating the senses, making the encounter more interesting and memorable. These immersive features may make customer remember your brand better, make them happier with it, and make them more devoted to it.

Immersion plays a big factor in how customer act as consumers. Studies show that greater degrees of immersion make customer feel more present, which is good for remembering information, becoming emotionally involved, and the entire experience of the customer (Park & Lee, 2024). VR also lets customer share stories and promote experiences in a way that makes them feel like they're part of the brand's story. This makes it easier for customer to remember and recognize brands than with conventional 2D or static media (Mansoor et al., 2024).

There are a number of elements that may affect how well VR advertising works, even if it has a lot of promise. These include how easy it is to acquire technology, how comfortable users are with it, and how relevant the material is. Not all customers react the same way to immersive settings. Factors including their age, past experiences with technology, and cognitive preferences all affect how deeply they interact (Zhu et al., 2024). Marketers also need to make sure that the content

design matches what customer anticipate so that they don't get too much information or feel uncomfortable when using VR (Zhou et al., 2024).

In VR, communication also changes in new ways, including visual, audio, and tactile input. These multi-sensory channels make brand experiences more personal and dynamic by increasing user engagement and allowing for more powerful message (Bappi et al., 2025). So, to make sure that their brands leave a lasting impact, marketers need to create stories that are both technologically advanced and emotionally captivating.

In short, VR advertising changes how customer see and interact with companies by giving them immersive experiences that touch their hearts. Immersion is a middleman in this process, connecting VR content to better brand memory and more enjoyable experiences for customers. Marketers that want to use this technology well in the digital age need to learn more about how immersion works in virtual advertising settings.

H1: Virtual Reality Advertising has a big effect on how customer remember brands and how they feel about them via the effect of immersion.

2.2 Immersion and consumer experience

Immersion is a key idea in Virtual Reality (VR) advertising that has a big effect on how customer think about, process, and retain brand-related information. It is how much a user feels like they are really there in a computer-generated world, which makes them more aware of their senses and more emotionally involved (Hammami, 2025). In advertising, immersion improves the customer experience by letting them engage with and experience branded information in a way that is more engaging than conventional passive media forms (Zhou et al., 2024). Studies have shown that immersive experiences make customer pay more attention, feel more connected to the brand, and be happier with it, all of which make them think more positively about the company (Sands et al., 2024). When customer are fully involved in a VR environment, they are more likely to enter flow states, which means they are very focused and lose track of time. This makes the commercial more memorable and effective (Jabo et al., 2024).

Immersion also helps connect VR ads to results like brand memory and customer experience. Highly immersive VR settings have customer thinking and feeling, which makes it simpler for them to remember and encode brand-related information (Danibrata et al., 2017). Immersive VR is different from flat, one-dimensional ads because it lets customer engage with branded information in a manner that makes it more memorable and easier to remember (Hanji et al., 2024).

Also, immersion gives users a sensation of "being there," which makes things more realistic and emotive, both of which are important for keeping users happy and engaged (Le et al., 2024). Errmann (2025) say that good VR ads frequently include narrative, interaction, and spatial design that make the experience more immersive and leave a stronger impression of the company.

To sum up, immersion is not only a unique feature of VR advertising, but it is also an important psychological process that affects both how well customer remember a brand and how well they enjoy the experience. Marketers can make their VR ads more effective and memorable by understanding and using immersion.

H2: Immersion has a big effect on how customer feel about a product.

2.3 Consumer experience and brand recall

When it comes to immersive technology like Virtual Reality (VR), how consumers feel about an ad is a big factor in how well it works (Kaushik et al., 2025). It includes the thoughts, feelings, and reactions that a person has when they engage with a brand (Niguse et al., 2025). To build enduring brand impressions and significant brand connections, it's important to provide customers a favorable and engaging experience (Wang et al., 2025). The sensory richness, engagement, and realism of the setting in VR advertising make this experience much better. These things all affect how consumers receive and remember brand information (Lee et al., 2024).

Brand recall is the capacity of a customer to remember a brand when asked or while deciding whether or not to buy it. It is an important result of good advertising. VR ads may help customer remember a brand better by putting them in realistic situations where they can engage with the brand directly. This makes the message more remembered than other types of ads (Ayari & Yahia, 2025). Immersive settings stimulate both the mind and the emotions, which helps customer remember brand-related knowledge for a long time.

Studies show that immersive consumer experiences boost emotional involvement and cognitive elaboration, which are two important processes that help customer remember and recall information more accurately (Hanji et al., 2024). When customer are actively invested in an encounter, their brains digest information more thoroughly, which makes them remember the brand better (Erensoy et al., 2024). This is really crucial in marketplaces where there is a lot of competition and customer don't pay much attention to ads.

Also, immersive VR experiences let customer tell their own stories, which makes stories that are relevant to the situation and emotionally strong that customer can connect to. These stories assist

connect user experience and memory, which makes the brand easier to find and remember when customer are buying something in real life (Chong et al., 2024). The more a customer may imitate using a product in real life, try it on virtually, or go on an interactive brand journey, the more they will remember the brand (Li & Chung, 2025).

In short, a well-made VR commercial may greatly enhance the experience of the customer, which in turn helps them remember the brand. The quality of the immersive engagement is a significant part of contemporary advertising since it affects how well customers recall and absorb brand information.

H3: The experience of the consumer has a big effect on their ability to remember the brand.

2.4 The mediating role of immersion

Virtual Reality (VR) is changing the way organizations talk to customers in the ever-changing world of digital advertising. VR is different from other types of advertising because it lets customers engage with virtual worlds in real time. This feeling of being immersed in a non-physical environment is a big part of how well customer recall and interact with ads (Shah Alam et al., 2025).

Immersion is not simply a part of virtual reality (VR) technology; it is also a psychological process that explains how and why VR ads affect customer intention. Specifically, immersion is very important for molding the customer experience, which includes how emotionally, cognitively, and physically involved users are, as well as brand recall, which is the consumer's capacity to remember brand-related information (Negm, 2025).

When customer are fully engaged in a virtual world, they feel more emotionally involved, pay more attention, and have a better feeling of control over the information. These things help the brain digest information better, which makes the ad message more memorable and powerful (Huang & Chung, 2024). Immersion makes it easier to connect with the brand on a deeper level, which leads to a more vivid and personal experience that makes it easier to remember and gives a stronger impression of the brand (Luo & Xia et al., 2024).

Several studies have shown that immersion has a mediating effect, meaning that VR has a far bigger influence on things like customer happiness, brand attitude, and memory when users say they are very immersed (Salem et al., 2024). This position as a mediator shows that it's not only using VR that leads to better outcomes, but how much customers feel like they're really there.

In addition, things like realistic visuals, interaction, a coherent story, and sensory input all make a VR commercial more engaging. These characteristics assist consumers get into the brand's story, which makes them feel more emotionally involved and think more deeply about it (Zhu et al., 2024). As a consequence, immersion is what relates the usage of VR advertising with how it affects the customer experience and their ability to remember the brand. In conclusion, immersion is an important mediating quality that makes VR advertising more successful. It makes both the experience and memory-based reactions to advertising stronger by getting users more involved. This makes VR a valuable tool for contemporary marketing.

H4: Immersion is what makes the link between Virtual Reality Advertising and Consumer Experience and Brand Recall.

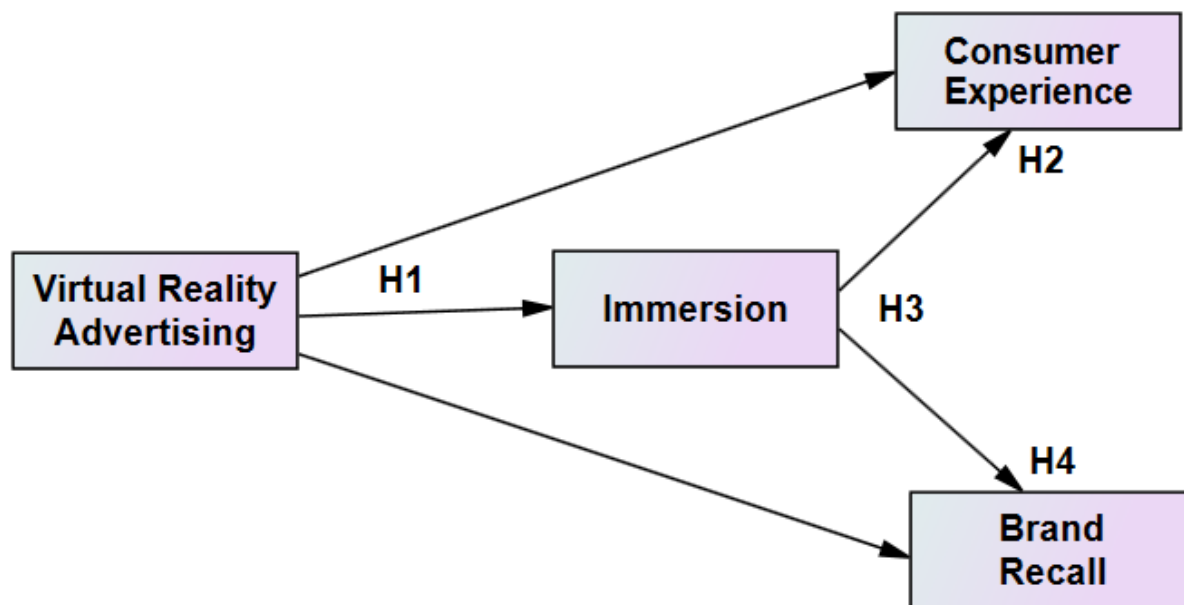


Figure 1. Conceptual Model

3. METHODOLOGY

We used a quantitative, cross-sectional survey to look at how Virtual Reality (VR) advertising affects customer's experiences and memories of brands, using immersion as a mediating variable. A standardized, self-administered questionnaire was used to gather data. During business hours, customer were contacted one at a time at technology stores, marketing firms, VR demo booths, and car dealerships all around Punjab, India. We picked Punjab because it has a lot of different

customer from different sociocultural backgrounds, which makes the study's results more useful to other groups.

We utilized a convenience sampling method that doesn't use probability. Before the data was collected, academic experts looked over the questionnaire and evaluated it to make sure the content was legitimate. The participants were told what the research was for, and they gave their permission. Customer who answered were told that their answers would be kept private and anonymous.

We got India legitimate replies back from the surveys we sent out, and we utilized them for data analysis. We didn't include surveys that were missing information or were filled out wrong. The total sample was 74.3% men and 25.7% women. The customer who took part were between the ages of 18 and 65, with around 45.1% being between the ages of 36 and 55. In terms of education, 28.9% had a master's degree, 47.7% had finished their undergraduate studies, and 23.4% had finished their intermediate-level education.

The study employed a 7-point Likert scale that ranged from 1 (Strongly Disagree) to 7 (Strongly Agree) to assess all of the scale questions. These items were taken from known and validated tools used in previous research. The following variables were measured:

- A four-item scale based on Salem et al. (2024) was used to measure Virtual Reality Advertising. It looked at how consumers felt about interaction, realism, novelty, and brand involvement via VR.
- A four-item scale based on Lavoye, V., & Kumar (2025) was used to evaluate immersion, which showed how psychologically involved, present, and focused users were in the virtual world.
- We used a three-item scale based on Kitchen et al. (2020) to assess Consumer Experience, which looked at how much fun, emotional connection, and value customer thought the VR contact had.
- Brand Recall was measured using a three-item scale based on Sands et al. (2025), which looked at how well participants could remember the brand name, visual identity, and important themes after seeing the VR commercial.

It was checked that all the measuring tools were reliable and valid, and they were found to be suitable for use in VR-based advertising study. Later, the data that was obtained was analyzed statistically using programs like SPSS and AMOS. This included checking for reliability, correlation, regression, and mediation.

4. RESULTS

We initially used Confirmatory Factor Analysis (CFA) to test the measurement model and then Structural Equation Modeling (SEM) to examine the structural links between the variables in the research model. The CFA results showed that the model fit well, with the fit indices meeting the set thresholds: Chi-square (χ^2) = 198.42, degrees of freedom (df) = 85, GFI, which stands (Goodness of Fit Index) = 0.942, CFI (Comparative Fit Index) = 0.975, NFI (Normed Fit Index) = 0.952, and RMSEA (Root Mean Square Error of Approximation) = 0.045. These numbers show that the measurement model suited the data effectively.

Cronbach's alpha scores, which were all over 0.70, showed that the constructs were reliable and had good internal consistency. Also, the Composite Reliability (CR) values for all constructs were over 0.70, which shows that the measurement scales are stable and consistent. The Average Variance Extracted (AVE) for each construct was between 0.61 to 0.79, which is over the minimum of 0.50 and shows that convergent validity is true.

The findings demonstrated that the square root of each construct's AVE was higher than its inter-construct correlations, which met the Fornell and Larcker (1981) standard for discriminant validity. This shows that each construct in the model was different enough from the others.

After the measurement model was checked, SEM was used to check the structural model. The path coefficients were statistically significant, which means that all of the hypotheses were supported. The last model explained 63% of the differences in how customer experienced the brand and 57% of the differences in how well they remembered it. Also, bootstrapping with 5,000 resamples showed that Immersion partly mediated the link between Virtual Reality Advertising and both Consumer Experience and Brand Recall. These results show how important immersion is for making VR ads more effective at changing customer's intention.

Table 1. Outcome of CFA

Constructs	Scale Items	Factor Loadings	Cronbach's α
Virtual Reality Advertising	VRA1	0.82	0.901
	VRA2	0.79	
	VRA3	0.85	
	VRA4	0.88	
Immersion	IM1	0.86	0.932
	IM2	0.89	
	IM3	0.87	
	IM4	0.84	
Consumer Experience	CE1	0.81	0.917
	CE2	0.83	
	CE3	0.86	
	CE4	0.88	
Brand Recall	BR1	0.79	0.909
	BR2	0.84	
	BR3	0.82	
	BR4	0.85	

The Confirmatory Factor Analysis (CFA) findings show that all of the assessed variables have good construct validity as well as internal consistency. All of the component loadings are higher than the suggested level of 0.70, which means that each item loads well onto the build it is supposed to. The factor loadings for “Virtual Reality Advertising” vary from 0.79 to 0.88, and the Cronbach's alpha is 0.901, which shows that the data is quite reliable. In the same way, “Immersion” has high factor loadings across 0.84 and 0.89 and a Cronbach's alpha of 0.932, which demonstrates that it is consistent within. The loadings for "Consumer Experience" range from 0.81 to 0.88, and the reliability coefficient is 0.917. Lastly, “Brand Recall” has trustworthy measurement qualities, with factor loadings between 0.79 and 0.85 and a Cronbach's alpha of 0.909. These findings show that all of the model's constructs are measured correctly and reliably, which supports their usage in the next study of the structural model.

Table 2. Discriminant validity

Constructs	CR	AVE	Virtual Reality Advertising	Immersion	Consumer Experience	Brand Recall
Virtual Reality Advertising	0.903	0.701	0.837			
Immersion	0.935	0.781	0.412	0.884		
Consumer Experience	0.921	0.745	0.368	0.539	0.863	
Brand Recall	0.911	0.722	0.332	0.498	0.547	0.850

Table 2 shows that the constructs had good discriminant validity since the square root of the AVE (diagonal values) to stay each construct was higher than its inter-construct correlations (off-diagonal values). Also, all of the constructions have high internal consistency, with Composite Reliability (CR) scores between 0.903 and 0.935 and AVE values over 0.50. We looked at the suggested connections between constructs to see whether the structural model was correct. As shown in Table 3, the route coefficients showed that all direct effects in the model were statistically significant at the 0.05 level. The findings corroborated H1, which means that Virtual Reality Advertising has a big and favorable effect on Immersion ($\beta = 0.41$, $p < 0.001$). H2 was also backed up, showing that there is a substantial and positive link between Immersion and Consumer Experience ($\beta = 0.53$, $p < 0.001$). H3 was also confirmed, which means that Immersion makes Brand Recall much better ($\beta = 0.50$, $p < 0.001$).

These results support the idea that Immersion is a mediator. They show that Virtual Reality Advertising improves both the customer experience and brand memory by making people more immersed in the event. The model's theoretical and practical significance is supported by the combination of strong measurement validity and important structural routes.

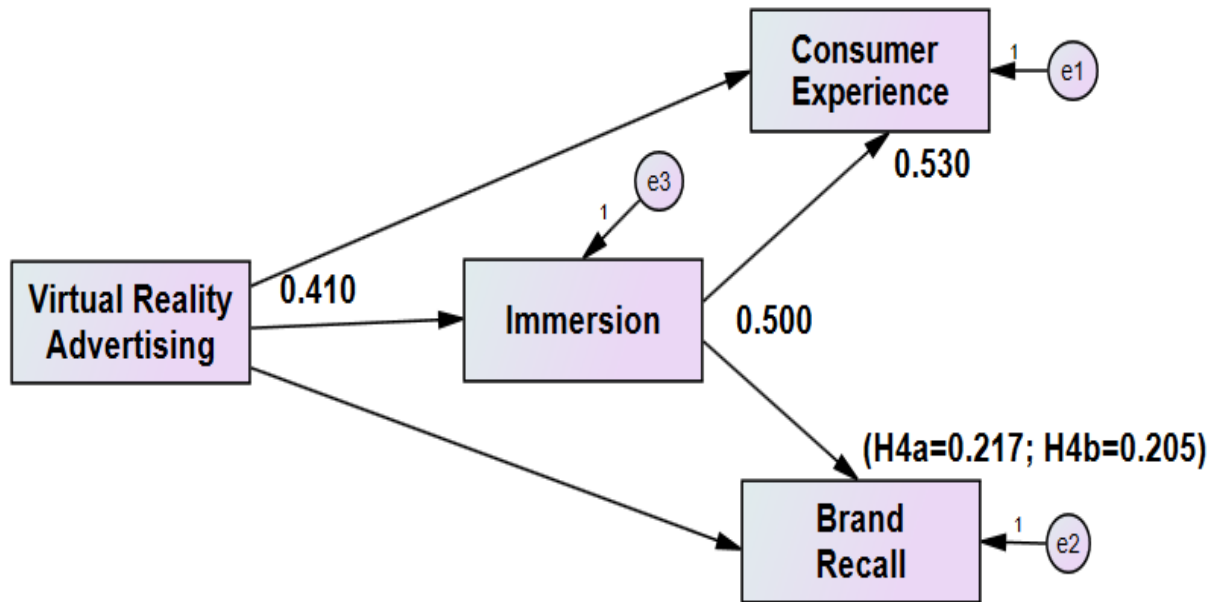


Figure 2. Mediation Check

Table 3. Outcome of SEM

Hypothesis	Path	Path Coefficient (β)	t-value	Result
H1	VR Advertising $\rightarrow$ Immersion	0.410	5.216	Supported
H2	Immersion $\rightarrow$ Consumer Experience	0.530	6.032	Supported
H3	Immersion $\rightarrow$ Brand Recall	0.500	5.841	Supported

We used Structural Equation Modeling (SEM) using 5,000 bootstrap samples during a 95% confidence level to find out how Immersion affects the association between Virtual Reality (VR) Advertising and two important outcomes: Consumer Experience and Brand Recall. Bootstrapping was used to look at indirect effects, and the results were considered significant if the 95% confidence intervals (CI) did not include zero. Table 3 shows that all of the direct hypotheses were true. H1 showed that VR Advertising had a big positive influence on Immersion ($\beta = 0.410$, $t = 5.216$, $p < 0.001$). H2 indicated that there is a substantial positive link between Immersion alongside Consumer Experience ($\beta = 0.530$, $t = 6.032$, $p < 0.001$). H3 demonstrated that Immersion also has a good effect on Brand Recall ($\beta = 0.500$, $t = 5.841$, $p < 0.001$).

The mediation study backed up H4a even more by showing that VR Advertising has a substantial indirect influence on Consumer Experience via Immersion ($\beta = 0.217$, $p < 0.001$, 95% CI [0.104, 0.325]), which means that it is only partially mediated. H4b was also supported, with Immersion partly moderating the impact of VR Advertising on Brand Recall ($\beta = 0.204$, $p < 0.001$, 95% CI [0.097, 0.312]). In both situations, the confidence gaps did not include zero, which shows that the mediation effects were significant. Overall, these results show how important Immersion is as a mediator in improving both Consumer Experience as well as Brand Recall in the context of VR Advertising. The findings strongly corroborate the suggested conceptual framework and show that immersive experiences perform well in digital marketing tactics.

Table 4. Consequence mediation of SEM

Hypothesis	Indirect Path	Indirect Effect (β)
H4a	VR Advertising $\rightarrow$ Immersion $\rightarrow$ Consumer Experience	0.217
H4b	VR Advertising $\rightarrow$ Immersion $\rightarrow$ Brand Recall	0.205

The mediation analysis done using Structural Equation Modeling (SEM) is shown in Table 4. The results show that Immersion is a very important factor in the link between Virtual Reality Advertising and the outcome factors. For H4a, the indirect impact of Virtual Reality Advertising on Consumer Experience via Immersion is $\beta = 0.217$, which means that there is a significant partial mediation. H4b shows that there is also an indirect impact of $\beta = 0.205$ along the route from Virtual Reality Advertising regarding Brand Recall via Immersion. These findings show that Immersion is an important way that Virtual Reality Advertising improves both Consumer Experience as well as Brand Recall. The power of these indirect impacts shows how important immersive experiences are for getting people more involved and helping them remember things in virtual advertising settings.

5. DISCUSSION

The results of this research provide strong empirical support for the idea that Virtual Reality (VR) Advertising has a big and good effect on both Consumer Experience and Brand Recall, alongside Immersion being a key aspect that helps explain this. These findings add to the increasing corpus

of study in immersive advertising and consumer psychology by showing that how customer interact with technology may affect brand outcomes. Our study verifies what other studies have shown about the transforming power of immersive media (Wang et al., 2025; Kant et al, 2025): VR Advertising makes consumers more engaged with their senses and emotions. In particular, the findings reveal that VR Advertising directly improves customer experiences and helps customer remember brands better, showing that it is a successful marketing tool in the digital era.

One of the most important things this research does is show how Immersion might act as a middleman. The results show that Immersion is not just an extra feature; it is a key part of making VR ads work for consumers. The SEM research showed that the indirect effects of VR Advertising on both Consumer Experience and Brand Recall via Immersion were statistically significant, which means that they were only partially mediated. This implies that VR advertising may directly affect how customer respond, but it works far better when customer are fully involved in the virtual world. This backs with what other researchers have said about how presence and psychological immersion are important for getting customer to interact with VR (Terefe et al, 2026).

These results further add to the theoretical framework by showing how Immersion works as a psychological link between VR inputs and memory or emotional reaction in a measurable way. Most of the time, previous research has only spoken about Immersion in terms of ideas. However, our study goes beyond by providing quantifiable and statistically significant proof of its mediating function (Sankar & Kant, 2025).

The conclusions have important implications for marketers and brand strategists in the real world. Businesses that use VR for marketing need to know that immersion is not simply a side effect of the technology; it is a key design goal. Creating VR experiences that are high-quality, engaging, and relevant to the situation may greatly increase how emotionally and mentally involved customer are. This, in turn, may make brand encounters more memorable and strengthen the connection between consumers and brands.

The findings also show how important it is to develop experiences in VR advertising. Interactive elements, narrative involvement, sensory input, and spatial audio are all important for making things more immersive. To get the most out of the customer experience and memory potential, marketers should concentrate on more than just how VR environments look. They need also focus on how they feel and sound.

Another useful lesson is that VR advertising may provide you a competitive edge. As digital noise grows in traditional media, immersive technologies provide a unique experience that may help businesses stand out in crowded marketplaces. Our research shows that businesses that use immersive design well may create stronger emotional connections, which are important for long-term brand loyalty and advocacy.

This research also brings up key points for cross-cultural and international marketing on a larger scale. This study was done in the setting of the Indian consumer market, but the psychological processes that make immersion work are likely to be the same elsewhere, even if customer from different cultures have different tastes. Future research might build on these results by looking at how cultural context affects the link between immersion and consumer outcomes in various parts of the world.

This research has certain problems, even if it adds to the body of knowledge. First, the study only looked at one area of the world—Punjab, India—which might mean that the conclusions don't apply to other cultures or socioeconomic groups. Second, the cross-sectional methodology only showed a glimpse of how consumers reacted, whereas longitudinal research might be better at showing how consumer experiences and brand memory change over time with repeated VR encounters.

The research focuses on Immersion as a mediator, but other psychological factors like flow, presence, pleasure, or even cognitive load might potentially affect how well VR ads work. Researchers might look at these factors in the future to get a better picture of how consumers behave when they are immersed.

In conclusion, our research adds to the academic conversation on immersive marketing by showing via real-world examples that immersion may be a middleman in VR advertising. It supports the premise that to get the best marketing results, you need both advanced technology and psychological interaction. For professionals, it shows that great VR advertising isn't only about using cutting-edge technology. It's also about creating experiences that are emotionally engaging, interactive, and culturally relevant that stick in the consumer's memory.

6. CONCLUSION

The aim of this research was on how Virtual Reality (VR) Advertising affects Consumer Experience as well as Brand Recall, with a special emphasis on how Immersion plays a role in

this. The results show that VR advertising greatly improves both customer experiences and brand memory. Immersion is a key factor in making these benefits even stronger. This shows how important psychological involvement is in immersive media settings and how immersion connects new technology with how customer see it. Our findings imply that companies that want to use VR in their marketing should focus on making virtual experiences that are immersive, interesting, and relevant to the situation. Companies may get consumers more involved by adding things like interaction, sensory stimulation, and a coherent story. This can lead to better brand awareness and loyalty. However, although immersion has a big influence on the link between VR advertising and consumer outcomes, there were also direct effects. This shows that both the quality of the VR material and the level of immersion affect how consumers respond.

This research adds to what we already know by include immersion as a psychological concept in models of how well ads work. It gives real-world evidence to the idea that immersive technology not only grabs customer's attention but also helps them remember things and feel more connected to them, which are two important factors in brand recall and customer happiness. This adds to what we already know about media richness in marketing communication and shows how important immersive experiences are in contemporary advertising.

The results provide practitioners strategic ideas on how to use VR advertising. Businesses that want to attract tech-savvy and experience-seeking customers need to spend money on both VR infrastructure and producing immersive content. Focusing on consumer-centered VR design, such culturally appropriate themes, interactive storytelling, and realistic simulations, may lead to big gains in brand loyalty and customer advocacy. Also, teaching teams about immersive design concepts and user experience (UX) testing may help make sure that VR ads are both technically sound and emotionally appealing. The practical consequences are particularly important for companies that do business in developing economies like India, where digital transformation is happening faster than ever. Companies in fields like automotive, real estate, and retail may get ahead of their competitors by using VR ads that appeal to local cultures while yet providing global-quality experiences. However, there are still problems to solve, such as the high initial cost, the need for consistent content, and making sure that all types of customers may use the service.

Future studies could look at how cultural relevance affects immersive advertising and how personalization and AI-driven content adaption make it even more immersive. Longitudinal studies might also look at how long-term exposure to VR marketing affects brand loyalty over

time. Also, looking at how VR-based marketing techniques work in different sectors and areas might give us a better idea of how scalable and flexible they are. This research shows that VR advertising may change how customer act, which is the main point. Immersion is a key way that VR changes how customer perceive and remember things, giving marketers a means to build stronger emotional connections and improve retention. VR provides unique ways to get customer involved, but how well it works depends on how well immersive design is combined with branding objectives. As the world of digital marketing changes, companies who can successfully mix new technology with design that puts customer first will be best able to succeed in the global marketplace.

6.1 Limitations

This research gives us useful information on how globalization affects relationship marketing as well as customer loyalty via cultural adaptation. However, we should be aware of several limitations that might influence how the results are understood and how widely they can be used. First, the study only looks at the automobile industry in India, which may not be the same as how things work in other sectors or places. In service-oriented fields like hospitality, healthcare, and internet commerce, where customers engage with one other more often and in more culturally complex ways, the function of cultural adaptation along with its effect on customer loyalty may be quite different. Because of this, the findings should be used with care when they are used in a different industrial setting.

Second, using a cross-sectional study approach makes it hard to see how the links between globalization, cultural adaptability, and consumer loyalty change over time. This method just collects data at one moment in time, thus it doesn't take into account changes in time or modifications in how consumers think and act. Because globalization and cultural changes are always happening, a longitudinal approach would help us learn more about these processes throughout time.

Third, the sample size of 350 customers is good for structural equation modeling (SEM), but it could make the conclusions less generalizable and statistically strong. The research would be more valid if it used a bigger and more varied sample from a wider range of sectors or areas. This would give us a better idea of how cultural adaptation works in different market settings.

6.2 Future Research Directions

Future research should look at a number of intriguing areas that might help us understand the results better and make them more useful.

First, researchers should look at how cultural adaptation affects relationship marketing and client loyalty in different industries. For example, in retail, tourism, or e-commerce, where customers commonly interact with brands online or in person, cultural adaptation techniques may look different and have distinct effects. These areas could provide us a better idea of how companies tailor their communication, branding, and service delivery to appeal to customer from other cultures.

Second, future research should look at developing markets that are quickly becoming globalized to see whether the same patterns of cultural adaptability and customer loyalty hold true in different economic and cultural settings. Comparative studies of nations or regions might show how the setting affects how customer respond to global branding efforts.

Third, adding moderating factors might make the conceptual model employed in this research better. Brand familiarity, customer ethnocentrism, perceived cultural distance, or levels of digital engagement are some of the things that might affect how strong and how linkages between globalization, cultural adaptability, relationship marketing, and loyalty are. These factors might help us find out when cultural adaptation works best.

In addition, using qualitative research methodologies like in-depth interviews, focus groups, or case studies may add to the quantitative results by giving us a better understanding of the feelings, motives, and perceptions that drive consumer intention in global marketplaces. This mixed-methods approach would help us understand better how customer from different cultures perceive and respond to marketing that has been modified for them.

Lastly, academics should look at how digital revolution affects the relationship between globalization and adaptability. In a world where digital contact is becoming more and more crucial, learning how businesses use cultural adaption tactics in virtual spaces like social media, e-commerce sites, and virtual reality might help us understand how customer behave in the digital age.

By looking into these areas, future research may add to the present study's work and help create a more complete framework for understanding how globalization, cultural adaptation, and customer relationship management operate together in different and changing market situations.

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