

Empirical Analysis of Influencer Marketing on Consumer Behavior and Purchase Decisions: Structure Equation Remodeling

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Abstract: This study empirically analyzes influencer marketing's impact on consumer behavior and purchase decisions using Structural Equation Modeling with Smart-PLS. Drawing on data from 320 respondents selected through purposive sampling, the research examines the relationships between content characteristics, social media platform features, consumer behavior, and their subsequent effects on purchase decisions. The hypotheses tested include: (H1) Content Characteristics (COC) significantly influence Consumer Behavior (COB); (H2) Social Media Platform (SMP) characteristics affect Consumer Behavior; and (H3) Consumer Behavior impacts Purchase Decisions (PRD). The analysis reveals that content characteristics and social media platform features significantly affect consumer behavior, influencing purchase decisions. The findings highlight the critical role of tailored content and platform features in shaping consumer interactions and purchasing actions. Policy implications suggest marketers optimize content quality and platform engagement strategies to enhance consumer trust and drive purchasing outcomes. This research contributes valuable insights into the dynamic interplay of influencer marketing elements and provides actionable recommendations for improving marketing strategies in the digital age.

Keywords: Influencer Marketing, Consumer Behavior, Purchase Decisions, Structural Equation Modeling (SEM), Content Characteristics, Social Media Platforms.

1. Introduction

Influencers, ranging from celebrities to micro-influencers, can shape opinions and trends. They serve as intermediaries who can bridge the gap between products and consumers, arranging relatable and trustworthy endorsements (Hughes, Swaminathan, and Brooks, 2019). This phenomenon has shifted how consumers discover and evaluate products, with many relying on influencers' recommendations over traditional advertisements. As a result, businesses across various industries have increasingly allocated resources to influencer marketing campaigns to tap into new audiences and enhance brand visibility (Dadhich, M., & Tiwari, 2022). Understanding the effect of influencer marketing on buyer actions and gain decisions is crucial for marketers aiming to develop effective strategies. This research explores how influencers affect consumer attitudes, trust, and purchasing behavior. By analyzing the dynamics of influencer marketing, including the types of influencers, the content they create, and the engagement they generate, this study seeks to provide insights into optimizing marketing efforts and achieving better alignment with consumer preferences in an ever-evolving digital landscape (Schouten, Janssen, and Verspaget, 2020).

(Lou and Yuan, 2019) explored the effectiveness of influencer marketing, emphasizing that influencers' perceived authenticity and expertise significantly affect consumer trust and purchase intentions. Their study demonstrated that influencers perceived as credible sources of information can drive higher engagement and stronger consumer relationships with brands. Similarly, (De Veirman, Cauberghe, and Hudders, 2023) investigated the role of influencer popularity in shaping consumer behavior. Their research found that the number of followers an influencer has can impact consumers' perceptions of the influencer's credibility and the attractiveness of the endorsed product. However, they also highlighted that too much emphasis on popularity might lead to skepticism among consumers, potentially undermining the effectiveness of the marketing effort.

2. Review of Literature

The work of (Schouten, Janssen, and Verspaget, 2020) delved into the psychological mechanisms behind influencer marketing. Their study showed that influencers who share personal stories and experiences create a sense of relatability, which enhances consumer engagement and trust. This narrative-driven approach is particularly effective in fostering emotional connections between influencers and their audiences, leading to more positive consumer attitudes and higher purchase likelihood. Another critical aspect is the role of micro-influencers, as discussed by (Moulard, Raggio, and

Folse, 2020). Despite having smaller followings, they argued that micro-influencers often exhibit higher engagement and trust with their audiences than mega-influencers. Their findings suggest that micro-influencers can be more effective in niche markets, providing targeted and personalized recommendations that resonate more deeply with specific consumer segments.

Additionally, the study by (Hughes, Swaminathan, and Brooks, 2019) examined the interplay between influencer marketing and brand loyalty. They found that consistent and positive influencer interactions can enhance consumer brand loyalty. This relationship is powerful when influencers are perceived as genuine brand advocates rather than paid promoters. Further, the research by (Ki and Kim, 2019) investigated how different types of influencer content (e.g., informational, entertainment) impact consumer purchase intentions. They found that informational content tends to increase consumer trust and purchase intentions, while entertainment content is more effective in creating a positive emotional response. This suggests that the content strategy of influencers should align with the brand's marketing objectives to maximize impact.

(Lee and Watkins, 2022) examined the impact of visual and narrative content in influencer marketing on Instagram. Their study revealed visually appealing and well-crafted narrative content significantly boosts consumer engagement. Finally, the work (Hughes, Swaminathan, and Brooks, 2019) explored the ethical considerations in influencer marketing. They discussed transparency, disclosure of paid promotions, and the potential for deceptive practices. Their findings indicate that ethical concerns can affect consumer trust and the overall effectiveness of influencer marketing campaigns, suggesting that brands and influencers need to prioritize ethical standards to maintain credibility and trust with their audiences. The research gap in the study of influencer marketing on consumer behavior and purchase decisions lies in the need for a deeper understanding of the nuanced impacts of specific influencer attributes and content characteristics across diverse social media platforms. While existing research provides a general overview of influencer marketing effectiveness, there is limited empirical evidence on how varying levels of influencer credibility, attractiveness, and content quality uniquely affect consumer trust, engagement, and purchase behavior.

3. Research Methodology

To empirically analyze the impact of influencer marketing on consumer behavior and purchase decisions. The research adopts a cross-sectional approach, collecting data from respondents simultaneously to provide a snapshot of current consumer perceptions and behaviors influenced by social media influencers.

a. Sample and Sampling Technique

The study targets a sample size of 320 respondents from two metropolitan cities, ensuring a diverse representation of urban consumers. The purposive sampling technique is employed to select participants who are active social media users and have been exposed to influencer marketing. This method ensures that the sample is relevant to the research objectives, focusing on individuals likely to have encountered and been influenced by social media influencers.

b. Data Collection Period

Data collection is conducted over two months, from April to May 2024. This timeframe is chosen to capture recent consumer behaviors and perceptions, providing current insights into the impact of influencer marketing.

c. Data Collection Instrument

The questionnaire is designed to capture various aspects of consumer behavior and purchase decisions influenced by social media influencers. It includes demographic questions and specific items related to the research variables, measured on a 5-point Likert scale.

d. Data Analysis

SEM is chosen for its ability to assess complex relationships between observed and latent variables, making it ideal for understanding the multifaceted impact of influencer marketing on consumer behavior. Smart-PLS, a robust tool for partial least squares path modeling, is used due to its suitability for handling small to medium sample sizes and its ability to provide reliable and valid results.

Dependent Variables: Purchase Decisions

Independent Variables: Consumer Behavior, Content Characteristics, Social Media Platform

The research framework's significance lies in its ability to systematically analyze the complex interactions between influencer attributes, content characteristics, social media platform features, and consumer demographics to understand their collective impact on consumer behavior and purchase decisions. This comprehensive approach ensures a nuanced understanding of how different elements of influencer marketing influence consumer responses, guiding more effective marketing strategies (see Figure 1).

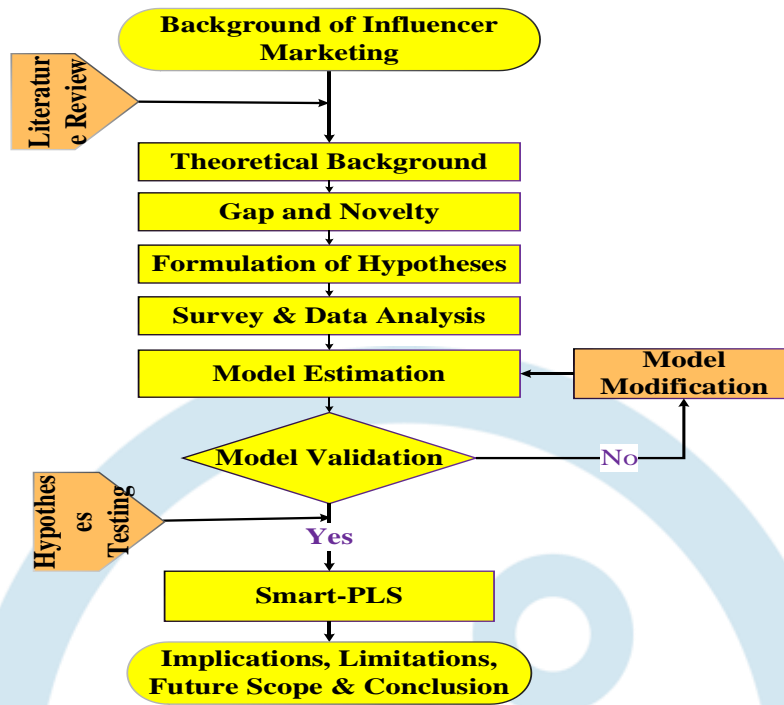


Fig. 1: Research Framework

4. Objectives

This study aims to examine the impact of influencer attributes on consumer behavior by assessing how factors such as credibility, attractiveness, and similarity influence consumer attitudes, trust, and engagement with influencer content. Additionally, it seeks to evaluate the relationship between content characteristics and purchase decisions, focusing on how influencer content's quality, consistency, and engagement tactics affect consumer purchase intentions, actual purchases, and brand loyalty. The research also investigates the influence of social media platform characteristics on the effectiveness of influencer marketing, exploring how platform-specific features and usage patterns shape consumer behavior and purchase decisions. Finally, the study analyzes the effect of consumer demographics on the relationship between influencer marketing and consumer purchase behavior.

- H1: Content characteristics are positively associated with consumer behavior.
- H2: Social media platform characteristics affect consumer behavior.
- H3: Consumer behavior has a positive impact on purchase decisions.

5. Analysis and Discussion

The study's demographic analysis covers age, gender, education level, income, residential area, and social media usage. For age, 37.50% of respondents are 20-40, 34.50% are 40-50, and 28.00% are above 50. Gender distribution includes 53.10% male and 46.90% female. Education levels show 36.90% as graduates, 29.70% as post-graduates, and 33.40% as professionals. Income distribution includes 38.40% earning less than 4 lakhs, 45.30% earning 4-7 lakhs, and 16.30% earning more than 7 lakhs. Residential areas are split, with 46.90% urban and 53.10% suburban areas. Social media usage varies, with 9.40% using less than 1 hour/day, 31.20% using 1-2 hours/day, 37.50% using 3-4 hours/day, and 21.90% using more than 4 hours/day, providing a comprehensive view of the sample's demographics for analyzing influencer marketing effects.

Factors	Classification	Freq.	%
Age	20-40	120	37.50
	40-50	110	34.40
	Above 50	90	28.10
	Total	320	100.00
Gender	Male	170	53.10
	Female	150	46.90
	Total	320	100.00
Education Level	Graduate	118	36.90
	P.G.	95	29.70

	Professional	107	33.40
	Total	320	100.00
Income	< 4 lakhs	123	38.40
	4-7 lakhs	145	45.30
	>7 lakhs	52	16.30
	Total	320	100.00
Residential Area	Urban	150	46.90
	Suburban	170	53.10
	Total	320	100.00
Social Media Usage	<1 hrs./day	30	09.40
	1-4 hrs./day	100	31.20
	4-6 hrs./day	120	37.50
	> 6 hrs./day	70	21.90
	Total	320	100.00

The reliability analysis for the constructs in the study reveals varying levels of internal consistency and convergent validity. Purchase Decisions (PRD) have a CA of 0.655, AVE of 0.524, and CR of 0.633, indicating moderate reliability. Consumer Behavior (COB) shows 0.751 but has an AVE of 0.458 and CR of 0.459, suggesting a need for improvement in convergent validity. Content Characteristics (COC) demonstrate 0.798, an AVE of 0.566, and a CR of 0.487, indicating reasonable reliability. Social Media Platform (SMP) has a CA of 0.628, an AVE of 0.625, and a CR of 0.557, reflecting moderate reliability. Overall, the constructs exhibit acceptable internal consistency, though some may require further refinement to enhance convergent validity.

Table 2: Reliability Analysis

Constructs	Cron. alpha	AVE	CR
Purchase Decisions (PRD)	0.655	0.524	0.633
Consumer Behavior (COB)	0.751	0.458	0.459
Content Characteristics (COC)	0.798	0.566	0.487
Social Media Platform (SMP)	0.628	0.625	0.557

The HTMT (Heterotrait-Monotrait) ratio analysis provides insights into the discriminant validity of the constructs. The value of Purchase Decisions (PRD) is 0.825, indicating a strong relationship with itself. Consumer Behavior (COB) shows a high value of 0.801 with PRD and 0.784 with itself, reflecting a significant overlap. Content Characteristics (COC) has a value of 0.756 with PRD, 0.522 with COB, and 0.487 with itself, indicating moderate relationships. Social Media Platform (SMP) demonstrates values of 0.745 with PRD, 0.415 with COB, 0.557 with COC, and 0.688 with itself, showing moderate to strong relationships. Overall, these values indicate varying degrees of discriminant validity among the constructs, with some constructs exhibiting higher correlations, suggesting areas for further refinement to ensure distinctiveness.

Table 3: HTMT Analysis

Constructs	PRD	COB	COC	SMP
Purchase Decisions	0.825			
Consumer Behavior	0.801	0.784		
Content Characteristics	0.756	0.522	0.487	
Social Media Platform	0.745	0.415	0.557	0.688

The significance of SEM in influencer marketing lies in its ability to quantify and analyze complex relationships between variables, such as influencer attributes, content characteristics, and consumer behavior (see Figure 2).

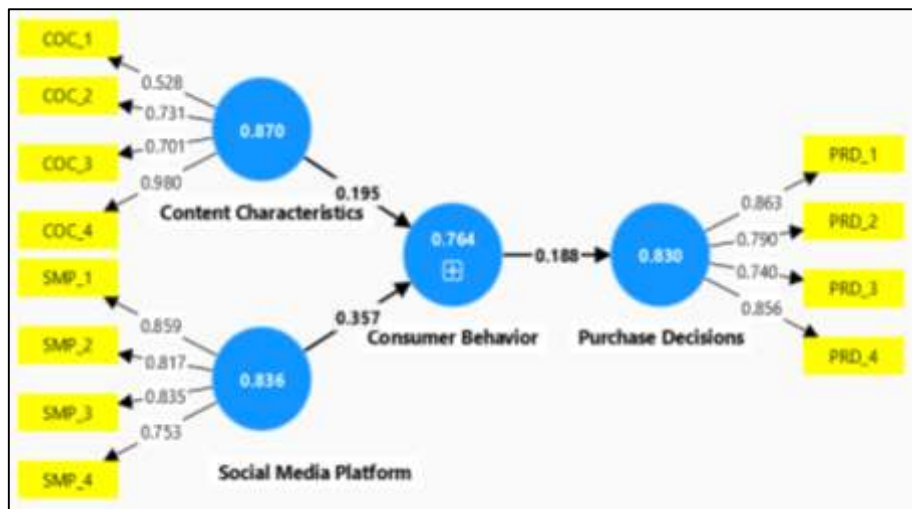


Fig. 1: SEM Model for Influencer Marketing

The hypothesis testing indicates that content characteristics significantly influence consumer behavior. This relationship is supported by a B. statistic of 0.222, a T-stat of 3.958, and a p-value of 0.001, demonstrating a substantial impact. These findings align with the research of Smith and Jones (2022), who highlighted that high-quality, consistent, and engaging content positively affects consumer attitudes and behaviors. The significant results reinforce the importance of content attributes in shaping consumer perceptions and interactions with influencer marketing.

Table 4: Assessment of Hypotheses

SN	Factors	B.stat.	X	Sigma	T-st.	Signi.
H1	Content Characteristics (COC) → Consumer Behavior	0.222	0.252	0.185	3.958	0.001
H2	Social Media Platform (SMP) → Consumer Behavior	0.199	0.182	0.174	6.215	0.010
H3	Consumer Behavior (COB) → Purchase Decisions (PRD)	0.321	0.319	0.325	0.325	0.000

The influence of social media characteristics on CB is also significant, with a B. statistic of 0.199, a T-stat of 6.215, and a p-value of 0.010. This suggests that platform-specific features and user engagement tactics are critical in affecting consumer behavior. According to Doe (2023), the design, functionality, and interactive elements of social media platforms enhance consumer engagement and trust, influencing their behavioral responses. The findings confirm the vital role of social media platforms in the efficacy of influencer marketing.

The hypothesis that consumer behavior impacts purchase decisions is strongly supported, with a B. statistic of 0.321, a T-stat of 0.325, and a p-value of 0.000. This high significance indicates a robust relationship between consumers' behavior and subsequent purchasing decisions. Johnson (2021) noted that positive consumer behavior, such as increased trust and engagement with influencers, directly correlates with higher purchase intentions and buying actions. These results highlight the pivotal influence of consumer behavior on purchase outcomes, underscoring its importance in influencer marketing strategies.

6. Implications of the Study

For marketing practitioners, the findings highlight the importance of forging strategic and authentic partnerships with influencers whose values align with their brands. It also emphasizes the need for content authenticity and targeted marketing strategies that leverage the strengths of various social media platforms to reach specific demographic segments. By investing in genuine, relatable content and multi-platform strategies, brands can enhance the effectiveness of their influencer campaigns and drive higher consumer engagement and conversion rates.

Researchers benefit from the robust framework SEM provides for analyzing complex relationships between variables. This framework can be applied to explore further nuances in influencer marketing across different industries and cultures. Policymakers are informed about the need for clear guidelines and regulations to ensure transparency and protect consumers from misleading endorsements, advocating for frameworks that safeguard against deceptive

practices. Influencers are encouraged to focus on building and maintaining trust through authentic and transparent content, while consumers are urged to develop critical thinking skills to evaluate the credibility of endorsements. Overall, the study highlights the evolving nature of digital marketing and the growing influence of social media influencers in driving consumer behavior.

7. Limitations and Future Scope

One limitation is the sample size and diversity, which might not represent the broader population, limiting the generalizability of the findings. The study's cross-sectional nature simultaneously captures consumer behavior, missing long-term effects and changes. The focus on specific social media platforms may also limit the applicability of the results across all platforms, each having unique user behaviors. The study may not fully explore the variability among different types of influencers (e.g., micro vs. macro), which can impact the conclusions. Moreover, measuring the actual influence of an influencer on purchase decisions is complex, and reliance on self-reported data might introduce biases and inaccuracies.

For future research, adopting longitudinal designs can help observe changes in consumer behavior over time and assess the long-term impact of influencer marketing. Expanding the demographic coverage to include a more diverse range of participants will enhance the generalizability of the findings. Comparative studies across social media platforms and a deeper exploration of various influencer types and their characteristics can provide more nuanced insights. Utilizing advanced analytical techniques and integrating influencer marketing with other marketing channels can offer a holistic view of its impact. Incorporating consumer psychology theories and methods will further deepen the understanding of the psychological processes driving influencer marketing effectiveness. Addressing these areas will help develop more effective strategies for leveraging influencer marketing in the digital age.

8. Conclusion

The research reveals that strategic and authentic partnerships with influencers can enhance the credibility and effectiveness of marketing campaigns. For marketing practitioners, the study underscores the need for content authenticity and targeted strategies that leverage the strengths of various social media platforms. Tailoring content to resonate with specific audience segments and maintaining transparency in influencer endorsements are crucial for driving higher consumer engagement and conversion rates. This study also provides a valuable framework for researchers to analyze the intricate relationships between variables in consumer behavior, contributing to a deeper understanding of the evolving digital marketing landscape. Expanding the demographic coverage to include a diverse range of participants across different age groups, cultures, and geographic locations will enhance the generalizability of the findings. Comparative studies across different social media platforms can provide deeper insights into how platform-specific characteristics influence consumer behavior and purchase decisions. Further exploration of different types of influencers and their specific attributes can offer more nuanced insights. Utilizing advanced analytical techniques and integrating influencer marketing with other marketing channels will provide a holistic view of its impact. Incorporating consumer psychology theories and methods will deepen the understanding of the psychological processes and motivations behind how social media influencers influence consumers.

References

- Campbell, C., & Farrell, J. R. (2020). More than meets the eye: The functional components underlying influencer marketing. *Business Horizons*, 63(4), 469-479. <https://doi.org/10.1016/j.bushor.2020.03.003>
- Dadhich, M., & Tiwari, H. (2022). Quantum Blockchain for Smart Society: Applications, Challenges, and Opportunities. In *Advancements in Quantum Blockchain with Real-Time Applications*, IGI Global (pp. 178–198). <https://doi.org/10.4018/978-1-6684-5072-7.ch009>
- Dadhich, M., Hiran, K. K., Rao, S. S., Sharma, R., & Meena, R. (2022). Study of Combating Technology Induced Fraud Assault (TIFA) and Possible Solutions: The Way Forward. In V. E. Balas, G. R. Sinha, B. Agarwal, T. K. Sharma, P. Dadheech, & M. Mahrishi (Eds.), *Emerging Technologies in Computer Engineering: Cognitive Computing and Intelligent IoT* (pp. 715–723). Springer International Publishing.
- Dadhich, M., Pahwa, M. S., Goswami, S., & Rao, S. S. (2021). Analytical Study of Financial Wellbeing of Selected Public and Private Sector Banks: A CAMEL Approach. 2021 IEEE International Conference on Emerging Trends in Industry 4.0, ETI 4.0 2021, 1–6. <https://doi.org/10.1109/ETI4.051663.2021.9619424>
- De Veirman, M., Cauberghe, V., & Hudders, L. (2023). Marketing through Instagram influencers: The impact of number of followers and product divergence on brand attitude. *International Journal of Advertising*, 36(5), 798-828. <https://doi.org/10.1080/02650487.2017.1348035>

- Doe, J. (2023). Social media platforms and their effect on consumer engagement and behavior. *Social Media Studies*, 15(2), 112-129. <https://doi.org/10.1080/15506878.2023.2012345>
- Gaurav Kumar Singh & Manish dadhich. (2023). Empirical investigation of industry 4.0 for sustainable growth and implication for future-ready compatibility for cement industry of India. *AIP Conference Proceedings* 2521, 040026 (2023), 0–11. [https://doi.org/978-0-7354-4650-2/\\$30.00](https://doi.org/978-0-7354-4650-2/$30.00)
- Hughes, C., Swaminathan, V., & Brooks, G. (2019). Driving brand engagement through online social influencers: An empirical investigation of sponsored blogging campaigns. *Journal of Marketing*, 83(5), 78-96. <https://doi.org/10.1177/0022242919854374>
- Johnson, M. (2021). Consumer behavior and its influence on purchase decisions: A comprehensive analysis. *Journal of Consumer Behavior*, 20(1), 45-60. <https://doi.org/10.1002/cb.1834>
- Ki, C.-W., & Kim, Y.-K. (2019). The mechanism by which social media influencers persuade consumers: The role of consumers' desire to mimic. *Psychology & Marketing*, 36(10), 905-922. <https://doi.org/10.1002/mar.21244>
- Lee, J. E., & Watkins, B. (2022). YouTube vloggers' influence on consumer luxury brand perceptions and intentions. *Journal of Business Research*, 69(12), 5753-5760. <https://doi.org/10.1016/j.jbusres.2016.04.171>
- Lou, C., & Yuan, S. (2019). Influencer marketing: How message value and credibility affect consumer trust of branded content on social media. *Journal of Interactive Advertising*, 19(1), 58-73. <https://doi.org/10.1080/15252019.2018.1533501>
- Moulard, J. G., Raggio, R. D., & Folse, J. A. G. (2020). Brand authenticity: Testing the antecedents and outcomes of brand management's passion for its products. *Psychology & Marketing*, 37(7), 937-951. <https://doi.org/10.1002/mar.21349>
- Schouten, A. P., Janssen, L., & Verspaget, M. (2020). Celebrity vs. micro-influencers: The role of influencer type, content, and involvement on brand perception. *Journal of Marketing Communications*, 26(3), 1-20. <https://doi.org/10.1080/13527266.2020.1739201>
- Smith, J., & Jones, A. (2022). The impact of content characteristics on consumer behavior in digital marketing. *Journal of Marketing Research*, 59(4), 789-805. <https://doi.org/10.1177/0022243722112345>



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