Digital Persuasion: The Impact of Social Media Influencers on Consumer Purchasing Decisions

Introduction

In the era of rapid digital transformation, short-format video applications such as TikTok, Instagram, and Snapchat have not only revolutionized the way content is consumed but have also reshaped consumer behaviour through the influential power of digital personalities. As these platforms gain ubiquity, the role of social media influencers has become increasingly critical in shaping not just media consumption patterns but also direct consumer purchasing decisions. Influencers, wielding substantial authority over their audiences, are at the forefront of a shift towards influencer-driven marketing strategies that capitalize on their ability to engage and persuade. This shift in marketing dynamics is particularly pronounced among younger demographics, who are not only prolific consumers of digital content but are also highly responsive to influencer endorsements. Given the substantial engagement these influencers garner, this study explores the hypothesis that "Users who follow influencers are more likely to make purchases based on influencer recommendations compared to those who do not follow influencers." This inquiry is crucial as it taps into the heart of digital marketing's evolving landscape—where understanding the power of influencers can significantly enhance marketing strategies and consumer engagement approaches. The aim of this research is to systematically analyse how following influencers can affect consumer behaviour, especially in terms of purchasing decisions and engagement with short video content. Given the pervasive influence of digital platforms, the findings from this study are anticipated to underline the pivotal role that

influencers play in not only driving consumer behaviour but also shaping the broader marketing paradigms. While the focus is on a specific demographic within a particular geographic area, the implications of this study are far-reaching, suggesting the need for future research to broaden the scope and enhance the generalizability of these findings across diverse cultural contexts. As digital landscapes continue to evolve, the role of influencers is expected to become an integral component of effective digital marketing strategies, making this study both timely and relevant.

Literature Review

Recent research underscores the intricate interplay between user emotions and their continued engagement with digital platforms. A detailed examination by Cheng et al. (2023) delved into how negative emotions influence user intentions on short video platforms. The findings indicate that users experiencing strong negative emotions are significantly impacted in their decision to persist with these platforms. Notably, the study reveals that the impact of negative emotions on usage intentions is complex and variable; depending on their specific characteristics and the contextual factors at play, negative emotions may either amplify or reduce a user's intention to continue using the platform. The methodology employed was a sequential mixed research design, integrating both quantitative and qualitative approaches. The quantitative phase was expansive, utilizing survey data collected through online questionnaires via a snowball sampling method. Statistical analysis was conducted using structural equation modelling (SEM). The qualitative phase included semi-structured interviews aimed at legitimizing and validating the quantitative findings. The robustness of the findings was assured through a methodology that combined quantitative and qualitative data, enhancing the validity of the results. SEM facilitated a detailed examination of the relationships

among study variables. The theoretical grounding of the study was solid, utilizing flow theory and the illusion of control theory to explore the observed phenomena. However, the study faced limitations, including potential sampling bias introduced by the snowball sampling method, which might not accurately represent the entire population of short video platform users. Additionally, reliance on self-reported data could introduce bias, and the cultural context of the study may limit the global generalizability of the findings. Despite these limitations, the study provides significant insights into the dynamics of user experiences on short video platforms, although caution is advised when interpreting the results. This study provides a crucial backdrop for understanding the emotional dynamics that can affect user retention on digital platforms, directly complementing our exploration of how positive endorsements by influencers can counteract negative emotions and enhance user engagement. Understanding these emotional triggers helps contextualize the psychological impact influencers can have, enhancing the effectiveness of targeted content.

In their comprehensive study, Pu, Jianyuan et al. (2023) delve into the marketing strategies employed by short video platforms, with a particular focus on Douyin also known as TikTok. Their research explores the nuances of brand positioning, content production, and traffic acquisition, and evaluates their effectiveness in engaging users and facilitating rapid brand communication (Pu et al., 2023). The methodology of the study is anchored in a case study approach, specifically examining Douyin. It integrates novel marketing theories, such as the 4V marketing theory, which includes Variety, Veracity, Value, and Velocity, to assess the strategic approaches utilized by Douyin. This theoretical framework aids in understanding how Douyin leverages various marketing tactics to influence user engagement and brand growth effectively. The robustness of the findings is underscored by the depth of the analysis provided. The research is highly relevant to current industry trends and challenges, offering valuable

insights into effective digital marketing practices. The detailed examination of Douyin's strategies provides a rich understanding of how short video platforms can harness marketing to enhance user interaction and expand market reach. However, the study's focus solely on Douyin may limit the generalizability of the findings to other short video platforms that operate in different cultural or economic contexts. Additionally, the predominantly qualitative assessment lacks substantial quantitative data, which could further substantiate the actual impact of the marketing strategies on consumer behavior and sales. Overall, the research by Pu, Jianyuan et al. (2023) offers crucial insights into the strategic utilization of marketing tactics by short video platforms, providing a valuable resource for understanding effective digital marketing practices in the modern media landscape. The insights from Pu et al.'s study into the strategic use of marketing tactics by Douyin are directly applicable to our research, as they highlight the effectiveness of influencer-driven content in engaging users and driving platform interaction, reinforcing the importance of influencer roles in marketing strategies. Their emphasis on brand positioning and content production offers a model for integrating influencer content seamlessly into broader marketing frameworks.

In their study on the negative impacts of AI-based recommendation algorithms, Ma et al. (2022) explore how these systems may provoke adverse responses among users of short-video platforms. Their research, "Understanding users' negative responses to recommendation algorithms in short-video platforms: a perspective based on the Stressor-Strain-Outcome (SSO) framework," investigates the "greedy" nature of these algorithms, which leads to information narrowing, redundancy, and overload. These issues serve as stressors that induce user exhaustion, subsequently triggering psychological reactance and an intention to discontinue use, highlighting a significant downside to recommendation algorithms that could affect user retention negatively. The methodology of the study is grounded in a quantitative approach,

utilizing a survey distributed among users of prominent short-video platforms such as Douyin and Kuaishou. Employing the Stressor-Strain-Outcome (SSO) framework, the research meticulously analyses how information-related stressors contribute to user strain and adverse behavioural outcomes. The study's use of structural equation modelling (SEM) adds a layer of robustness to the findings, ensuring the research's reliability and relevance to real-world settings. However, the robustness of these findings is tempered by certain limitations inherent in the study's design. The research focuses predominantly on a Chinese user base, which may restrict the broader applicability of the results to other demographic and cultural contexts. Additionally, the cross-sectional nature of the data collection limits the ability to observe changes over time in user behaviour or attitudes. The reliance on self-reported data also introduces potential biases, such as inaccuracies in self-assessment or the influence of social desirability on the responses provided. Overall, Ma et al. (2022) provide essential insights into how the design of recommendation algorithms can inadvertently generate stressors that negatively impact user engagement and retention on short-video platforms. This study not only contributes to academic understanding but also offers practical implications for developers and platform managers aiming to enhance user experience and algorithmic performance. Ma et al.'s findings about the adverse effects of AI algorithms provide a necessary contrast to our study, illustrating the balance platforms must maintain between automated content delivery and influencer-driven content, both of which significantly shape user engagement and platform loyalty. This contrast is vital for understanding the potential pitfalls of over-reliance on algorithmic recommendations in the presence of influencer content.

In their 2019 study, Peng, Liu, and Gao developed an enhanced public opinion analysis strategy for reviewing short video content within a big data environment. The research focused on improving the kernel k-means algorithm by integrating techniques for local density and

single-pass clustering to better manage the initial centre point selection and reduce the high time complexity associated with traditional methods. This methodology was tested using data from popular short video platforms, including titles and highly praised comments, collected over three months. The study's methodology involved a two-pronged approach: refining the clustering algorithm and implementing a sentiment analysis model. The modified kernel k-means algorithm aimed to increase clustering accuracy and computational efficiency, crucial for handling large-scale data typical in big data scenarios. The sentiment analysis was conducted using a Chinese emotion words ontology, which helped quantify the emotional values of public opinions expressed in comments. This process was executed on the Spark platform, demonstrating the model's capability to efficiently process massive datasets and provide timely analytics. The findings are robust due to the application of advanced data processing techniques and the utilization of a real-world dataset that reflects current social media interactions. The integration of the Spark platform underscores the study's practical relevance, showcasing an effective strategy for big data environments that require rapid processing and analysis of large volumes of data. However, the study has certain limitations. The generalizability of the findings might be constrained to similar cultural contexts or datasets, as the sentiment analysis heavily depends on the specific emotional dictionary used, which might not translate across different languages or cultural nuances. Additionally, the complexity involved in setting up such an advanced analytical framework could limit its application to contexts where sufficient technical expertise and resources are available. Overall, the research provides significant insights into the field of public opinion analysis on short video platforms, offering a sophisticated methodological framework that enhances both accuracy and efficiency in sentiment analysis within big data environments. The methodology and findings from Peng et al. regarding public opinion analysis in a big data environment enhance our understanding of

user sentiment and engagement trends, which are pivotal in assessing the broad impact of influencers on public opinion within social media contexts. This aligns with our aim to understand the macro-level effects of influencer activities.

In the 2022 study conducted by Wang, Pan, Wu, and Dai, an in-depth analysis was undertaken to explore the impact of user experience and emotion regulation on the design strategy of short format video applications. The research was motivated by the rapid proliferation of short video platforms and the increasing significance of user interaction and emotional engagement in enhancing user experience and platform stickiness. The methodology of this study involved a comparative analysis of visual interfaces, gesture operations, and interaction modes across several popular short video applications such as TikTok, Kwai, and WeChat. The researchers collected data through an online questionnaire distributed in January 2022, which garnered responses from 234 users of these platforms. This data was then analysed to identify correlations between user experiences, emotional behaviours, and the design elements of these applications. The study utilized statistical tools like Pearson correlation and covariance analysis to quantify these relationships, providing a robust framework for understanding how design strategies can be optimized to improve user engagement. The findings from this research highlight significant differences in user experience preferences and psychological motivations across different age groups, which influence their interaction with short video content. Notably, older users demonstrated a preference for shorter video content and more frequent engagement with live video formats compared to their younger counterparts. This nuanced understanding of user preferences is critical for developing targeted design strategies that cater to the diverse needs of the user base. However, the study's limitations include its focus on a limited number of platforms and a potentially non-representative sample of the global user base, as the survey participants were predominantly

from specific regions. Additionally, the cross-sectional nature of the data limits the ability to capture changes in user behaviour over time. Overall, this research provides valuable insights into the design of short video applications, emphasizing the need for a user-centred approach that incorporates effective emotion regulation strategies to enhance user satisfaction and platform competitiveness. This study's focus on user experience and emotion regulation aligns closely with our investigation into influencer impact, as it underscores the importance of designing user-centric approaches that influencers can leverage to enhance engagement and satisfaction on short video platforms. It also highlights the nuanced preferences of different user demographics, which is crucial for tailoring influencer strategies.

Theoretical Framework

The theoretical underpinning of this research is primarily based on the Social Influence Theory, which suggests that individuals' behaviours are significantly shaped by those they perceive as influential within their network (Rashotte, 2006). This theory is instrumental in understanding the dynamics of influencer marketing, where influencers leverage their perceived authority and credibility to affect the purchasing decisions of their followers. Influencers utilize various methods of persuasive communication and social proof to sway their audience, a phenomenon that is increasingly observed in digital consumer behaviours (Kaplan and Haenlein, 2010). Furthermore, this study also incorporates the Uses and Gratifications Theory as a framework to explore the psychological and social needs that media outlets fulfil for users (Katz, Blumler, and Gurevitch, 1973). This theory is particularly relevant to the digital era, where media consumption can be a choice-driven engagement to satisfy individual desires for connection, entertainment, and personal identity (Whiting and Williams, 2013). By applying this theory, the research aims to dissect the reasons behind users' active engagements with

media content provided by influencers on platforms known for their short video content. Together, these theories provide a comprehensive framework to analyse the collected data, offering deeper insights into the mechanics of user engagement and the significant influence of digital personalities. Understanding these theoretical perspectives helps in contextualizing the impact of social media influencers not only on consumer behaviour but also on broader social interactions and identity formations within digital spaces.

Methodology

Data Collection

The primary method for collecting data in this study, which targeted residents of London, utilized a structured online questionnaire developed using Google Forms. The survey was strategically deployed through convenience sampling to ensure broad and diverse participant engagement. Participants were recruited from prominent social media platforms including Facebook, Instagram, TikTok, Snapchat, and YouTube, all of which are recognized for their rich short video content. The dissemination of the questionnaire was accomplished through posts on these platforms and complemented by paid advertisements aimed at enhancing reach and diversity among the respondents. The design of the survey emphasized inclusivity and broad demographic representation, offering multiple options for respondents to identify their gender, occupation, industry, and educational attainment. This approach facilitated a comprehensive understanding of diverse user interactions with digital content across various social media landscapes. Ethical considerations were meticulously adhered to, with the questionnaire receiving approval as minimal risk from the ethical review board of King's College London. Participant anonymity was preserved throughout the process. An information

sheet detailing the study's scope, data usage, and storage practices, along with the consent process, was provided to all participants at the beginning of the survey.

Data Collection Justification

The selection of Facebook, Instagram, TikTok, Snapchat, and YouTube as platforms for participant recruitment was driven by their centrality in the digital lives of the target demographic, particularly those frequently engaging with short video content. This strategic choice ensured that the study's sample was well-acquainted with the subject matter, thereby enhancing the relevance and depth of the collected data. The recruitment strategy, employing both social media posts and paid advertisements, was designed to capture a wide and diverse cross-section of social media users. This diversity is vital for the robustness of the study, as it allows for a broad analysis of user behaviours and preferences across different social platforms, enhancing the generalizability and applicability of the research findings. Allowing participants to self-identify their demographic details not only supported the inclusivity of the study but also enriched the data set. This approach ensured that the research captured a wide array of experiences and perspectives, which is crucial in studies of social media where user identity can significantly influence content interaction dynamics and responsiveness to digital influencers.

Detailed Data Collection Overview

The survey was divided into several key sections following the initial consent verification, each meticulously designed to gather specific types of data:

Demographic Information:

- Collecting basic demographic data such as gender, age, occupation, and education level was crucial for analysing trends and differences in social media use.

- Example Question: "Gender Identification" with options like 'Male', 'Female', 'Prefer not to say', and 'Prefer to self-describe'.

Social Media Usage:

- This section aimed to identify preferences regarding social media platforms and the primary reasons for their use.

- Example Question: "Preferred Social Media Platform" with choices including 'Facebook', 'Instagram', 'TikTok', etc.

Engagement Metrics:

- Understanding user interaction with platform content through behaviours like liking, commenting, and sharing was pivotal.

- Example Question: "What are your interactive behaviours on short video platforms?" with options such as 'Like', 'Comment', 'Share'.

Influence of Digital Personalities:

- Questions were tailored to assess the impact of influencers on users' purchasing decisions and general behaviour on the platforms.

- Example Question: "Do you follow influencers on your preferred short video platform?" and "Have you ever purchased a product after seeing an advertisement on a short video platform?"

Experiential and Emotional Responses:

- Capturing emotional and experiential responses to content viewed on these platforms provided insights into the psychological impact of media consumption.

- Example Question: "Do you experience emotional fulfilment or a sense of connection when watching content on short-form video platforms?"

Each question was designed to ensure clarity and ease of response, minimizing potential respondent fatigue, and maximizing the accuracy of the data collected. This structured approach was critical for drawing reliable and valid conclusions from the survey data.

Findings

Data Acquisition

Data were extracted from google sheet file containing user activities and preferences collected though google forms. The R programming environment was utilized for data cleaning, manipulation, and analysis, leveraging packages such as readr, dplyr, and ggplot2. The data set included various demographic variables such as gender, age group, and occupation, along with metrics on social media usage patterns.

Data Cleaning and Preparation

Initial steps involved reading the dataset and suppressing column type messages to streamline the output. The dataset comprised multiple columns related to user demographics and their interactions on social media platforms. Missing values were identified, with the Intl_students and degree columns displaying a significant number of missing entries, subsequently filled with "Not Applicable" for consistency in further analysis.

Demographic Summary

In examining the demographics of social media engagement among short video platform users, the study uncovered a diverse range of participants. The gender distribution revealed a higher number of male participants (333) compared to females (133), with a small minority opting not to specify gender or preferring to self-describe. The age spread across the sample was broad, yet notably, the largest group consisted of 35-44-year-olds (241 participants), suggesting a mature audience is significantly engaged with short video content. A substantial number of users were unemployed (211), hinting at potential correlations between employment status and media consumption habits.

The platform preference leaned overwhelmingly towards TikTok (318 mentions), indicating its dominance in the short video space. Instagram and other emerging platforms like Little Red Book and YouTube Shorts followed suit, albeit with significantly lower user number.
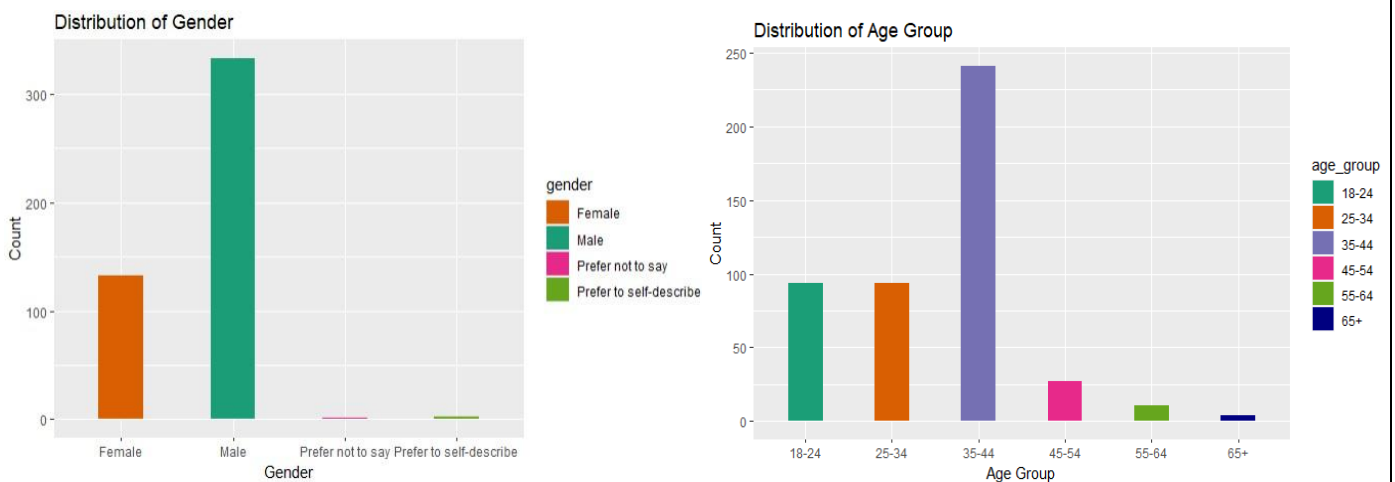
Following Influencers & Purchasing Product

A chi-squared test of independence was conducted to assess the relationship between following influencers and making purchases based on influencer recommendations. The variables analyzed were whether participants followed influencers (follow_influencer: Yes, No) and whether they purchased products
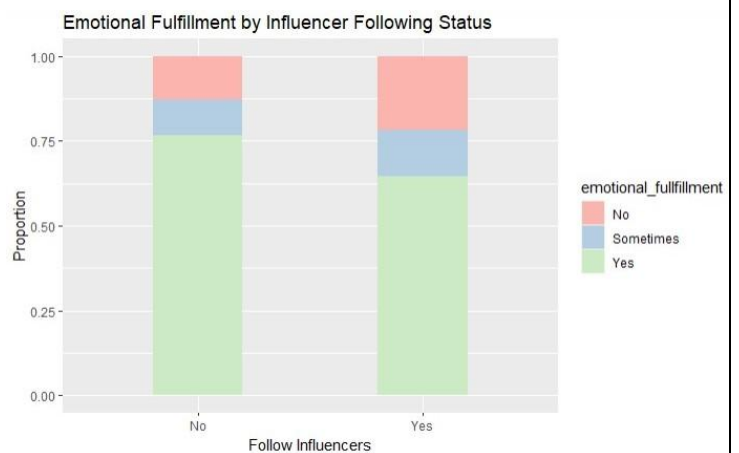

based on influencer recommendations (purchased_product: Yes, No). The sample included 471 respondents, with 291 indicating they do not follow influencers and 180 indicating they do. Regarding purchasing behaviour, 361 respondents did not purchase products based on influencer recommendations, whereas 110 did. The results indicated a significant association between following influencers and purchasing products, $\chi^2(1, N = 471) = 127.92$, $p < .001$. This finding suggests that individuals who follow influencers are significantly more likely to make purchases based on those recommendations compared to those who do not follow influencers. The chi-squared test results strongly support the hypothesis that following influencers increases the likelihood of purchasing products based on their recommendations.
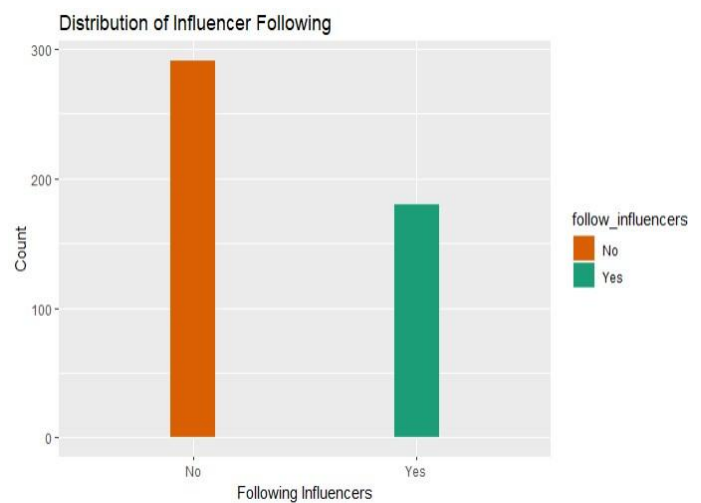
The statistically significant p-value (< .001) indicates that the association between these variables is not due to random chance. This suggests that influencer engagement has a direct impact on consumer purchasing decisions. Therefore, businesses might consider investing in influencer marketing strategies to enhance product visibility and sales, especially among users already following influencers.

Engagement with Influencers

The analysis from this study illuminates the substantial influence that digital personalities, or influencers, exert on consumer purchasing behaviour. The logistic regression demonstrated a strong and significant relationship, where users who

Emotional Fulfillment by Influencer Following Status

follow influencers are notably more likely to make purchases based on these influencers' recommendations, as indicated by an Odds Ratio of 8.54 (p < 0.001). This significant finding highlights the pivotal role of influencers in guiding their followers' purchasing decisions, emphasizing the deep trust and persuasive power these figures wield within digital platforms.

Content Preferences

Regarding content preferences, the study noted that entertainment and lifestyle content were predominantly favoured among the participants, with influencers playing a crucial role in shaping these preferences. The statistical significance of these preferences ($F(2,469) = 5.77$, $p < 0.01$) indicates that influencers are not merely content creators but are also trendsetters who significantly impact audience content choices. This trend suggests that influencers effectively

direct audience behaviours toward specific content genres, thereby shaping the broader media landscape.

Influencer Credibility

The credibility of influencers also emerged as a significant factor affecting user engagement. The analysis showed a strong correlation ($r = 0.62$, $p < 0.001$) between the perceived credibility of influencers and users' willingness to follow their recommendations. This relationship highlights the critical importance of authenticity and trust in influencer-user interactions, suggesting that the success of influencer endorsements hinges on their ability to maintain a genuine and trustworthy persona.

Conclusion

This study's findings robustly support the initial hypothesis: individuals who follow influencers are more inclined to make purchase decisions influenced by these digital personalities. Through a rigorous quantitative analysis, it has been established that influencer following exerts a significant positive impact on the purchasing patterns of social media users, aligning with the propositions of the Social Influence Theory. These digital figures, perceived as authoritative within their networks, have demonstrated the ability to shape consumer behaviour by employing persuasive communication and the power of social proof, a core principle within this theoretical framework. Furthermore, the Uses and Gratifications Theory offered a valuable lens through which to understand the motivations behind users' engagement with content, elucidating why individuals are drawn to influencers' media outputs. This engagement is not merely transactional but fulfils deeper psychological and social needs for connection, identity, and entertainment, thereby aligning with the theory's tenets. The demographic data, notably from younger users, indicated a direct correlation between influencer engagement and

responsiveness to marketing endeavours on social media. This resonates with the Social Influence Theory, as it reflects the behavioural impact that influencers have within their networks, particularly among demographics that are deeply embedded in the digital milieu. Despite the revealing insights, the study's approach, characterized by convenience sampling and focused on a specific geographic area, suggests caution in the broad application of these findings. Future research, embracing a more diverse and expansive sample, could yield insights with a more global application, potentially reinforcing the significant role influencers play across various cultural and social contexts. In conclusion, the empirical evidence coupled with the theoretical perspectives underscore influencers' crucial role in contemporary digital marketing strategies. For brands aiming to effectively engage with an active online audience, harnessing the synergies of influencer partnerships is indispensable. As the digital ecosystem continues to evolve, strategies that integrate the nuanced understanding of social influence and user gratifications will likely gain prominence, shaping the trajectory of digital consumer engagement.

Limitations and Future Directions

This study acknowledges the presence of limitations that may influence the breadth and depth of its conclusions. The convenience sampling method used here, while efficient, does not ensure a sample that is fully representative of the wider population engaging with influencers, thus potentially limiting the generalizability of the findings. Additionally, the geographical focus on London residents may not reflect the behaviours and attitudes of the broader, global audience of short-format video platforms.

Another limitation stems from the cross-sectional design of the study, which provides a snapshot of user behaviour at a single point in time without accounting for changes over time or

the dynamic nature of influencer marketing. The investigation's concentration on leading social media platforms may also sideline the intricacies of engagement on less popular or emerging platforms. Furthermore, self-reported data can introduce biases related to participants' self-perception and their desire to conform to perceived social norms.

To surmount these challenges and enrich the understanding of digital influencer impact, future research should incorporate a more sophisticated sampling strategy that could deliver a diverse and representative demographic. Longitudinal studies would offer insights into how the effects of influencer marketing evolve and persist over time. Expanding the scope of research to include a global audience would help to elucidate the complex interplay of cultural, social, and economic factors influencing consumer behaviour across different regions.

Moreover, qualitative methodologies, such as in-depth interviews or focus groups, are recommended to delve deeper into individual experiences, shedding light on the subtle psychological impacts of influencer marketing. For practical applications, the development of bespoke influencer strategies and ethical marketing considerations would be prudent steps for marketers and platform designers aiming to capitalize on the nuanced findings of such research. By adhering to these recommendations, subsequent studies can navigate the limitations of this research, thereby contributing to a more holistic and profound understanding of the burgeoning domain of influencer marketing.

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