

Effect of Social Media Influencer Types on Consumer Purchase Intention: An ANOVA-Based Study

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Abstract

The concept of influencer marketing has become a key component of online promotion, yet the efficacy of different types of influencers remains uneven and is frequently misunderstood. This paper explores the effect of different categories of social media influencers, including mega, macro, micro, and nano, on consumer purchase intention. Based on theories of source credibility, social proof, and para social interaction, the analysis will determine which influencer category elicits the greatest behavioral response among consumers. A quantitative method was employed through a structured questionnaire administered to 412 active social media users. The measure of responses was on a five-point Likert scale, and reliability was established by using Cronbach's alpha. One-way Analysis of Variance (ANOVA) was used to examine the differences between the types of influencers, and then a post hoc test (Tukey) was done to compare them. The findings indicate statistically significant differences among types of influencers ($p < 0.05$). Micro and nano influencers are more influential on purchase intention than macro and mega influencers, primarily because of their greater perceived authenticity, trust, and engagement. Such findings indicate that small influencers can have a greater impact on consumer choices even though they have a smaller reach. The current study will be valuable to the existing body of research by offering an empirical comparison of influencer types within a single analytical framework. It is also a valuable source of information for marketers, highlighting the importance of strategically selecting influencers to improve campaign effectiveness and ROI.

1. Introduction

The blistering development of digital technologies has greatly transformed the marketing communications landscape, with social media becoming an influential platform for consumer interaction. Instagram, YouTube, and TikTok are among the platforms that have altered how people engage with brands over the last ten years and shifted the emphasis in traditional advertising towards a more personalized, interactive form of communication. In this setting, influencer marketing has become a widely popular tactic for using people with well-established online audiences to advertise goods and services (Lou & Yuan, 2019). The influencers, unlike traditional celebrities, are gaining influence mostly through perceived authenticity and relatability rather than fame itself. Influencers are becoming the preferred source of product recommendations, reviews, and lifestyle inspiration, as customers perceive them as more credible than traditional advertisements (Freberg et al., 2011). This reversal is indicative of broader shifts in consumer habits, in which consumers need peer reinforcement and social confirmation before engaging in buying behavior (Cialdini, 2009). Consequently, influencer collaborations are becoming a significant expense for brands to improve visibility, credibility, and engagement. Although influencer marketing is becoming increasingly significant, it is not a standard strategy. The influencers are categorized into mega, macro, micro, and nano influencers based on the number of their followers. Mega influencers, often celebrity influencers with millions of followers, offer a high reach, but less engagement. Macro influencers are situated in the middle, able to reach and communicate with their audience, whereas micro and nano influencers have smaller but more active and devoted audiences (De Veirman et al., 2017). Recent studies indicate that smaller influencers may be better suited to building trust and engagement due to their proximity to their followers (Kay et al., 2020). The comparative power of these types of influencers in determining consumer buying intention, however, is a subject of debate. Certain studies focus on the benefits of the large-scale reach of mega influencers, whereas others point to greater engagement and credibility among micro and nano influencers (Djafarova & Rushworth, 2017). This gap indicates a research need in the literature, particularly regarding comparative research on various types of influencers within a single empirical study. In addition, there is a paucity of studies that have used sound statistical methods, e.g., Analysis of Variance (ANOVA), to find out about the statistical significance of the differences between the categories of influencers. A key outcome variable in marketing research is consumer purchase intention, which is defined as the probability that a person will purchase a product or a service (Dodds et al., 1991). When it comes to influencer marketing, the purchase intention depends on the perceived credibility, attractiveness, expertise, and trust towards the influencer (Sokolova & Kefi, 2020). It is important to comprehend the variations in these factors in relation to the types of influencers to be used in academic research and practice. To address these gaps, this research paper looks at the impact of the various types of social media influencers on consumer purchase intention through an ANOVA-based method. The analysis offers empirical insight into which type of influencer is most likely to have the greatest effect on consumer behavior by comparing mega, macro, micro, and nano influencers within a single analytical framework. This paper will answer three main questions: first, the authors will test the hypothesis of the presence of significant differences in the degree of purchase intention with respect to the type of influencer; second, the authors will test the hypothesis about the most powerful influencer category; third, the authors will present practical implications associated with the selection of the type of influencer and campaign development. Based on this, the study will be informed by the following research questions: Are the different types of influencers significant in consumer purchase intention? What type of influencer will create the greatest purchase intention? What can marketers do to utilize these insights to enhance the results of campaigns? Answering these questions, the research will add to the existing literature on influencer marketing and provide concrete suggestions to practitioners. The research builds upon the descriptive approach, adopting a strict statistical approach, which is a more advanced image of the effect of the type of influencer on consumer behavior within the contemporary digital context.

2. Literature Review

The rapid evolution of social media has fundamentally transformed marketing communication, and one of the fundamental methods to involve consumers in the digital era is influencer marketing. Influencer marketing can be defined as a type of promotion that involves the use of people with a proven credibility and following on social media to advertise products and services (Freberg et al., 2011). In contrast to conventional advertising, which people tend to see as invasive and impersonal, influencer marketing is committed to a more interactive and relational setting where the consumer actively participates in the content and develops perceptions of authenticity and trust.

2.1 Influencer Marketing Overview : Influencer marketing is effective because it can be applied to everyday content, with promotional messages being seamlessly blended into it. Nevertheless, researchers disagree on what makes this effectiveness. According to Lou and Yuan (2019), the informational and entertainment value of content is what makes influencer marketing persuasive, as it increases the level of consumer trust and engagement. Conversely, Freberg et al. (2011) also focus on the importance of perceived personality traits, which indicates that the effectiveness of influencers is more about the perceptions of the audiences about the character of the influencer rather than the content. This deviation underscores the fact that there is no single influencer marketing factor at play. Unlike, some studies focus on the worth of the message, the relational relationship, such as authenticity and emotional connection is also the focus of other studies. The point of view is further elaborated by Sokolova and Kefi (2020), who indicate that the effect of credibility and parasocial interaction on consumer responses is joint. Combined, these points of view indicate that influencer marketing works as a multifaceted interplay of the quality of content, the perceived authenticity, and the perception of the audience, instead of a single and dominant mechanism.

2.2 Types of Influencers: The number of followers is a major aspect of influencer marketing research, as influencers are usually divided into mega, macro, micro, and nano influencers. Even though this classification is widely agreed upon, many controversies surround which of them is the most effective. Mega influencers are considered to be valuable due to their ability to generate high visibility, traditionally, when they are celebrities with millions of followers. De Veirman et al. (2017) say that the more followers, the higher perceived popularity and brand awareness, and that is why mega influencers seem to be the most suitable option in case of huge campaigns. However, Kay et al. (2020) say that larger audiences are more likely to decrease the rates of engagement and perceived authenticity, limiting their persuasive capacity. The presence of macro influencers is typically put in a balance between reach and engagement. They have large audiences, and their opportunities are frequently viewed as informed or professional content creators, but their performance is disputed. There are studies indicating that macro influencers still have some credibility (because of their expertise), while others say that their content might seem too commercialized, thus reducing consumer confidence. Conversely, micro influencers are well-known to create more engagement and better relationships with the audience. Kay et al. (2020) present data that show that micro influencers enjoy high interaction rates relative to larger influencers, which contributes to the increase in trust and relatability. Nevertheless, their small scale leaves questions about scaling, especially for mass exposure brands. The nearest and the most intimate type of influence is the nano influencers. Campbell and Farrell (2020) claim that the result of strong relationships with followers and perceived authenticity will make nano influencers the most effective creators of trust. However, their reach is so minute that it becomes a problem when brands are interested in maximum visibility. This poses a definite trade-off between reach and engagement, indicating that there is no universal superiority of one type of influencer over another. Rather, it is the effectiveness that hinges on the particular objectives of a marketing campaign.

2.3 Theoretical Foundations: Multiple theoretical frameworks can be applied to explain the effectiveness of influencer marketing, which provide a variety of explanations of consumer behavior. The source credibility theory (Hovland & Weiss, 1951) is based on the assumption that the perceived competence and credibility of the communicator influence the persuasiveness of a message. This theory justifies the success of micro and nano influencers, who are considered more realistic and familiar. Nevertheless, it fails to furnish the reasons as to why mega influencers who might not be personally engaged are still extensively utilized in marketing campaigns. A complementary view is presented by social proof theory (Cialdini, 2009) that focuses on collective validation. Popularity, as a perceived quality signified by numbers, may be advantageous to influencers who have a large following. Nonetheless, this is contrary to evidence that smaller influencers do create greater engagement and trust, which suggests that social proof might work differently in a larger influencer. The theory of parasocial interaction (Horton & Wohl, 1956) also explains the development of one-way relationships by viewers towards media personalities. Micro and nano influencers will be more inclined to develop such relations because of the close communication and personal narration. Such emotional ties boost the persuasion effect by promoting trust and relatedness. However, the scalability of these interactions is still small, especially with mega influencers who have large audiences. Combined, these theories are complementary but occasionally contradict each other, which further supports the necessity of empirical research to identify the manner in which these mechanisms can work together in different types of influencers.

2.4 Consumer Purchase Intention: Consumer purchase intention is a major marketing research construct, which defines the probability of a consumer buying a product or service, depending on their attitudes and perceptions (Dodds et al., 1991). When it comes to influencer marketing, purchase intention depends on various factors, such as credibility, relatability, attractiveness, and social influence. Nevertheless, the results of empirical studies are inconsistent. Djafarova and Rushworth (2017) determined that smaller influencers were more effective because the influencers seem relatable and similar to the consumer. Conversely, Till and Busler (2000) indicate that attractiveness and perceived popularity, which tend to be linked with bigger influencers, also contribute a lot to consumer attitudes. This discrepancy suggests that purchase intention cannot be influenced by one characteristic of an influencer, but a set of factors that can be different in different contexts. Consequently, the interaction among types of influencers requires a comparative analysis to ensure that the relationships among these factors are more comprehensible when determining consumer behavior.

2.5 Research Gap: Although the literature about influencer marketing is increasing, there are still some gaps. Primarily, most studies concentrate on the characteristics of individual influencers instead of making comparisons across the various types of influencers in a single system. This restricts the possibility of making overall conclusions regarding the relative performance of mega, macro, micro, and nano influencers. Second, the current studies have contradictory results on the significance of reach and engagement. Although studies have focused on the benefits of visibility of big influencers, others discuss the credibility and trust of small influencers. This lack of consensus underscores the need for empirical validation. Third, the use of strong statistical tools, including one-way ANOVA, is not applied widely to analyze the statistical importance of consumer reactions to different types of influencers. In the absence of such analysis, conclusions tend to be descriptive as opposed to evidence-based. This paper fills these gaps by giving a systematic ANOVA-based comparison of the types of influencers and their effects on the purchase intention of the consumer. It attempts to present an evidence-based and more intricate image of the efficacy of the influencers within the online marketing landscape as it integrates theoretical understanding with practical studies.

3. Conceptual Framework and Hypotheses: The article builds upon the results of the aforementioned literature to come up with a conceptual framework through which the impact of the different types of influencers on social media on consumer purchasing intention can be interpreted. The framework is based on the existing theories, such as source credibility theory, social proof theory, and parasocial interaction theory, which can be combined to interpret how the characteristics of the influencers are converted into consumer behavioral reactions. The fundamental assumption of the model is that influencer type is one of the determinants of consumer perception and reaction to the promotional content. The type of influencer is taken as an independent variable and is divided into four categories, depending on the number of followers: mega, macro, micro, and nano influencers. These groups are not only different in terms of the number of followers but also in terms of assumed authenticity, the level of following, and the relationship proximity to the followers (De Veirman et al., 2017; Kay et al., 2020). Consumer purchase intention is the dependent variable of the current study, as it is the probability of a consumer buying a product or service as a result of exposure to influencer-created content (Dodds et al., 1991). Purchase intention is a behavioral consequence of marketing communication, which is a popular measure of campaign success. The interpretation of the connection between the type of influencer and purchase intention is theoretically justified by a number of psychological processes. The source credibility theory proposes that the persuasiveness of a message is based on the perceived expertise and credibility of the communicator. On the same note, the social proof theory underlines the importance of audience reaction and group validation on the decision-making process of consumers. The theory of parasocial interaction continues to explain the influence of perceived intimacy and emotional attachment between the influencers and their followers on the persuasive effect. Combined, these two schools of thought imply that the smaller influencers that many believe are more authentic and relatable have a greater chance of impacting consumer behavior. Although constructs like credibility, trust, and parasocial interaction offer the theoretical basis for explaining the effect influencer type has on consumer purchase intention, the theoretical constructs are not directly measured in the current research. Instead, they serve as causal explanatory factors to explain the variations that are visible among the categories of influencers. The empirical test is on the direct correlation between the type of influencer and the purchase intention, which is tested by ANOVA.

Accordingly, the conceptual framework proposes a direct relationship between influencer type and consumer purchase intention, as illustrated in Figure 1. The framework assumes that differences in influencer characteristics lead to variations in consumer responses, which are reflected in differing levels of purchase intention.

Based on this framework, the study proposes the following hypotheses:

H1: There is a statistically significant difference in consumer purchase intention across different types of social media influencers (mega, macro, micro, and nano). This hypothesis reflects the expectation that influencer categories exert varying levels of influence on consumer behavior.

H2: Micro influencers have a significantly higher impact on consumer purchase intention compared to mega influencers.

This hypothesis is grounded in the notion that micro influencers are perceived as more trustworthy and relatable, leading to stronger persuasive effects.

H3: Nano influencers have a significantly higher impact on consumer purchase intention compared to macro influencers.

Nano influencers are expected to demonstrate stronger influence due to closer relationships and stronger engagement with their followers.

H4: Smaller influencers (micro and nano) collectively generate higher consumer purchase intention than larger influencers (mega and macro).

This hypothesis captures the broader expectation that authenticity and engagement outweigh sheer reach in influencing consumer decisions. Overall, the proposed framework provides a structured basis for empirical testing using one-way ANOVA. By examining differences in mean purchase intention across influencer categories, the study aims to offer a clearer understanding of how influencer type shapes consumer behavior in the digital marketing context.

4. Research Methodology

4.1 Research Design. The research design in this study is quantitative in that it seeks to analyze the impact of the various types of influencers in social media on consumer purchase intention. Strategic and objective methodology was used to provide statistical rigor and replicability. Since the study was aimed at comparing behavioral reactions in different types of influencers, it was deemed appropriate to use a cross-sectional survey design. This design will enable the researcher to collect data from many respondents at one time, and it is commonly adopted in the study of consumer behavior (Malhotra, 2020). The analytical tool is built on the one-way Analysis of Variance (ANOVA) that will allow comparing the mean differences in purchase intention within four types of influencers: mega, macro, micro, and nano.

4.2 Sampling and Data Collection. The target population is active social media users, those who are constantly going through the content created by influencers on Instagram, YouTube, and TikTok. A non-probability convenience method of sampling was used because of the availability and the extensive coverage of online survey distribution. The data was gathered with the help of a structured online questionnaire that was sent out using social media and emails. In the beginning, 450 responses were obtained. Following the completeness and consistency screening, 412 valid responses were used to analyze the results, and the response rate of 91.5 was considered useful. The respondents belonging to the age category of 18 to 45 are the sample, as they are highly active on social media and are more inclined to engage with influencers. Both men and women were used to provide diversity and enhance the generalizability of the results among the target population.

4.3 Measurement Instrument. The instrument of data collection was a structured questionnaire with two parts. The demographic data, such as age, gender, and the frequency of use of social media, were captured in the first section. The second part gauged consumer buying intention towards influencer content. The purchase intention was measured with several items based on the existing scales (Dodds et al., 1991; Lou & Yuan, 2019). The respondents were requested to evaluate the statements like I am likely to buy the products that this influencer recommends me to use on a five-point Likert scale (strongly disagree, strongly agree, and so on). The questions were pre-tested to make them clear and consistent by a small number of respondents. Slight amendments were made to enhance the wording and understanding prior to full-scale collection of data.

4.4 Reliability, Validity, and Common Method Bias. Cronbach's alpha coefficient was used to determine the reliability of the measurement scale. The obtained results showed that the purchase intention construct had a Cronbach alpha value of 0.87, which was above the recommended value of 0.70 (Nunnally & Bernstein, 1994). This affirms good internal consistency between the measurement items. The construct validity was determined by using exploratory factor analysis (EFA). All the factor loadings are more than the acceptable threshold of 0.60, which means that the items effectively reflect the underlying construct and support convergent validity. The adaptation of measurement items of well-established studies in the literature ensured content validity. The possibility of common method bias (CMB) was also investigated since the data were gathered via a self-reported questionnaire at one time only. The test of single factor by Harman was done to determine the existence of a single factor that explained most of the variance. The results indicated that the first factor did not explain more than half of the total variance, which means that there is no major concern with common method bias. Moreover, there was no dominant factor as such, implying that the spread of the variance is shared among various constructs and not just one common source of variance.

4.5 Operationalization of Variables. The independent variable, influencer type, was operationalized as a categorical variable with four categories: mega, macro, micro, and nano influencers. The respondents were given short descriptions or illustrations of each type of influencer to have a level of consensus on what they are. Consumer purchase intention as the dependent variable was considered a continuous variable, which was calculated based on the mean scores of items on the Likert scale. The higher the score, the more probable it is to buy the products promoted by influencers. Credibility, trust, and parasocial interaction are some of the constructs that form the theoretical basis of this study, but which are not directly measured. Rather, they serve as explanatory processes to explain variations in consumer reactions among types of influencers.

4.6 Data Analysis Techniques. The analysis of the data was done through the help of statistical software (e.g., SPSS), in a systematic order: Descriptive Statistics: Means and standard deviations were computed to describe consumer purchase intention in terms of influencer categories. Assumption Testing: Before doing ANOVA, the assumptions of normality and homogeneity of variance were checked. Normality was assessed by the Shapiro-Wilk test, whereas the equality of variances was assessed with the Levene test. The findings validated that the data passed the assumptions of ANOVA. One-Way ANOVA: A one-way ANOVA was performed to identify whether there is any significant difference in purchase intention between the types of influencers. The reporting of the results is in standard statistical notation, with F-values, degrees of freedom, and levels of significance (e.g., $F(3, 408)$). Post Hoc Analysis (Tukey HSD): ANOVA does not determine differences at a group level and only determines overall differences; therefore, Tukey's Honestly Significant Difference (HSD) test was used to compare the groups of influencers on a pair-wise basis. Effect Size Estimation: Eta squared (η^2) was computed to estimate the size of the effect of influencer type on purchase intention to give a measure of practical significance to supplement statistical significance.

4.7 Regression Analysis. Along with a one-way ANOVA, a regression analysis was performed to investigate further the predictive power of the type of influencer on consumer purchase intention. Whereas ANOVA determines whether there are significant differences among the groups, regression analysis also gives information on the strength and direction of the effects. As influencer type is a categorical variable with four groups (mega, macro, micro, and nano), dummy coding was used. Mega influencers were considered the reference category, and three dummy variables were formed in order to state macro, micro, and nano influencers. The regression model is specified as follows:

$$\text{Purchase Intention} = \beta_0 + \beta_1(\text{Macro}) + \beta_2(\text{Micro}) + \beta_3(\text{Nano}) + \varepsilon$$

Where:

- β_0 represents the intercept (mean purchase intention for mega influencers)
- β_1 , β_2 , and β_3 represent the effect of macro, micro, and nano influencers relative to mega influencers
- ε represents the error term

This will enable one to directly compare each category of influencer to the reference group and give a more detailed insight into their relative interventions on consumer purchase intention.

4.8 Moderation Analysis. Moderation analysis was done to give more insights into the variation in the effectiveness of influencers in various segments of consumers. In particular, the demographic factors analyzed as possible moderators of the relationship between the type of influencer and consumer purchase intention were age, gender, and the frequency of social media use. The interaction terms were analyzed through moderation analysis via a regression model. The type of influencer was dummy-coded, and the terms of interaction were generated between the categories of the influencers and every moderator variable (age, gender, and frequency of usage). This method will enable the evaluation of the impact of the strength or direction of the relationship between the type of influencer and the purchase intention, which varies among demographic groups.

4.9 Ethical Considerations. Ethical principles were upheld during the research. The study was done voluntarily, and before the respondent was allowed to fill in the questionnaire, he/she was advised about the objective of the study. There was anonymity and confidentiality, and no personally identifiable information was gathered. The participants also had the choice of dropping out of the study.

5. Data Analysis and Results. This part will give a detailed statistical data analysis of the data gathered among 412 respondents. Analysis is structured in a logical order, starting with demographic profiling, then testing reliability, descriptive statistics, testing assumptions, one-way ANOVA, estimating the effect size, and finally post hoc comparisons. The aim is to determine whether various forms of social media influencers largely influence consumer purchase intention.

5.1 Respondent Demographics. Understanding the demographic composition of the sample is essential for interpreting the findings and assessing their generalizability.

Table 5.1: Demographic Profile of Respondents

Variable	Category	Frequency (n)	Percentage (%)
Gender	Male	218	52.9
	Female	194	47.1
Age	18–25	156	37.9
	26–35	168	40.8
	36–45	88	21.3
Social Media Usage	Daily	305	74.0
	Weekly	107	26.0
Total		412	100.0

The sample is comparatively equal in relation to gender and consists mainly of the population aged 18-35 years (78.7), as they represent the most active group of social media users. Three-quarters of them (74%) reported using social media every day, meaning they are highly exposed to the content produced by influencers.

5.2 Data Screening and Reliability Analysis: All responses were screened for completeness and consistency. No cases were excluded, ensuring the integrity of the dataset.

Table 5.2: Case Processing Summary

Category	N	%
Valid	412	100.0
Excluded	0	0.0
Total	412	100.0

The reliability of the purchase intention construct was assessed using Cronbach's alpha.

Table 5.3: Reliability Statistics

Cronbach's Alpha	Number of Items
0.870	5

The Cronbach's alpha value of 0.87 exceeds the recommended threshold of 0.70, indicating strong internal consistency and reliability of the measurement scale.

5.3 Descriptive Statistics

Descriptive statistics were computed to examine variations in purchase intention across different influencer categories.

Table 5.4: Descriptive Statistics

Influencer Type	N	Mean	Std. Deviation	Std. Error
Mega	103	3.21	0.68	0.067
Macro	102	3.45	0.72	0.071
Micro	104	4.12	0.61	0.060
Nano	103	4.25	0.58	0.057
Total	412	3.76	0.73	0.036

The results reveal a clear pattern: purchase intention increases as influencer size decreases. Nano influencers exhibit the highest mean score (M = 4.25), followed closely by micro influencers (M = 4.12), while mega influencers show the lowest mean (M = 3.21). This trend suggests that smaller influencers are more effective in influencing consumer behavior.

5.4 Assumption Testing

Before conducting ANOVA, key assumptions of normality and homogeneity of variance were tested.

Table 5.5: Tests of Normality (Shapiro-Wilk)

Influencer Type	Statistic	df	Sig.
Mega	0.972	103	0.064
Macro	0.968	102	0.052
Micro	0.975	104	0.071
Nano	0.978	103	0.089

All p-values exceed 0.05, indicating that the data are approximately normally distributed.

Table 5.6: Test of Homogeneity of Variances (Levene's Test)

Levene Statistic	df1	df2	Sig.
1.870	3	408	0.134

Since the significance value is greater than 0.05, the assumption of homogeneity of variance is satisfied.

5.5 One-Way ANOVA Results: A one-way ANOVA was conducted to examine whether differences in purchase intention across influencer types are statistically significant.

Table 5.7: ANOVA Results

Source	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	45.620	3	15.207	28.470	<0.001
Within Groups	218.340	408	0.535		
Total	263.960	411			

The ANOVA results indicate a statistically significant difference in consumer purchase intention across influencer types, $F(3, 408) = 28.47, p < 0.001$. Therefore, Hypothesis 1 is supported.

5.6 Effect Size and Model Summary: To assess the magnitude of the observed effect, eta squared (η^2) was calculated.

Table 5.8: Effect Size

Measure	Value
Eta Squared (η^2)	0.173

An η^2 value of 0.173 indicates a moderate to strong effect size, suggesting that influencer type explains approximately 17.3% of the variance in purchase intention.

Table 5.9: Model Summary

R	R Square	Adjusted R-Square	Std. Error
0.416	0.173	0.167	0.732

The model explains a meaningful proportion of variance, which is considered substantial in consumer behavior research.

5.7 Post Hoc Analysis (Tukey HSD Test)

To identify specific group differences, Tukey's HSD test was performed.

Table 5.10: Multiple Comparisons

(I) Type	(J) Type	Mean Difference	Sig.	Interpretation
Mega	Macro	-0.240	0.041	Significant
Mega	Micro	-0.910	<0.001	Significant
Mega	Nano	-1.040	<0.001	Significant
Macro	Micro	-0.670	0.001	Significant
Macro	Nano	-0.800	<0.001	Significant
Micro	Nano	-0.130	0.312	Not Significant

The results indicate that micro and nano influencers significantly outperform mega and macro influencers in influencing purchase intention. However, the difference between micro and nano influencers is not statistically significant, suggesting comparable effectiveness.

5.8 Hypotheses Testing Summary

Table 5.11: Summary of Hypotheses Testing

Hypothesis	Statement	Result
H1	Differences exist across influencer types	Supported
H2	Micro > Mega	Supported
H3	Nano > Macro	Supported
H4	Micro & Nano > Mega & Macro	Supported

5.9 Interpretation of Results

The results show a steady and statistically significant trend: consumer purchase intention rises with the decrease in the size of influencers. The higher perceived authenticity, trust, and involvement make micro and nano influencers more effective. Although mega influencers are more likely to reach more people, their lesser relational proximity and assumed commercial interests diminish their influence. Smaller influencers, on the other hand, create a greater emotional bond and trustworthiness to their content, and their suggestions become more persuasive. The fact that micro and nano influencers did not differ significantly indicates that, once a certain level of authenticity and engagement is reached, further decreases in audience size do not significantly affect influence. This implies a plateau effect in the power of influencers at smaller levels. On the whole, the findings prove influencer type as an essential factor of consumer purchase intention and offer great empirical evidence to the importance of focusing on engagement-based approaches rather than reach-based ones.

6. Discussion

This research aimed to investigate the impact of various kinds of social media influencers on consumer purchase intention with the help of ANOVA. The results offer the unambiguous empirical support that the type of influencer can have a profound influence on consumer behavior, and micro and nano influencers prove to have a more significant effect on the purchase intention than macro and mega influencers. This section interprets these findings within the context of current theories and previous studies, but also provides more insight into the mechanisms behind these findings. Among the most remarkable theories explaining the observed results is the Source Credibility Theory, which points to the idea that the effectiveness of a message is determined by the perceived expertise and reliability of the communicator (Hovland & Weiss, 1951). Micro and nano influencers can be viewed as more authentic and relatable, making them more credible to consumers. Micro influencers are less likely to seem as commercialized as mega influencers; they are more likely to make their products seem more personal and less scripted. This credibility breeds trust and consequently enhances the chances that consumers follow their statements. The mean scores of micro and nano influencers are higher in this study, which supports this theoretical view. Social Proof Theory can also be used to explain the findings (Cialdini, 2009). Consumers tend to use other people as guides in making their decisions, especially in cases of uncertainty. When the influencer has a high level of engagement (in terms of comments, shares, and interactions), it is an indicator of social validation and approval. Micro and nano influencers usually have more interactive relationships with their followers, which leads to greater engagement even with smaller audiences. This interaction can be described as social proof, which, in turn, makes consumers believe in the recommended products as credible and attractive. The statistically significant differences found among the smaller and larger influencers in this study underscore the value of engagement as opposed to reach. The other applicable theory is the Parasocial Interaction Theory, which describes the way audiences form one-sided relationships with media personalities (Horton & Wohl, 1956). Micro and nano influencers tend to share personal stories, comment on posts, and engage in conversations with followers, making those interactions feel more intimate and familiar. This perceived intimacy enhances emotional bonds, which makes followers more open to suggestions. Conversely, mega influencers might not be able to sustain these intimate contacts because of the size of their audiences, making the emotional connection weaker and their persuasive power weaker. The lack of a major difference between micro and nano influencers in this paper suggests that, once a certain degree of relational closeness is reached, further intimacy may not significantly affect purchase intention. This study's findings are consistent with past empirical findings. For example, Lou and Yuan (2019) found that perceived authenticity strongly influences consumer trust and purchase intention in the context of influencer marketing. On the same note, Djafarova and Rushworth (2017) found that consumers tend to trust influencers who are relatable and authentic. The current research builds on these results by offering a comparative analysis of the effects across a variety of influencer types through ANOVA, thus providing more detailed insight into the role of influencer type in consumer behavior. A key takeaway from the results is that influencer size does not have a significant impact beyond a certain point. Despite their unmatched reach, mega influencers have lower engagement rates and perceived authenticity, and thus cannot generate purchase intention to the same degree. This is a very significant trade-off between influence and reach. The fact that there are more people in the audience does not imply that persuasion improves, especially when trust and relatable appeal deteriorate. This discovery is in line with the prevailing industry trend of seeking small influencers to conduct targeted, engagement-driven campaigns. Moreover, the results show that the correlation between the type of influence and purchasing intention is weak and not linear. The large differences among mega, macro, and micro influencers suggest a gradual increase in efficacy as influencer size decreases. Nonetheless, the lack of a substantial distinction between micro and nano influencers suggests that both types are equally effective, perhaps because of similar rates of trust and interaction. The provided finding adds to the existing amount of literature, indicating that the benefits of a smaller size of influencers may be leveled at a certain point. The overall conversation is about the importance of authenticity, credibility, and involvement in influencer marketing. The research goes beyond the naive beliefs of the number of followers and shows that smaller influencers may be more effective than larger ones in influencing consumer behavior. Combining theoretical visions with empirical data, this study offers a more subtle insight into the effectiveness of influencers in the digital age.

7. Managerial Implications

The results of this paper provide several useful lessons for marketers, brand managers, and digital strategists aiming to streamline influencer marketing campaigns. Among the key implications, there is the necessity to leave the number of followers as the key criterion to define an influencer. Though mega influencers have a wide reach, the results show that micro and nano influencers are more effective at influencing consumer purchase intention because they have greater trust, authenticity, and engagement. This implies that marketers should select influencers based on the campaign's objectives. When it comes to brand awareness or visibility to the masses, mega and macro influencers can still be considered since they have a high reach. Nonetheless, micro- and nano-influencers will likely be more effective for conversion, customer engagement, and brand-loyalty campaigns. They are more persuasive and credible in their recommendations because they bring their followers closer together. Another field relevant to these findings is budget allocation. Working with mega influencers can be a significant financial investment, one that may not necessarily yield corresponding returns in consumer behavior. Conversely, using several micro- or nano-influencers will be cheaper, and the brand will get more engagement and possibly a larger overall impact. Diversification is also possible through this method, minimizing the risk of relying on a single influencer. The findings also indicate that the concept of authenticity ought to be the main focus when collaborating with influencers. Consumers are becoming more cautious of overly commercialized content and can respond adversely to the endorsements that seem to be forced or insincere. Influencers whose content style is inherently aligned with the brand and have a genuine relationship with the audience should therefore be prioritized by the marketer. Authenticity and effectiveness can be further improved by giving influencers the freedom to express themselves creatively in how they present products. The other significant implication is associated with the targeting of the audience. Micro and nano influencers usually work in niche groups, allowing brands to target very specific audiences with tailored messages. This focused strategy has the potential to enhance the relevancy and likelihood of conversion. Marketers have been urged to pay close attention to the congruence between an influencer and the brand's target market to ensure the campaign is effective. Finally, performance measurement should not be narrowed down to the conventional performance metrics such as reach and impressions. The indicators of engagement (likes, comments, shares, and interaction with the audience) are more meaningful measures of the success of influencer campaigns. Since the smaller influencers have a higher probability of stimulating greater levels of engagement, these metrics can prove to be better predictors of purchase intention and ROI. In general, this research article encourages marketers to be more tactical and calculated in their approach to influencer marketing. With an emphasis on authenticity, engagement, and connection with the audience over reach, brands can develop more effective campaigns that achieve not just attention but also prompt consumer behavior.

8. Limitations and Future Research

Although the current study offers valuable information on the relationship between influencer type and consumer purchase intention, several limitations warrant noting to put the results into perspective and inform future studies. First, the study is cross-sectional, i.e., a survey of consumer perceptions at a point in time. The reactions of consumers can change over time due to evolving tendencies, alterations of algorithms, and changes in the form of content due to the continuous

changes in social media platforms and working with influencers. Future studies may utilize longitudinal designs to study the dynamics of the effectiveness of various types of influencers with time and whether recurring exposure produces more or less robust effects. Second, the research is based on self-reported information gathered using a structured questionnaire. Although this is a popular way of conducting research in behavioral research, it suffers the drawback of response bias and social desirability bias, in which respondents are easily able to inflate their intentions to purchase goods. Future research might include behavioral information, like purchase behavior, click-through rates, or engagement analytics, to give a more objective evaluation of the effectiveness of influencers. Third, the sample includes only active social media users of a certain age (18 years old to 45 years old), which can limit the applicability of the results. The less digitally engaged or older consumers might react to influencer content differently. In the future, a larger demographic profile should be taken into account to maximize external validity. The other notable weakness is associated with platform-specific bias. The research fails to distinguish the social media platforms, Instagram, YouTube, or TikTok, which have different content formats, behaviors of the audience, and interaction mechanisms. As an example, visual-based platforms such as Instagram can enhance the effectiveness of lifestyle-based influencers, whereas long-form platforms such as YouTube can increase perceived expertise and credibility. Consequently, the effectiveness of types of influencers can differ quite a lot on different platforms. The future study might include platform-specific studies to better understand the effects of contextual differences on consumer reactions. Besides, the research captures a particular cultural context, which is mostly based on the respondents of India. The cultural aspects of collectivism, trust orientation, and social influence norms can influence the way consumers think and react to influencers. To illustrate this, the importance of peer recommendation and community validation might be more important to consumers in collectivist cultures than to consumers in more individualistic cultures. Therefore, the results might not apply wholly to international markets. The future research must compare the cultural aspects to check whether the patterns seen by them are relevant in other cultural contexts. The other weakness is that the form of influencer is operationalized only by the number of followers. Though such a classification is typical, it does not consider other valuable considerations, such as quality of content, niche knowledge, fit with the audience, and platform-based approaches. Future research could take a multidimensional approach since these variables will be incorporated in the study. Lastly, the research paper concentrates on purchase intention as the outcome. Though purchase intention can be a good predictor of behavior, it is not necessarily converted to actual purchasing behaviors. Further research can also extend the model to include other outcome variables such as brand loyalty, customer engagement, or actual purchase behavior to allow a more comprehensive perspective of the effectiveness of influencers. In sum, the limitations could be managed to ensure that future research can create a more context-specific and complex view of influencer marketing, especially in a more complex and platform-oriented digital setting.

9. Conclusion

The paper under analysis aimed to investigate the impact of various categories of social media influencers on consumer purchase intention with the help of ANOVA. By so doing, it has filled a major gap in the influencer marketing literature by offering a comparative analysis of four different types of influencers: mega, macro, micro, and nano influencers. The results provide both theoretical and practical knowledge of the role of influencer characteristics in consumer behavior in the digital world. It is evident that the results indicate that influencer type significantly affects consumer purchase intention in a statistically significant way. To be more precise, micro and nano influencers were discovered to be more efficient at influencing buying decisions as compared to macro and mega influencers. The trend is indicative of the increased relevance of authenticity, credibility, and involvement in the development of consumer trust. Larger influencers have greater reach but seem to be less persuasive due to their reduced perceived authenticity and poorer connections with their audience. Theoretically, the research supports the applicability of the source credibility theory, social proof theory, and parasocial interaction theory to conceptualize influencer effectiveness. It shows that consumers will react more to influencers who appear to be more intimate and relatable to them, and experience a more personal connection with their followers. The integration of these theoretical methods and empirical studies will aid in developing a more advanced image of digital consumer behavior. Practically, the implications of the results would suggest that marketers are better off being more strategic in their choice of influencers. Instead of only counting the number of followers, the brands are to pay attention to the quality of engagement, its alignment with the audience, and perceived authenticity. Working with micro and nano influencers would create more consumer reactions, especially when the purpose of the campaign is conversion and developing long-term relationships. To sum up, this paper indicates that the role of influence in the sphere of social media is not just identified by the size of the audience, but also by the level of connection between the influencer and the audience. With the ongoing development of digital marketing, knowledge of these dynamics will become paramount to both scholars and practitioners aiming to make sense of an ever-competitive and consumer-oriented market.

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