Eduvest – Journal of Universal Studies
Volume 5 Number 10, October, 2025
p- ISSN 2775-3735- e-ISSN 2775-3727

The Difference in the Influence of Source Credibility Nano and Micro Beauty Influencers on Parasocial Interaction and Purchase Intention of Instagram Users in Indonesia

Shafira Amalia, Ni Putu Nanda Pramesti Nata Putri, Nurfathiyah Mualifah Qalbi, Faranita Mustikasari
Bina Nusantara University, Indonesia
Email: shafira.amalia001@binus.ac.id, ni.putri008@binus.ac.id, nurfathiyah.qalbi@binus.ac.id, faranita.mustikasari@binus.ac.id

ABSTRACT

Micro, Small, and Medium Enterprises (MSMEs) in Indonesia face limited marketing budgets, requiring promotional strategies that are both effective and efficient. One rapidly growing approach is the use of nano and micro influencers, who engage more closely with audiences than large-scale influencers. This study examines the effect of influencer credibility (attractiveness, trustworthiness, and expertise) on parasocial interaction (PSI) and purchase intention (PI), as well as the differences in influence between nano and micro influencers. Using a quantitative method, an online survey was distributed to 170 respondents who follow nano and micro influencers in the skincare industry. Data were analyzed with Partial Least Squares–Structural Equation Modeling (PLS-SEM) and Multi-Group Analysis (MGA). The results show that influencer credibility positively and significantly affects both PSI and PI (H1–H6 accepted). PSI also has a positive and significant impact on PI (H7 accepted). In the comparison between influencer types (H8–H14), most hypotheses were rejected due to the absence of significant differences between nano and micro influencers. However, H13 was accepted, showing that the expertise of nano influencers more strongly influences PI than that of micro influencers. These findings confirm that influencer credibility directly drives both PSI and PI, while PSI further strengthens PI. The study highlights that both nano and micro influencers are effective digital marketing strategies for MSMEs, with nano influencers' expertise offering a distinctive advantage in enhancing purchase intention.

KEYWORDS *Influencer Marketing, Source Credibility, Parasocial Interaction, Purchase Intention, Nano Influencer, Micro Influencer*

INTRODUCTION

The development of digital technology has driven the transformation of marketing strategies, where social media has become the primary channel for building connections between brands and consumers (Kotler et al., 2019; Modi et al., 2025). According to APJII (2024), more than 79% of Indonesia's population uses the internet, with the average social media access time in Asia reaching 2 to 5 hours per day (Influencer Marketing Report, 2024). This indicates the increasing digital involvement of people in their daily lives. Social media plays an important role as the main channel in digital marketing strategies (Khrais & Gabbori, 2023). Platforms such as Instagram, TikTok, and YouTube are no longer just entertainment venues but have become key arenas for brands to build narratives, create engagement, and drive purchasing behavior. A study by Tuten and Solomon (2018) emphasizes that social media marketing is not only about increasing visibility but also about building long-term relationships with consumers through authentic interactions.

Many companies are now shifting their advertising budgets to digital platforms such as Instagram, TikTok, and YouTube to leverage the influence of content creators with broad audience reach (Chappa, 2023). Influencer marketing is growing rapidly, as evidenced by a 36.8% increase in the digital marketing budget from 2023 to 2024, with 92% of brands planning

to increase investment in influencers by 2025 (Single Grain, 2025). DataReportal (2025) recorded more than 5.24 billion global social media users, making influencer marketing no longer a complementary strategy but a major component of marketing communication (Wiedmann & von Mettenheim, 2021). Influencers have proven effective in shaping public opinion through authentic content (Casaló et al., 2020; Dabiran et al., 2022; Farivar et al., 2022), leading audiences to trust influencer reviews more than traditional advertisements (De Veirman et al., 2017; Freberg et al., 2011).

Instagram has become the dominant platform for influencer marketing, with more than two billion monthly active users (HypeAuditor, 2024). As many as 89% of marketers identify Instagram as the main channel for influencer campaigns, reflecting a shift in consumer behavior that positions social media not only as a medium for interaction but also as a space for product exploration and purchase decisions (Taslaud, 2024). Indonesia ranks sixth globally in the number of Instagram influencers, with the majority of followers being women aged 18–34 years (HypeAuditor, 2024). Indonesian consumers' interest in beauty content is high, particularly skincare, which is viewed as a long-term investment by Gen Z and Millennials (Goodstats, 2024). The dominance of skincare in the beauty and personal care market accounting for more than 35% of total market value demonstrates the great potential of this sector (Ken Research, 2024).

Skincare MSMEs in Indonesia face limited marketing budgets (Susanti et al., 2023; Purnomo et al., 2024). Therefore, collaboration with nano and micro influencers is considered strategic, as it is more cost-effective and fosters emotional closeness with audiences (Ijiga & Olola, 2024; Pellegrino & Abe, 2023). HypeAuditor (2024) data show that nano influencers dominate 77.4% of the Indonesian influencer market with the highest engagement rate of 1.85%. The role of micro influencers is also significant, with an engagement rate of 0.83%, although lower than that of nano influencers. Studies confirm that influencer credibility (Lee & Watkins, 2016; Shawn & Kathy, 2020; Lou & Yuan, 2019; Cheng et al., 2023) strongly determines consumer purchase intention. Parasocial relationships have been shown to strengthen message reception (Horton & Wohl, 1956; Yuan & Lou, 2020), particularly through dimensions of source credibility such as attractiveness, trustworthiness, and expertise (Ohanian, 1990). HypeAuditor (2024) research even found that nano and micro influencers achieve higher engagement than macro and mega influencers, suggesting an untapped potential for comparative study—especially regarding the difference in the influence of the two on parasocial interaction and purchase intention.

The urgency of this research is even greater because most players in Indonesia's skincare industry are Micro, Small, and Medium Enterprises (MSMEs) operating with limited promotional budgets. This condition makes it difficult for them to collaborate with macro or mega influencers, whose costs are considerably higher, making nano and micro influencers more feasible choices. However, no empirical evidence currently demonstrates which category is more effective for MSMEs. Thus, this study seeks to fill the gap in the existing literature by comparing, more specifically, nano and micro beauty influencers in terms of how each dimension of source credibility influences parasocial interaction and purchase intention among Indonesian consumers.

This research discusses the influence of source credibility of nano and micro beauty influencers on parasocial interaction and consumer purchase intention in the skincare sector,

considering that platforms such as Instagram, TikTok, and YouTube now play crucial roles in purchasing decisions (Influencer Marketing Report, 2024; HypeAuditor, 2024). The main focus is on the three dimensions of source credibility—attractiveness, trustworthiness, and expertise—which are believed to build consumer trust and emotional interaction with influencers. These dimensions can encourage purchase intention, especially for MSMEs that have limited promotional budgets and are more likely to collaborate with nano and micro influencers (Slice, 2023; Bernas, 2024; Accurate, 2020; Lou & Yuan, 2019; Sokolova & Kathy, 2020). This study fills a gap in the literature by comparing the effectiveness of these two influencer types in emerging markets such as Indonesia, where personal credibility factors are considered more decisive than follower count.

The research questions aim to examine the influence of each source credibility dimension on parasocial interaction and purchase intention and to compare the differences in these effects between nano and micro influencers (Ohanian, 1990). This study focuses on Generation Z and Millennial women in Indonesia who actively follow nano or micro beauty influencers, use Instagram as their main platform, and have the intention to purchase promoted skincare products that they have not previously bought. The focus on Instagram and skincare enables a more targeted analysis of the psychological mechanisms and relationships between influencers' personal credibility, parasocial interactions, and consumer purchase intentions.

The aims of this research are threefold: first, to examine the influence of source credibility dimensions (attractiveness, trustworthiness, and expertise) on parasocial interaction and purchase intention among Indonesian Instagram users; second, to analyze the role of parasocial interaction in mediating the relationship between source credibility and purchase intention; and third, to compare the effectiveness of nano versus micro beauty influencers across these relationships. The benefits of this research are both academic and practical. Academically, it enriches the literature on digital and influencer marketing by integrating the three dimensions of source credibility and comparing the effectiveness of nano and micro influencers, which were previously rarely analyzed simultaneously. Practically, the results provide strategic guidance for skincare MSMEs in selecting the right type of influencer for marketing campaigns, improving promotional budget allocation efficiency, and designing personalized, impactful communication for segmented audiences—thus supporting more effective decision-making in influencer marketing.

METHOD

This study used a quantitative approach with a cross-sectional design to analyze the influence of the source credibility dimensions—attractiveness, trustworthiness, and expertise—of nano and micro beauty influencers on parasocial interaction and purchase intention among skincare consumers in Indonesia (Sekaran & Bougie, 2016; Creswell, 2014; Scott, 2015). The research covered a national sample to represent diverse digital behaviors across regions. The subjects were Generation Z and Millennial women who actively followed beauty influencers and intended to purchase promoted skincare products but had not made prior purchases (Dimock, 2019; CNBC Indonesia, 2024). A purposive sampling technique was employed, with a total of 140 respondents evenly divided between nano and micro influencer groups to ensure data balance and representativeness.

Data were collected through an online questionnaire distributed via Google Forms and analyzed using Partial Least Squares–Structural Equation Modeling (PLS-SEM) to assess relationships among latent variables and indicators, as well as to compare the influence of nano and micro influencers using Multi-Group Analysis (MGA) (Hair et al., 2019; Memon et al., 2021; Sarstedt et al., 2011). The dependent variable was purchase intention, while the independent variables included the three source credibility dimensions and parasocial interaction. The type of influencer served as the moderating variable. A five-point Likert scale was used, with indicators adapted from validated instruments in prior studies (Ohanian, 1990; Liu et al., 2021; Duffet, 2015; Alalwan, 2018). Validity and reliability were tested through convergent validity, discriminant validity (HTMT), and composite reliability analyses.

The Structural Equation Modeling (SEM) comprised an outer model to test construct validity and reliability and an inner model to evaluate causal relationships through R^2values and path coefficients, with a significance level of $p \leq 0.05$and a 95% confidence interval (Hair et al., 2017, 2019). Multi-Group Analysis (MGA) was conducted with 5,000 bootstrap samples and bias-corrected confidence intervals to determine whether significant differences existed between nano and micro influencers in their effects on parasocial interaction and purchase intention (Sarstedt et al., 2011).

RESULTS AND DISCUSSION

In this study, the researcher applied the SEM-PLS method with two stages, namely *the measurement model* (*outer model*) and *structural model* (*inner model*), as well as *Multi Group Analysis* (PLS-MGA). All data was processed using SmartPLS software version 4.1.0.9, and an explanation of the results is presented in the discussion section below.

In this study, statistical analysis was conducted to see how respondents answered question items on the *variables Attractiveness* (IA), *Trustworthiness* (IT), *Expertise* (IE), *Parasocial Interaction* (PSI) and *Purchase Intention* (PI). The assessment uses a scale of 1 to 5, with the results calculated through the *mean* of each question item.

Table 1. Descriptive Statistic

Variable	*Item*	*Mean*	*Median*	*Min*	*Max*	*Hours of deviation*	*Excess Kurtosis*	*Skewness*
Attractiveness	IA1	4,48	5,00	2	5	0,636	0,521	-0,957
	IA2	4,34	4,00	2	5	0,688	-0,230	-0,659
	IA5	4,42	4,00	2	5	0,631	0,282	-0,756
Mean		4,41						
Trustworthiness	IT1	4,45	5,00	2	5	0,606	0,499	-0,785
	IT2	4,38	4,00	2	5	0,688	0,453	-0,871
	IT4	4,39	4,00	3	5	0,628	-0,616	-0,536
Mean		4,41						
Expertise	IE1	4,38	4,00	2	5	0,615	0,258	-0,599
	IE2	4,18	4,00	2	5	0,804	0,306	-0,827
	IE5	4.28	4,00	2	5	0,722	0,298	-0,758
Mean		4,28						
Parasocial Interaction	PSI3	4,26	4,00	2	5	0,726	0,219	-0,734
	PSI4	4,26	4,00	2	5	0,699	0,502	-0,720
	PSI5	4,36	4,00	3	5	0,650	-0,664	-0,531
Mean		4,29						

Variable	*Item*	*Mean*	*Median*	*Min*	*Max*	*Hours of deviation*	*Excess Kurtosis*	*Skewness*
Purchase Intension	PI2	4,31	4,00	2	5	0,715	-0,440	-0,639
	PI3	4,30	4,00	2	5	0,687	-0,293	-0,579
	PI4	4,32	4,00	2	5	0,692	0,761	-0,841
	PI5	4,33	4,00	2	5	0,669	-0,130	-0,616
	PI6	4,16	4,00	2	5	0,817	0,305	-0,829
Mean		4,28						

Descriptive statistics analysis was carried out to see the distribution of research data on each variable indicator used, including mean, median, minimum, maximum, standard deviation, skewness, and kurtosis. The results of the analysis are shown in Table 1. In general, the mean value of all indicators is above 4 (scale 1–5). This shows that most respondents tend to give yes to strongly agree with the statement submitted. The highest average value is found in the Attractiveness indicator (IA1 = 4.48), while the lowest average is found in Purchase Intention (PI6 = 4.16). Thus, it can be said that respondents consider influencers to have high attractiveness, but purchase intention, although still positive, is relatively lower than other indicators.

The median value for almost all items is 4, but the number of items reaches 5, which means that the distribution of data is skewed towards the categories of "agree" and "strongly agree". Meanwhile, the minimum and maximum values on all indicators were 2 and 5 (or 3–5 for some items), so none of the respondents gave an answer in the very low category (1). This reinforces the finding that respondents' answers tend to be at the top level of the measurement scale. The results of the standard deviation analysis showed a relatively small value (< 1), with a range of 0.606–0.817. This low standard deviation suggests that the data is relatively homogeneous, or in other words, the respondents' answers do not spread too far from the average value.

To test the normality of the data, it can be seen from the values of skewness and excess kurtosis. According to Hair, Hult, Ringle, & Sarstedt (2019), the data is considered to be normally distributed when the values of skewness and kurtosis are in the range of -1 to +1. In the results of this study, the skewness value of all indicators ranged from -0.957 to -0.531. All of them are in the range of -1 to +1, so it can be concluded that the distribution of data is normal even though it tends to be skewed (negatively skewed), which means that many respondents gave high answers on the scale. Meanwhile, the excess kurtosis value of all indicators is also in the range of -0.664 to 0.761. This shows that the data distribution is neither too pointed nor too flat, so it remains in normal conditions.

Thus, it can be concluded that the data of this study meets the assumption of normal distribution. In addition, although the method used is PLS-SEM which is non-parametric and does not demand normal distribution, the results of this descriptive analysis reinforce that the data is in good condition for further testing.

Testing Measurement Model (Outer Model)

Factor Loading dan Average Variances Extract (AVE)

Convergent validity serves to ensure that the indicators in a construct measure latent variables. In the test, the loading factor and Average Variance Extracted (AVE) measurements

were used. The loading factor is considered good if it is greater than 0.7, although a number above 0.5 is also often used in studies (Hair et al., 2019). In addition, the validity requirement is also met if the AVE has a value greater than 0.5.

Based on the test results in Table 4.4, it was found that there were items that did not meet the validity criteria, for example IA4 which had a loading factor value below 0.7 (0.685). In addition, there were also a number of other indicators that were excluded from the model because they did not show statistical significance (p value > 0.05). Once the invalid and insignificant indicators are removed, the model is then retested to produce more accurate analysis results.

Table 2. Test Results Outer Model

Variable	***Item***	***Statement***	***Factor Loading (>0,7)***	***Cronbach's Alpha***	***Composite Reliability (>0,7)***	***AVE (>0.5)***
Attractiveness	IA1	I feel that *the influencer* I follow on Instagram is an attractive person	0,809	0,838	0,885	0,608
	IA2	I feel that *the influencer* I follow on Instagram is classy	0,834			
	IA3	I feel that the physical appearance *of the influencer* I follow on Instagram is an elegant person	0,792			
	IA4	I feel that *the* influencers I follow on Instagram have beautiful faces	0,685			
	IA5	I feel that *the influencers* I follow on Instagram have charisma (strong / *charismatic appeal*)	0,769			
Trustworthiness	IT1	I feel that *the influencers* I follow on Instagram are reliable in expressing their opinions about *skincare* products (*dependable*)	0,802	0,886	0,916	0,687
	IT2	I feel that *the influencer* I follow on Instagram is honest in expressing his opinion about *skincare* products (*honest*)	0,838			
	IT3	I feel that *the influencers* I follow on Instagram are consistent in expressing their opinions about *skincare* products (*reliable*)	0,813			
	IT4	I feel that *the influencers* I follow on Instagram are sincere (sincere, sincere, pure) in recommending *skincare products* (*sincere*)	0,804			
	IT5	I feel that *the influencers* I follow on Instagram are trustworthy overall	0,885			
Expertise	IE1	I consider *the influencers* I follow on Instagram to have good skills about *skincare* (*skilled*)	0,753	0,888	0,918	0,693

Variable	*Item*	*Statement*	*Factor Loading (>0,7)*	*Cronbach's Alpha*	*Composite Reliability (>0,7)*	*AVE (>0.5)*
	IE2	I consider the *influencers* I follow on Instagram to be experts in the field of skincare (*experts*)	0,872			
	IE3	I consider *the influencers I follow on Instagram to have extensive knowledge about* skincare *(*knowledgeable*)*	0,833			
	IE4	I consider *the influencers I follow on Instagram to be competent enough to make a statement about* skincare *products (*qualified*)*	0,870			
	IE5	I consider *the* influencer *I follow on Instagram to be an experienced* skincare person	0,829			
Parasocial Interaction	PSI1	I feel comfortable watching *the content of influencers* I follow on Instagram, as if we were friends.	0,796	0,861	0,900	0,643
	PSI2	I feel engaged when I interact with *influencers* I follow on *Instagram*.	0,876			
	PSI3	I often compare my opinion of *skincare products* to the opinions of *influencers* I follow on Instagram.	0,781			
	PSI4	I tend to compare my opinions about *skincare* products with those of others, especially *the opinions of influencers* I follow on Instagram.	0,715			
	PSI5	When *influencers* I follow on Instagram share information, they seem to understand the things I want to know.	0,832			
Purchase Intension	PI1	I'm going to buy *skincare* advertised by *influencers* I follow on Instagram.	0,787	0,917	0,934	0,669
	PI2	I have a desire to buy *skincare* promoted by *influencers* I follow on Instagram.	0,860			
	PI3	The ads from *influencers* I follow on Instagram affect my intention to buy the *skincare*.	0,805			
	PI4	If I had the money, I would buy *skincare* advertised by *influencers* I follow on Instagram.	0,818			
	PI5	I'm interested in trying *skincare* promoted by *influencers* I follow on Instagram.	0,840			
	PI6	I wanted to buy another *skincare* from the brand because it was	0,775			

Variable	*Item*	*Statement*	*Factor Loading (>0,7)*	*Cronbach's Alpha*	*Composite Reliability (>0,7)*	*AVE (>0.5)*
		promoted by *an influencer* I follow on Instagram.				
	PI7	I will actively look for *skincare* products featured by *influencers* I follow on Instagram to buy them.	0,836			

The following test results that have met the validity criteria can be seen in Table 3:

Table 3. Test Results *Factor Loading*

Variable	*Item*	*Statement*	*Factor Loading (>0,7)*	*Cronbach's Alpha*	*Composite Reliability (>0,7)*	*AVE (>0.5)*
Attractiveness	IA1	I feel that *the influencer* I follow on Instagram is an attractive person	0,865	0,795	0,879	0,708
	IA2	I feel that *the influencer* I follow on Instagram is classy	0,841			
	IA5	I feel that *the influencers* I follow on Instagram have charisma (strong / *charismatic appeal*)	0,818			
Trustworthiness	IT1	I feel that *the influencers* I follow on Instagram are reliable in expressing their opinions about *skincare* products (*dependable*)	0,843	0,792	0,878	0,706
	IT2	I feel that *the influencer* I follow on Instagram is honest in expressing his opinion about skincare products (*honest*)	0,867			
	IT4	I feel that *the influencers* I follow on Instagram are sincere (sincere, sincere, pure) in recommending skincare products (*sincere*)	0,811			
Expertise	IE1	I consider *the* influencers I follow on Instagram to have good skills about skincare (*skilled*)	0,808	0,804	0,885	0,719
	IE2	I consider the *influencers* I follow on Instagram to be experts in the field of skincare (*experts*)	0,889			
	IE5	I consider the *influencer* I follow on Instagram to be an experienced skincare person	0,845			
Parasocial Interaction	PSI3	I often compare my opinion of *skincare products* to the opinions of *influencers* I follow on Instagram.	0,827	0,786	0,873	0,696
	PSI4	I tend to compare my opinions about *skincare* products with those of others, especially *the opinions of influencers* I follow on Instagram.	0,827			
	PSI5	When *influencers* I follow on Instagram share information, they seem to understand the things I want to know.	0,850			
Purchase Intension	PI2	I have a desire to buy *skincare* promoted by *influencers* I follow on Instagram.	0,866	0,890	0,919	0,695

Variable	*Item*	*Statement*	*Factor Loading (>0,7)*	*Cronbach's Alpha*	*Composite Reliability (>0,7)*	*AVE (>0.5)*
	PI3	The ads from *influencers* I follow on Instagram affect my intention to buy the *skincare*.	0,840			
	PI4	If I had the money, I would buy *skincare* advertised by *influencers* I follow on Instagram.	0,831			
	PI5	I'm interested in trying *skincare* promoted by *influencers* I follow on Instagram.	0,856			
	PI6	I wanted to buy another *skincare* from the brand because it was promoted by *an influencer* I follow on Instagram.	0,770			

Discriminating Validity Test

In testing discriminant validity, the Heterotrait-Monotrait Ratio of Correlations (HTMT) criterion was used. A construct can be declared to meet discriminant validity if the HTMT value between latent constructs is below the threshold of 0.9. This value indicates that each construct has an obvious difference from each other, so the indicator used actually represents the construct it is measuring. The results of the discriminatory validity test based on the HTMT criteria are presented as follows.

Table 4. HTMT Discriminant Validity Test Results

	IA	**IE**	**IT**	**PI**	**PSI**
IA					
IE	0,836				
IT	0,885	0,869			
PI	0,776	0,811	0,818		
PSI	0,721	0,734	0,821	0,799	

Based on the results of the discriminant validity test using the HTMT criteria shown in Table 4, the entire correlation value between latent constructs is below the threshold of 0.9. These results show that each construct in the research model has a fairly clear difference and does not conceptually overlap with the other constructs. Thus, it can be concluded that all indicators in this study meet the criteria for discriminatory validity and can be declared valid.

Reliability Test

The reliability test in this study was carried out using two main measures, namely composite reliability and Cronbach's Alpha. In general, a construct is considered reliable if the composite reliability value exceeds 0.7, which indicates a strong consistency between indicators. Meanwhile, Cronbach's Alpha is used to measure the stability and consistency of measurement results, with an acceptable minimum limit of more than 0.6.

Based on the test results shown in Table 5, all constructs in this study were proven to have a composite reliability value higher than 0.7, and Cronbach's Alpha value above 0.6. These results confirm that all constructs have a good level of reliability, so that the indicators

used are consistent in measuring their respective latent variables. Thus, it can be concluded that this research instrument meets the reliability criteria and is suitable for further analysis.

Table 5. Reliability Test Results

Variable	***Cronbach's Alpha***	***Composite Reliability (>0,7)***
Attractiveness	0,795	0,879
Trustworthiness	0,792	0,878
Expertise	0,804	0,885
Parasocial Interaction	0,786	0,873
Purchase Intension	0,890	0,919

Structural Model Testing (Inner Model)

In the inner model testing stage, the initial step is carried out by calculating the coefficient of determination (R^2) value, where the range of R^2 values is between 0 to 1. The higher the R^2 value, the stronger the relationship between the independent variable and the dependent variable. The results of the calculation of R^2 are as follows:

Table 6. Test Results *R Square*

Variable	***R Square***	***Description***
Purchase Intention	0,629	*Moderate*
Parasocial Interaction	0,493	*Weak*

According to Hair et al. (2011), it is explained that the interpretation of the R^2 value (coefficient of determination) can be used to see the extent to which independent variables are able to explain dependent variables in structural models. As a rule of thumb, R^2 values of 0.75, 0.50, and 0.25 can be interpreted as substantial (strong), moderate (moderate), and weak (low) respectively. Based on the SmartPLS output, the R^2 value is obtained as follows:

1. The value of the determination coefficient (R^2) in the Purchase Intention (PI) variable is 0.629. This shows that PI can be explained through the variables Attractiveness, Trustworthiness, and Expertise of 62.9%. Based on the criteria of Hair et al. (2011), this value is included in the moderate category, so the model has a good predictive ability in explaining Purchase Intention.
2. The value of the determination coefficient (R^2) in the Parasocial Interaction (PSI) variable was 0.493. This shows that PSI can be explained by the variables Attractiveness, Trustworthiness, and Expertise of 49.3%. According to the criteria of Hair et al. (2011), this value is in the weak category, so the contribution of these three variables to PSI is still limited and is most likely influenced by other factors outside the model.

Hypothesis Test

The next stage is to run the bootstrapping method by re-sampling 5,000 times. The results of the bootstrapping test are shown as follows:

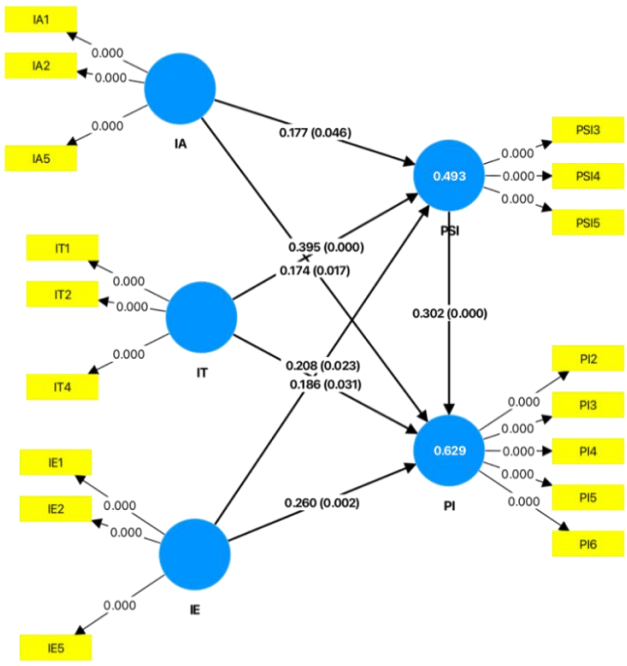

Figure 1. Result Model Bootstrapping

In this study, the level of confidence between variables was measured through a T-statistic value compared to a P-value. A hypothesis is declared to have a significant effect if the T-statistic is greater than equal to ≥ 1.65 and the P-value is less than < 0.05. The results of the internal model test shown in Table 7 below show this:

Table 7. Test Results Inner Model

Hypothesis	***Path Coefficient***	***T-statistics (|O/STDEV|)***	***P-Values***	**Conclusion**
H1: *The attractiveness of nanos* and *micro influencers* has a positive and significant influence on *parasocial interaction*. IA -> PSI)	0,177	1,688	0,046	Accepted
H2: *The attractiveness of nano* and *micro influencers* has a positive and significant influence on *purchase intention*. (EACH -> PI)	0,174	2,109	0,017	Accepted
H3: Trustworthiness *of nanos* and *micro influencers* have a positive and significant influence on *parasocial interaction*. (IT ->PSI)	0,395	3,471	0,000	Accepted
H4: *Trustworthiness of nano* and *micro influencers* has a positive and significant influence on *purchase intention*. (IT -> PI)	0,186	1,861	0,031	Accepted
H5: *Nano and* micro influencer *expertise* has a positive and significant influence on *parasocial interaction*. (IE -> PSI)	0,208	1,999	0,023	Accepted
H6: *Nano and* micro influencer *expertise* has a positive and significant influence on *purchase intention*. (IE -> PI)	0,260	2,908	0,002	Accepted
H7: *Parasocial interaction nano* and *micro influencers* have a positive and significant influence on *purchase intention.* (PSI ->PI)	0,302	3,568	0,000	Accepted

The results of the hypothesis test showed that all variables had a positive and significant influence. Attractiveness was shown to have an effect on parasocial interaction (H1 accepted; t = 1.688; p = 0.046) and purchase intention (H2 accepted; t = 2.109; p = 0.017). Trustworthiness also affects parasocial interaction (H3 accepted; t = 3.471; p = 0.000) and purchase intention (H4 accepted; t = 1.861; p = 0.031). Expertise had a significant influence on both parasocial interaction (H5 accepted; t = 1.999; p = 0.023) and purchase intention (H6 accepted; t = 2.908; p = 0.002). In addition, parasocial interaction was shown to have a positive and significant effect on purchase intention (H7 accepted; t = 3.568; p = 0.000). Thus, all hypotheses (H1–H7) are declared acceptable.

MGA Hypothesis Test

The interpretation of the results of Multi Group Analysis (MGA) analysis in this study is based on three main parameters, namely p-value, path coefficient, and t-value. First, p-value is used as a basis for assessing the statistical significance of differences in influence between groups. In this study, the significance level was set at 0.05. If the p-value < 0.05, then the difference in influence between groups is statistically significant. On the other hand, if the p-value ≥ 0.05, then the difference is considered insignificant, so it can be concluded that there is no significant difference in influence between the group of nano influencers and micro influencers.

Second, the path coefficient (β) describes the magnitude and direction of influence between latent constructs. In the results of the Path Coefficient Difference in Multi Group Analysis (MGA) analysis, the difference value can be positive or negative. A positive value indicates that the path coefficient in Group A is greater than Group B, so the influence of the path is relatively stronger on Group A. On the other hand, a negative value indicates that the path coefficient in Group B is greater than Group A, so the influence of the path is stronger on Group B.

Third, t-values were obtained from the results of bootstrapping and used to test the significance of the influence on each group. With a significance level of 5%, a path is declared significant if the t-value ≥ 1.65. Conversely, if the t-value < 1.65, then the effect of the independent construct on the dependent construct is declared insignificant in the group being tested.

Table 8. Inter-Type MGA Test Results Influence

Hypothesis	***Nano***		***Micro***		***Nano - Micro***		**Conclusion**
	Path Coefficient	***t-value***	***Path Coefficient***	***t-value***	***Path Coefficient***	***P-value***	
H8: *The attractiveness of nano* influencers has a stronger and more significant influence on *parasocial interaction* than *micro influencers.* (IA -> PSI)	0,081	0,574	0,203	1,345	-0,122	0,725	Rejected

Hypothesis	*Nano*		*Micro*		*Nano - Micro*		Conclusion
	Path Coefficient	***t-value***	***Path Coefficient***	***t-value***	***Path Coefficient***	***P-value***	
H9: *The attractiveness of micro influencers* has a stronger and more significant influence on *purchase intention* than *nano influencers.* (EACH -> PI)	0,115	0,982	0,208	1,826	-0,093	0,718	Rejected
H10: *The trustworthiness* of *nano influencers* has a stronger and more significant influence on *parasocial interaction* than *micro influencers.* (IT -> PSI)	0,535	3,335	0,294	1,937	0,241	0,138	Rejected
H11: *The trustworthiness* of *nano influencers* has a stronger and more significant influence on *purchase intention* than *micro influencers.* (IT -> PI)	0,216	1,787	0,245	1,711	-0,029	0,561	Rejected
H12: *The expertise* of *nano* influencers *has a stronger and more significant influence on* parasocial interaction *than micro influencers*. (IE -> PSI)	0,201	1,567	0,284	2,035	-0,083	0,669	Rejected
H13: *The expertise* of *nano influencers* has a stronger and more significant influence on *purchase intent* than *micro influencers.* (IE -> PI)	0,444	4,577	0,071	0,341	0,373	0,019	Accepted
H14: *Parasocial interaction* from *nano* influencers *has a stronger and more significant influence on* purchase intention *than micro influencers*. (PSI -> PI)	0,192	1,903	0,367	2,789	-0,175	0,855	Rejected

Based on the MGA test (Table 8), the difference in effects between influencer tiers was generally insignificant: H8 (Attractiveness→PSI) and H9 (Attractiveness→PI) showed higher coefficients at micro than at nano ($\Delta = -0.122$; $p = 0.725$ and $\Delta = -0.093$; $p = 0.718$), but the two did not differ significantly; H10 (Trustworthiness→PSI) was numerically stronger in nanos

(Δ = 0.241) but not significant (p = 0.138); H11 (Trustworthiness→PI) is slightly stronger at the micro (Δ = −0.029; p = 0.561) and remains insignificant; H12 (Expertise→PSI) is numerically stronger at micro (Δ = −0.083; p = 0.669) and is insignificant; only H13 (Expertise→PI) was significant with a much stronger effect on nano (Δ = 0.373; p = 0.019), confirming the nano influencer's advantage when competence/expertise stimulated purchase intent; H14 (PSI→PI) is numerically stronger at the micro (Δ = −0.175) but not significant (p = 0.855). In summary, the majority of differences between nano-micro are meaningless, except for the path of expertise → purchase intention which is convincingly stronger in nano influencers.

Discussion of Hypothesis Test Results

This study confirms that in Gen Z and Millennial Instagram users in Indonesia, the three dimensions of source credibility attractiveness, trustworthiness, and expertise consistently have a positive and significant effect on parasocial interaction (PSI) and purchase intention (PI), and PSI itself also encourages PI (H1–H7 to be accepted). The influencer type comparison test showed that the majority of the differences between nano and micro were insignificant (H8–H12, H14 was rejected), so the effectiveness of the two was relatively comparable; An important exception is that expertise has a stronger influence on PI on nano influencers (H13 accepted). Descriptively, high mean scores on the attractiveness, trustworthiness, expertise, and PSI/PI indicators reinforce this pattern. The implication is that MSMEs do not need to be fixated on one tier: nano is effective when the strategy emphasizes product education and competence (cost efficient, high engagement), while micro is useful for expanding the reach of the audience. In summary, the credibility of a personal influencer is the main motor that shapes parasocial closeness and, ultimately, purchase intent, with nano-specific advantages on the expertise → purchase intention path.

CONCLUSION

The study on Generation Z and Millennials in Indonesia revealed that the three dimensions of source credibility—attractiveness, trustworthiness, and expertise—positively and significantly influenced both parasocial interaction and purchase intention, with parasocial interaction further enhancing purchase intention. Although most differences between nano and micro beauty influencers were insignificant, nano influencers demonstrated a stronger effect through expertise in shaping purchase intent, while micro influencers reached broader audiences. These results validated the relevance of the Source Credibility model and highlighted parasocial interaction as an independent predictor of purchase intention. For MSMEs, the findings suggest that collaboration with nano influencers can be more efficient for educating consumers about skincare products, while micro influencers may effectively increase brand exposure. Future research should aim to balance respondent demographics across generations, regions, and income levels, incorporate qualitative methods such as interviews or FGDs, and include additional variables to provide deeper insights into influencer marketing effectiveness for MSMEs in Indonesia.

REFERENCES

Alalwan, A. A. (2018). Investigating the impact of social media advertising features on

customer purchase intention. *International Journal of Information Management, 42*(1), 65–77. https://doi.org/10.1016/j.ijinfomgt.2018.06.001

Casaló, L. V., Flavián, C., & Ibáñez-Sánchez, S. (2020). Influencers on Instagram: Antecedents and consequences of opinion leadership. *Journal of Business Research, 117*, 510–519. https://doi.org/10.1016/j.jbusres.2018.07.005

Chappa, V. (2023). Growth of influencer marketing in emerging economies. *International Journal of Digital Marketing, 15*(2), 123–139.

Cheng, Y., Wei, J., & Zhao, Y. (2023). Source credibility and consumer trust in influencer marketing. *Journal of Consumer Behaviour, 22*(1), 35–47. https://doi.org/10.1002/cb.2053

Choi, S. M., & Lee, W. N. (2019). The role of credibility in influencer marketing: A structural equation approach. *Journal of Interactive Marketing, 46*, 93–104. https://doi.org/10.1016/j.intmar.2018.09.005

Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). SAGE Publications.

Dabiran, E., Kharazi, M., & Jalili, M. (2022). Social media influencers and consumer engagement: Evidence from Instagram. *Computers in Human Behavior, 134*, 107332. https://doi.org/10.1016/j.chb.2022.107332

De Veirman, M., Cauberghe, V., & Hudders, L. (2017). 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

Dimock, M. (2019). Defining generations: Where Millennials end and Generation Z begins. *Pew Research Center*.

Farivar, S., Wang, F., & Yuan, Y. (2022). Influencer marketing effectiveness on social media. *Journal of Retailing and Consumer Services, 64*, 102–114. https://doi.org/10.1016/j.jretconser.2021.102814

Freberg, K., Graham, K., McGaughey, K., & Freberg, L. A. (2011). Who are the social media influencers? A study of public perceptions of personality. *Public Relations Review, 37*(1), 90–92. https://doi.org/10.1016/j.pubrev.2010.11.001

Hair, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2017). *A primer on partial least squares structural equation modeling (PLS-SEM)* (2nd ed.). SAGE Publications.

HypeAuditor. (2024). *The state of Instagram influencers in Indonesia*. HypeAuditor.com.

Khrais, L. T., & Gabbori, D. (2023). The effects of social media digital channels on marketing and expanding the industry of e-commerce within digital world. *Periodicals of Engineering and Natural Sciences*, *11*(5), 64–75.

Kotler, P., Kartajaya, H., & Setiawan, I. (2019). *Marketing 4.0: Moving from traditional to digital*. Wiley.

Lee, J. E., & Watkins, B. (2016). YouTube vloggers' influence on consumer luxury brand perceptions. *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

Ohanian, R. (1990). Construction and validation of a scale to measure celebrity endorsers' perceived expertise, trustworthiness, and attractiveness. *Journal of Advertising, 19*(3), 39–52. https://doi.org/10.1080/00913367.1990.10673191

Sokolova, K., & Kefi, H. (2020). Instagram and YouTube bloggers promote it, why should I buy? How credibility and parasocial interaction influence purchase intentions. *Journal of Retailing and Consumer Services, 53*, 101742. https://doi.org/10.1016/j.jretconser.2019.01.011

Susanti, N., Pratama, R., & Hidayat, A. (2023). The digital marketing challenges of SMEs in Indonesia. *Journal of Economics & Business, 25*(2), 89–102.

Tuten, T. L., & Solomon, M. R. (2018). *Social media marketing* (3rd ed.). SAGE Publications.

Yuan, S., & Lou, C. (2020). How social media influencers foster relationships with followers: The roles of source credibility and fairness. *Journal of Interactive Advertising, 20*(2), 133–147. https://doi.org/10.1080/15252019.2020.1769514