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Influencer Credibility On Instagram And Its Impact On Consumer Purchase Behavior: A Sample Study In The Para-Pharmaceutical Sector

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Abstract:

In contemporary advertising, influencer marketing has emerged as a prominent strategy, notably on Instagram. This study employs the framework of Ohanian's source credibility model (1990) to investigate the credibility of influencers on Instagram and its subsequent influence on consumer purchase behavior. Utilizing a survey-based methodology and employing statistical analysis through SPSS, responses were gathered from a sample of 100 participants.

The findings reveal a direct and positive relationship between influencer credibility and consumer purchase behavior. These results provide valuable insights for businesses and marketers seeking to optimize their brand's digital presence in the modern era.

Keywords: Influencer, Marketing Instagram, Credibility.

1. *Introduction*

In recent years, there has been an exponential increase in spending on marketing through social media platforms, driven by the growing communication capabilities and the diverse audiences that engage with these platforms. Among the various social media platforms, Instagram stands out as a prominent player with a staggering 1.628 billion users worldwide (Kemp, 2023). Instagram has become a pivotal arena for brands seeking to boost their sales performance by employing modern marketing methods and strategies.

According to the principles of content marketing, the rise in brand investments for promotion through social media has been accompanied by the emergence of influencers whose followers can reach thousands, and an influencer is an individual with a large social reach and has the ability to "influence" as the content published by influencers in Social media is often seen as more credible and persuasive to consumers than what the seller publishes, and that is why the consumer is more likely to follow the recommendations of his favorite influencer. Consumers also consider digital content marketing by influencers more credible and trustworthy because they see that the influencer has more experience than them (Lim , Rozaini , Cheah, & Wong, 2017), which makes their willingness to purchase intent may increase. (Waldt, Loggerenberg, & Wehmeyer, 2009) According to the international statistics portal, 80% of consumers use Instagram to discover new products or services, in addition to helping them make a final purchase decision. (Liedke, 2022).

These evolving practices underscore the increasing need to meticulously define and elucidate the influence of influencers on consumer behaviors, as well as the underlying mechanisms that drive these effects (Casaló, Flavián, & Ibáñez-Sánchez, 2020)

1.1 The Objectives of the Study

This study aims to address critical questions concerning the influence of Instagram influencers on consumer purchasing behavior within this specific demographic. By exploring the dimensions of influencer credibility, including attractiveness, trustworthiness, and expertise, we seek to uncover the intricate dynamics that govern the decisions of the sample Study in the Para-pharmaceutical Sector in response to influencer-driven content.

1.1 The Problem of the Study

The research questions guiding our investigation are:

- Is there a statistically significant effect of the credibility of Instagram influencers on the purchasing behavior in the para-pharmaceutical sector at a significance level of $\alpha \leq 0.05$?
- Are there statistically significant differences in the attitudes of the consumers towards the credibility of Instagram influencers and their purchasing behavior based on gender in the para-pharmaceutical sector, at a significant level of $\alpha \leq 0.05$?
- Is there a statistically significant effect of the overall credibility of Instagram influencers on the purchasing behavior in the para-pharmaceutical sector at a significant level of $\alpha \leq 0.05$?
- Is there a statistically significant effect of the overall trustworthiness of Instagram influencers on the purchasing behavior in the para-pharmaceutical sector at a significant level of $\alpha \leq 0.05$?
- Is there a statistically significant effect of the experience of Instagram influencers on the purchasing behavior in the para-pharmaceutical sector at a significance level of $\alpha \leq 0.05$?
- Are there any statistically significant gender-based differences in attitudes towards the credibility of Instagram influencers in the para-pharmaceutical sector, at a significance level of $\alpha \leq 0.05$?
- Are there any statistically significant gender-based differences in trends in consumer purchasing behavior in the para-pharmaceutical sector at a significance level of $\alpha \leq 0.05$?

- ***1.2 Hypothesis of the Study***

Main Hypotheses:

$\boldsymbol{H_0^1}$: There is no statistically significant effect at a significant level ($\alpha \leq 0.05$) of the credibility of the Instagram influencer on consumer purchasing behavior in the para-pharmaceutical sector.

$\boldsymbol{H_0^2}$**:** There are no statistically significant differences at a significant level ($\alpha \leq 0.05$) in the attitudes of the sample members to both the credibility of the influencer on Instagram and the purchasing behavior in the para-pharmaceutical sector.

Sub-Hypotheses:

$\boldsymbol{H_0^{1-1}}$**:** There is no statistically significant effect at a significant level ($\alpha \leq 0.05$) of the credibility of the Instagram influencer on consumer purchasing behavior in the para-pharmaceutical sector.

$\boldsymbol{H_0^{1-2}}$: There is no statistically significant effect at a significant level ($\alpha \leq 0.05$) of trustworthiness on consumer purchasing in the para-pharmaceutical sector

$\boldsymbol{H_0^{1-3}}$: There is no statistically significant effect at a significant level ($\alpha \leq 0.05$) of the experience of the influencer on consumer purchasing behavior in the para-pharmaceutical sector

$\boldsymbol{H_0^{2-1}}$: There are no statistically significant differences at a significant level ($\alpha \leq 0.05$) in the attitudes of the sample members to the credibility of the influencer on Instagram according to their gender in the para-pharmaceutical sector

$\boldsymbol{H_0^{2-2}}$: There are no statistically significant differences at a significant level ($\alpha \leq 0.05$) in the trends of the sample members towards consumer purchasing behavior according to their gender in the para-pharmaceutical sector

1.2 Methodology

To address these dynamics, the present study aims to conduct a sample study in the para-pharmaceutical sector to investigate the credibility of influencers on Instagram and its impact on consumer purchase behavior. The methodology will involve a mixed-method approach, We conducted a comprehensive review of existing literature, including previous studies and articles, to understand the concepts of influencer credibility and its effects on consumer behavior. This part of our research is mainly descriptive and relies on secondary data sources. Additionally, On the applied side, we used an experimental method. This involved a field study where we collected primary data using questionnaires. Through this sample study, we aim to provide valuable insights into the role of influencers in shaping consumer behavior within the para-pharmaceutical industry on social media platforms like Instagram.

2. *Literature Review*

2.1 Influencer Marketing:

The rise of influencer marketing marks a pivotal shift in digital marketing strategies. Integrating influencers into marketing campaigns has been shown to effectively engage target audiences (Jílková, 2018). Influencers, or opinion leaders, possess deep knowledge in certain domains. Their endorsements are highly influential, often swaying the opinions and behaviors of their audience (Tuten & Solomon, 2018). Modern consumers, who prefer brands that resonate with their social identity, are particularly receptive to these influencers (Hassan, Teo, Ramayah, & Al Kumaym, 2021).

Moreover, (Zhang & Benyoussef, 2016) highlight the critical role of influencers in shaping purchase decisions, especially under conditions of uncertainty. Consumers view influencers as knowledgeable sources for specific product information. The impact of these endorsements is amplified when the influencer has a substantial social media following. This has led companies to increasingly collaborate with influencers for brand and product promotion. (Li, Lai, & Chen, 2011)

2.2 Influencer Credibility on Instagram:

Instagram has become a pivotal platform in influencer marketing. As reported on Instagram's website, 75% of its users take action after being inspired by a post, and 60% discover new products through the platform (Instagram, n.d.). Instagram's popularity among influencers for brand-related content is well-documented, with it being the platform of choice for many (Clement, 2023). Influencers leverage their ability to connect with targeted audiences, establishing a bond akin to virtual friendship. This perceived closeness enhances their trustworthiness and credibility, often surpassing that of traditional celebrities (Lou & Yuan, 2019).

Influencer-brand collaborations typically involve content creation for product promotion, compensated financially. (Stubb, Nyström, & Colliander, 2019) Transparency is key, with influencers often disclosing their compensated partnerships through hashtags like “sponsored”. (Evans, Phua, Lim, & Jun, 2017). However, incidents like the August 2016 investigation by TruthinAdvertising.org into undisclosed paid content by influencers, including Kim Kardashian, highlight potential risks to influencer credibility. When followers suspect bias due to compensation, it can diminish the perceived credibility of the influencer. (Djafarova & Bowes, Instagram made Me buy it’: Generation Z impulse purchases in fashion industry, 2021). This issue remains a significant concern for marketers and brand managers. (Abd-El-Salam, 2023)

2.2 Influencer Credibility Dimensions:

Credibility hinges on perceptions of trustworthiness and believability. (AlFarraj, et al., 2021). (Ohanian, 1990) identified three essential dimensions of source credibility, widely applied in influencer marketing research:

Expertise. Defined as the perceived knowledge, experience, or skill level of the endorser relevant to the product (Van der Waldt, Loggerenberg, & Wehmeyer, 2011). Expertise is a vital attribute for influencers to be recognized as credible and reliable sources (Daneshvary & Schwer, 2000).

Trustworthiness. This dimension involves the audience's confidence in the endorser's honesty and integrity. (Ohanian, 1990). Evaluating trustworthiness includes considering the endorser's honesty, authenticity, reliability, impartiality, integrity, credibility, and dependability. (Wiedmann & Mettenheim, 2021)

Attractiveness. Defined in marketing communication as the visual appeal of the endorser (Patzer, 1983) An influencer's attractiveness can significantly influence their followers' purchasing intentions. (Guo, Rammal, Benson, Zhu, & Dowling, 2018)

3. Field Study

3.1 Data Collection

The data collection process for our study was conducted using a structured survey, divided into two main parts. The first part of the survey was designed to gather personal data from the respondents, such as their gender, age, income level, educational qualifications, and professional experience. The second part of the survey consisted of two key areas of focus. The first area, encompassing Paragraphs 1-11, delved into the aspects of influencer credibility on Instagram. This was further broken down into three distinct dimensions, with each dimension comprising a series of related questions. The second area, covered in Paragraphs 12-17, aimed at understanding the purchasing behaviors of the consumers.

To ensure the clarity and effectiveness of the survey, a pilot test was initially conducted with a group of students from Badji Mokhtar Annaba University. This preliminary test helped in identifying and rectifying any unclear expressions, leading to the refinement of the questionnaire. Following this, the final version of the questionnaire was disseminated through an online survey platform, reaching out to a wider audience via email and social networks, specifically targeting internet users in Algeria.

Initially, responses were collected from 130 participants. However, to ensure the relevance and accuracy of the data, responses from individuals who do not follow influencers on Instagram and those from incomplete questionnaires were excluded from the final analysis. This resulted in a total of 100 valid questionnaires being used for the subsequent analysis phase of the study.

3.2 Instrumental Design

The development of our study's instrument was a detailed process, informed by key research in influencer marketing. We adapted the Influencer Credibility Scale from (Djafarova & Trofimenko, 2018) and Ohanian (1991, 2006) for relevance to Instagram. To assess consumer purchasing behavior, we used modified items from Moon et al. (2008) and Yoon et al. (2011). Additional items were added to these scales for accuracy in our specific research context, ensuring our instrument precisely measured the impact of influencer credibility on consumer behavior.

Table 1. Reliability statistics

Factors and Dimensions	Number of Items	Cronbach's Alpha
General Stability Coefficient	18	0.938
Factor 1: Influencer Credibility on Instagram	11	0.904
Factor 2: Consumer Purchasing Behavior	7	0.913
Influencer Attractiveness	4	0.812
Trustworthiness	3	0.837
Influencer Expertise	4	0.845

Source: Compiled by the researchers using SPSS v28 Outputs

The results from the reliability analysis of our questionnaire show promising indicators of its robustness. The total coefficient value for all questionnaire items was 0.938, which notably exceeds the standard reference value of 0.7. This suggests a high level of reliability across the instrument. Specifically, the reliability coefficient for the influencer credibility axis on Instagram was recorded at 0.904, while the coefficient for the consumer purchasing behavior axis reached 0.913. Further, the reliability coefficients for the dimensions within the first axis ranged between 0.81 and 0.84, all surpassing the 0.70 threshold. These results align with the criteria for scale reliability as outlined by Hair et al. (2005), confirming the reliability of our scales.

3.3 Data Analysis:

For processing the data obtained from the questionnaire, we employed various statistical tools. These included calculating arithmetic means, standard deviations, and applying the Cronbach's Alpha reliability coefficient. Additionally, we used the Pearson correlation coefficient, normal distribution tests, and the Mann-Whitney test. The T-test was utilized for single and two independent samples, along with simple and multiple linear regression analyses to interpret the data accurately.

4. Results

4.1 Statistical presentation and analysis of the respondents' answers

Based on statistical analysis in Appendix No. 3, key findings emerge regarding influencer credibility on Instagram. The weighted arithmetic mean for this axis is 3.37, suggesting a moderate level of agreement among respondents. The standard deviation of 0.99, being less than 1, indicates minimal variance in responses. Respondents' agreement with items in the first axis is quantified at 67.47%, highlighting the perceived importance of influencer credibility. The statistical significance of these findings is validated by a t-statistic value of 8.88, significant at the 5% level (SIG = 0.00), confirming that the weighted average is significantly greater than the hypothesized average.

Regarding individual items, paragraph No. (03), "The influencer(s) I follow on Instagram are good looking," ranked highest with an arithmetic mean of 3.89, suggesting a strong consensus among respondents about the physical attractiveness of influencers (77.8% agreement). In contrast, paragraph No. (05), "The influencer(s) I follow on Instagram are honest," scored the lowest, with an arithmetic mean of 3 and a standard deviation of 1.015, indicating a moderate level of agreement and greater dispersion in responses (60% agreement). This suggests some discrepancy in opinions, particularly regarding honesty.

Analysis of responses regarding consumer purchasing behavior in Appendix No. (4) indicates significant insights. The weighted average for the second axis is 3.23, suggesting a high degree of agreement among respondents that consumers' purchasing behaviors are influenced by influencers' advertisements and posts on Instagram. The relatively high standard deviation of 1.07 indicates minimal dispersion in responses, reinforcing the general agreement on this axis.

The overall relative weight of agreement for the second axis is calculated at 64.51%, reflecting a strong consensus among respondents that consumer purchasing behavior is impacted by influencers' promotions on Instagram. This interpretation is supported by a student's t-test for one sample, yielding a t-statistic of 6.79 (SIG = 0.00), statistically significant at the 5% significance level.

Among specific items, paragraph No. (12), "The products or services that influencer(s) endorse on Instagram catch my attention," scored the highest with an arithmetic mean of 3.51, indicating that respondents generally find influencers' advertisements on Instagram effective in attracting their attention to various products and services. Conversely, paragraph No. (18), "I advise my colleagues to purchase the products offered by the influencer(s) I follow on Instagram," ranked the lowest with an arithmetic mean of 2.87. The high standard deviation of 1.07 for this item suggests some variability in respondents' opinions, highlighting the complexity of how influencer marketing translates into consumer behavior and recommendations.

4.2 Hypothesis Testing:

Our study embarks on testing two principal hypotheses to understand the impact of Instagram influencer credibility on consumer purchasing behavior among a sample of Algerian university professors. We employ specific statistical methodologies for each hypothesis.

$\boldsymbol{H_0^1}$: There is no statistically significant effect at a significant level ($\alpha \leq 0.05$) of the credibility of the Instagram influencer on consumer purchasing behavior in the para-pharmaceutical sector.

To test this hypothesis, we utilize the Ordinary Least Squares (OLS) method. This method involves estimating a model that measures the influence of an Instagram influencer's credibility on consumer purchasing behavior. It requires adherence to several assumptions to ensure the statistical efficiency of the estimated model. We will verify these assumptions and then determine the validity of H_0^1 based on the outcomes of the OLS estimation.

$\boldsymbol{H_0^2}$**:**There are no statistically significant differences at a significant level ($\alpha \leq 0.05$) in the attitudes of the sample members to both the credibility of the influencer on Instagram and the purchasing behavior of the consumer according to their gender.

For this hypothesis, we will test for differences in responses based on gender. Depending on the distribution of our study data, we will choose either parametric or non-parametric tests to ascertain if there are significant gender-based differences in attitudes towards influencer credibility and consumer purchasing behavior.

The outcomes of these tests will provide insights into the nature and extent of the influence that Instagram influencers exert on consumer behavior, as well as any gender-based variances in perceptions among Algerian university professors. The results will either validate or refute our proposed hypotheses, contributing to a deeper understanding of influencer marketing dynamics.

5.3 Discussion of the first main hypothesis:

The first hypothesis was dissected into three sub-hypotheses to thoroughly examine the impact of different dimensions of influencer credibility on consumer purchasing behavior in the para-pharmaceutical sector. These sub-hypotheses are:

$\boldsymbol{H_0^{1-1}}$**:** There is no statistically significant effect at a significant level (α≤0.05) of the credibility of the Instagram influencer on consumer purchasing behavior in the para-pharmaceutical sector.

$\boldsymbol{H_0^{1-2}}$: There is no statistically significant effect at a significant level (α≤0.05) of trustworthiness on consumer purchasing behavior (sample of Algerian university professors)

$\boldsymbol{H_0^{1-3}}$: There is no statistically significant effect at a significant level (α≤0.05) of the experience of the influencer on consumer purchasing behavior in the para-pharmaceutical sector.

The results from Appendix No. (5), based on the Ordinary Least Squares (OLS) method, offer significant insights into the relationship between influencer credibility on Instagram and consumer purchasing behavior. The simple linear correlation coefficient was found to be 0.72, indicating a strong and positive correlation between the dimensions of an influencer's credibility and consumer purchasing behavior. This suggests that as the perceived credibility of an influencer increases, so does the impact on consumer purchasing decisions.

Furthermore, the coefficient of determination for our model stood at 52%. This means that over half of the variability in consumer purchasing behavior can be explained by the credibility of influencers on Instagram, which is a substantial proportion from a statistical standpoint. However, it's important to note that the remaining 48% of the variation in purchasing behavior is due to other factors not captured in our model, falling within the margin of error.

Additionally, the F-statistic value obtained was 34.69, with an associated probability value (PROP-F_STAT) of 0.00. This is significantly lower than the critical value of 0.05. The result of the one-way analysis of variance (ANOVA) test being statistically significant implies that we can accept the alternative hypothesis. This hypothesis posits that there is a statistically significant linear relationship between the explanatory variables (the dimensions of an influencer’s credibility on Instagram) and the dependent variable (consumer purchasing behavior). In essence, this confirms that the attributes of influencer credibility—how trustworthy, attractive, and experienced they are perceived to be—do play a significant role in influencing consumer purchasing decisions.

Regarding the parameter of 'Influencer Attractiveness,' the Student's t-statistic reached a value of 3.57 with a probability value (PROP-T_STAT) of 0.001. This probability is notably less than the critical value of 0.05, signifying that 'Influencer Attractiveness' is statistically significant at the 5% level. This implies that the attractiveness of influencers has a meaningful impact on consumer purchasing behavior.

For the 'Expertise' parameter, the statistical significance is also affirmed. The Student's t-statistic for this variable stood at 4.83 with a probability value of 0.00, which is well below the critical value of 0.05. Therefore, the 'Expertise' parameter is also significant at the 5% level, indicating that the perceived expertise of influencers is an influential factor in consumer purchasing decisions.

However, the constant parameter presents a different scenario. With a t-statistic of 0.42 and a probability value of 0.66, which exceeds the critical value of 0.05, the constant parameter is not statistically significant at the 5% level. This suggests that the baseline level of the dependent variable (consumer purchasing behavior) does not significantly vary independently of the influencer's attractiveness and expertise.

Further analysis in Appendix No. (5) shows that the Variance Inflation Factor (VIF) for the two explanatory variables is 2.25 and 1.57, respectively. These values are well below the threshold of 10, indicating no multicollinearity concerns. The Tolerance tests, yielding values of 0.63 and 0.43, which are above the threshold of 0.05, support this conclusion.

Lastly, the Durbin-Watson (DW) statistic is 1.96, close to the ideal value of 2 and within the acceptable range of 1.813 to 2.421. This suggests the absence of autocorrelation in the model's residuals, confirmed by the normal distribution of these residuals as shown in Appendix No. (5). This indicates that the residuals (errors) in your model are independent, reinforcing the robustness of your model's estimates.

Based on the results of the statistical and measurement analysis of the study model, which confirm the efficiency and quality of the estimated model in the two aforementioned aspects, the hypotheses proposed by this study can be discussed with a high degree of accuracy and reliability. These hypotheses stipulate the following:

- Rejecting the first sub-hypothesis, which posits that there is no statistically significant effect at a significant level ($\alpha \leq 0.05$) of the attractiveness of the influencer on consumer purchasing behavior (a sample of Algerian university professors). This rejection is based on the significance of the parameter associated with the variable "Influencer_Attractiveness" at the significance level of 5%. Therefore, the first sub-hypothesis is rejected, indicating that there is a statistically significant effect of the influencer's attractiveness in this study on consumer purchasing behavior in the para-pharmaceutical sector.
- As for the second sub-hypothesis, which states that there is no statistically significant effect at the level of significance ($\alpha < 0.05$) of trustworthiness on consumer purchasing behavior in the para-pharmaceutical sector.
- it should be noted that the parameter associated with this variable is not statistically significant. Therefore, the second sub-hypothesis is not rejected.
- Rejecting the third sub-hypothesis, which suggests that there is no statistically significant effect at a significant level ($\alpha \leq 0.05$) of the experience of the influencer on consumer purchasing in the para-pharmaceutical sector. This rejection is based on the significance of the parameter associated with the variable "Influencer_Experience" at the significance level of 5%. Thus, the third sub-hypothesis is rejected, indicating that there is a statistically significant effect of the influencer's experience in this study on consumer purchasing behavior in the para-pharmaceutical sector.
- **5.4 Discussion of the second main hypothesis:**

The second main hypothesis of this study is focused on examining gender-based differences in the attitudes of Algerian university professors regarding the credibility of influencers on Instagram and their consumer purchasing behavior. To address this hypothesis, it was divided into two sub-hypotheses as follows:

$\boldsymbol{H_0^{2-1}}$: There are no statistically significant differences at a significant level ($\alpha \leq 0.05$) in the attitudes of the sample members to the credibility of the influencer on Instagram according to their gender in the para-pharmaceutical sector.

$\boldsymbol{H_0^{2-2}}$: There are no statistically significant differences at a significant level ($\alpha \leq 0.05$) in the trends of the sample members towards consumer purchasing behavior according to their gender in the para-pharmaceutical sector.

It's worth noting the importance of normal distribution tests in determining the appropriate statistical tests for studying gender-based differences. The results of these normal distribution tests for the two axes of the study are shown in the following table:

Table. 2. Normal distribution tests

Axis	Kolmogorov-Smirnova			Shapiro-Wilk		
	Stat	df	Sig.	Stat	df	Sig.
Influencer_credibility_on_Instagram	0.07	100	.200*	0.988	100	0.519
Consumer_purchase_behavior	0.103	100	0.011	0.963	100	0.007
*** This is a lower bound of the true significance.**						
a Lilliefors Significance Correction						

Source: Compiled by the researchers using SPSS v28 Outputs

The assessment of normality in the data is a crucial step in determining the appropriate statistical tests for analyzing gender-based differences in attitudes and behaviors related to influencer credibility and consumer purchasing behavior in the para-pharmaceutical sector.

For the "Influencer_credibility_on_Instagram" axis, two common tests, the Kolmogorov-Smirnov and Shapiro-Wilk tests, were conducted. These tests aim to assess whether the data follows a normal distribution. The null hypothesis for both tests is that the data is normally distributed.

The results of these normality tests for the first axis revealed that the data does indeed follow a normal distribution. This conclusion is supported by the probability values of both tests, which exceeded the critical value of 0.05. Therefore, we retained the null hypothesis for these tests, indicating that the data for the first axis can be considered normally distributed.

Conversely, when examining the data for the "Consumer_purchasing_behavior" axis, a different outcome emerged. The data for this axis did not conform to a normal distribution, as indicated by the calculated values for both the Kolmogorov-Smirnov and Shapiro-Wilk tests, which were greater than the tabulated critical values.

Based on the results, we have decided to apply different statistical tests to the two axes due to their normality characteristics.

For the first axis, where the data is normally distributed, we will employ a parametric test known as the student’s t-test for two independent samples to assess gender-based differences.

For the second axis, given its non-normal distribution, a non-parametric test called the Mann-Whitney U test will be utilized to examine gender-based disparities in perceptions of consumer purchasing behavior.

The subsequent table will present the detailed results of these tests, providing insights into the gender-based variations in attitudes and behaviors related to influencer credibility and consumer purchasing behavior within the para-pharmaceutical sector.

Table.3: Tests of differences

First axis	t	df	Sig. (2-tailed)	
Influencer_credibility_on_Instagram	1.607	98	0.111	
Second axis	Mann-Whitny U	Wilcoxon W	Z	Asymp. Sig. (2-tailed)
Consumer_purchase_behavior	1064.5	1805.5	-0.808	0.419

Source: Compiled by the researchers using SPSS v28 Outputs

First, with regard to the assessment of influencer credibility on Instagram, a student's t-test for two independent samples was conducted. The statistical value for this test was t_stat=1.607, which did not reach statistical significance at the 5% significance level. This outcome is supported by the associated probability value of 0.11, which exceeds the critical value of 0.05. Consequently, the first sub-hypothesis, which posited that there are no statistically significant differences in attitudes towards influencer credibility based on gender, was accepted.

In simpler terms, the data from the sample in the para-pharmaceutical sector suggests that gender does not have a significant impact on how they perceive influencer credibility on Instagram. It appears that, irrespective of gender, in the para-pharmaceutical sector. tend to hold similar views regarding the credibility of influencers on this platform. Other factors, such as trustworthiness, attractiveness, or expertise of influencers, may exert more influence on shaping their perceptions of influencer credibility.

Regarding the Mann-Whitney U test applied to assess gender-based disparities in perceptions of consumer purchasing behavior, the statistical value for this test was 1064.5. Similar to the t-test, this value did not reach statistical significance when compared to the critical value of 0.05, as the critical value associated with this statistic was 0.41 In essence, the second sub-hypothesis, which proposed that there are no statistically significant differences in the purchasing behavior trends in the para-pharmaceutical sector, was also accepted.

Conclusion:

In this comprehensive investigation, our focus was directed towards the influential realm of Instagram, where celebrities have become prominent figures recognized as influencers. Our research has unfolded a myriad of theoretical insights and practical implications, particularly in the realm of influencer credibility as a source of information. This study was meticulously crafted to assess the perceived credibility of Instagram influencers among their followers and delve into its potential impact on consumer purchasing behavior.

The core objective of our research was to gauge how followers perceive the credibility of influencers on Instagram and examine how this perception shapes their purchasing decisions. Employing a rigorous multiple linear regression analysis, we sought to unravel the intricate relationship between the credibility dimensions of influencers, namely attractiveness, trustworthiness, and expertise, and consumers' purchasing behavior.

The findings of our study shed light on the influential power of attractiveness in driving a positive response from the target audience. It becomes evident that influencers possessing a strong appeal to consumers are more likely to sway their purchasing behavior. These findings align harmoniously with prior research conducted by (Venciute, Mackeviciene, Kuslys, & Correia, 2023), which highlights the substantial impact of attractiveness on individuals' purchasing decisions. The allure of an influencer plays a pivotal role in fostering consumers' receptivity to product advertisements endorsed by that influencer.

Moreover, our results unveiled that the perceived trustworthiness of Instagram influencers wielded a direct and positive influence on users' purchasing behavior regarding the target product. This particular outcome resonates with recent studies conducted by (Park & Lin, 2020) and (Sokolova & Kefi, 2019). underscoring the profound impact of trustworthiness on consumer behavior.

(Brorsson & Plotnikova, 2017) similarly unearthed the significance of honesty and openness as paramount criteria for an influencer's followers. Followers tend to hold in high regard those influencers who exhibit candidness and share content devoid of overt promotional undertones.

While our results contradicted most previous studies regarding gender differences, we found that the latter does not affect the trends and attitudes of consumers when they are exposed to the posts of influencers on Instagram, and this may be due to the selected sample.

In summation, our study illuminates the intricate dynamics of influencer credibility on Instagram and its profound implications for consumer purchasing behavior. The three credibility dimensions: Attractiveness, trustworthiness and expertise emerge as potent factors that can significantly sway consumers' decisions. The Impact of influencers extends beyond aesthetics, delving into the realm of trust and authenticity, which are pivotal in today's digitally connected consumer landscape. These findings contribute to our understanding of the evolving landscape of influencer marketing and offer valuable insights for businesses and marketers seeking to leverage the power of Instagram influencers in shaping consumer behavior.

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6. *Appendices*

Appendix. 1: Values of the Weighted Average and the Corresponding Level

Average Response	Weighted Average	
Strongly Disagree	1.00 to 1.79	Very Low
Disagree	1.80 to 2.59	Low
Neutral	2.60 to 3.39	Medium
Agree	3.40 to 4.19	High
Strongly Agree	4.20 to 5.00	Very High

Source: Developed by the researchers based on the five-point Likert scale

Appendix.2: Description of Demographic Variables for the Sample

Description		Frequency	Percentage (%)
Gender	Male	38	38.0
	Female	62	62.0
Age	18-29 years	48	48.0
	30-39 years	40	40.0
	40-49 years	8	8.0
	50 years and above	4	4.0
Educational Qualification	High School	7	7.0
	University	49	49.0
	Postgraduate	44	44.0
Occupation	Government Employee	18	18.0
	Public Sector Employee	24	24.0
	Private Sector Employee	10	10.0
	Self-employed	8	8.0
	Unemployed	10	10.0
	Student	29	29.0
	Retired	1	1.0

Source: SPSS v28 Outputs

Appendix 3: Descriptive Statistics for Items Measuring Credibility of Influencers on Instagram

n		Mean	Std. Deviation	%	RANKING	t	Sig. (2-tailed)	Attitude
1	The influencer(s) I follow on Instagram have an attractive personality	3.42	0.976	68.4	6	9.423	0	High
2	The influencer(s) I follow on Instagram speak politely	3.61	0.952	72.2	2	11.655	0	High
3	The influencer(s) I follow on Instagram are good looking	3.89	0.898	77.8	1	15.483	0	High
4	The lifestyle of the influencer(s) I follow is attractive	3.49	1.02	69.8	5	9.706	0	High
5	The influencer(s) I follow on Instagram are honest	3	1.015	60	11	4.926	0	Medium
6	The influencer(s) I follow on Instagram are trusted	3.26	1.031	65.2	7	7.371	0	Medium
7	The influencer(s) I follow on Instagram are honest	3.05	0.947	61	10	5.809	0	Medium
8	The influencer(s) I follow on Instagram are experienced in their field	3.5	1.04	70	4	9.619	0	High
9	The influencer(s) I follow on Instagram have knowledge about what they post	3.6	0.953	72	3	11.537	0	High
10	The influencer(s) I follow on Instagram are knowledgeable about everything related to the products	3.21	1.008	64.2	8	7.044	0	Medium
11	The influencer(s) I follow on Instagram based their promotion of products on confirmed information	3.08	1.134	61.6	9	5.114	0	Medium
	Weighted average	3.373636	0.997636	67.47273		8.880636		Medium

Source: Compiled by the researchers using SPSS v28 Outputs

Appendix 4: Descriptive Statistics of Consumer Purchasing Behavior Variables

n		Mean	Std. Deviation	%	RANKING	t	Sig. (2-tailed)	Attitude
12	The products or services that influencer(s) endorse on Instagram catch my attention	3.51	1.02	70.2	1	9.902	0	High
13	I have great confidence in the products or services recommended by the influencer(s) I follow	2.94	1.052	58.8	6	4.181	0	Medium
14	Endorsements of influencers I follow on Instagram create a desire in me to purchase the recommended product/service	3.39	1.043	67.8	2	8.529	0	Medium
15	Most of the time I have an intention to buy products advertised by influencer(s) I follow on Instagram	3.39	1.1	67.8	3	8.091	0	Medium
16	If I am shopping, there is a high probability that I will buy the brand recommended by influencer(s)	3.37	1.06	67.4	4	8.205	0	Medium
17	I have previously purchased products that were featured by influencer(s) on Instagram	3.11	1.171	62.2	5	5.209	0	Medium
18	I advise my colleagues to purchase the products offered by the influencer(s) I follow on Instagram	2.87	1.07	57.4	7	3.458	0.001	Medium
	Weighted average	3.225714	1.073714	64.51429		6.796429		Medium

Source: Compiled by the researchers using SPSS v28 Outputs

Appendix 5: Results of Multiple Linear Regression Analysis on the Impact of Dimensions of Influencer Credibility on Instagram on Consumer Purchasing Behavior

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.721[a]	0.520	0.505	0.6183314	0.520	34.693	3	96	0.000	1.961

a. Predictors: (Constant), Expertise, Influencer_Attractiveness, Trustworthiness

b. Dependent Variable: Consumer_purchase_behavior

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	39.793	3	13.264	34.693	.000[b]
	Residual	36.704	96	0.382		
	Total	76.497	99			

a. Dependent Variable: Consumer_purchase_behavior

b. Predictors: (Constant), Expertise, Influencer_Attractiveness, Trustworthiness

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	0.134	0.313		0.429	0.669		
	Influencer_Attractiveness	0.490	0.101	0.429	4.830	0.000	0.633	1.579
	Trustworthiness	0.003	0.108	0.003	0.030	0.976	0.443	2.257
	Expertise	0.393	0.110	0.383	3.571	0.001	0.435	2.297

a. Dependent Variable: Consumer_purchase_behavior

Collinearity Diagnostics[a]

Model		Eigenvalue	Condition Index	Variance Proportions			
				(Constant)	Influencer_Attractiveness	Trustworthiness	Expertise
1	1	3.921	1.000	0.00	0.00	0.00	0.00
	2	0.041	9.782	0.46	0.04	0.26	0.08
	3	0.020	14.106	0.52	0.95	0.06	0.02
	4	0.018	14.820	0.02	0.01	0.69	0.89

a. Dependent Variable: Consumer_purchase_behavior

Source: Compiled by the researchers using SPSS v28 Outputs

Appendix 6: Graphical Representation of the Residual Distribution of the Study Models