

# How Do Consumer Perceptions of Authenticity in Social Media Influencers Impact the Revenue Generated from Sponsorships?

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## ABSTRACT

The rapid expansion of the influencer marketing industry has diverted billions in advertising spend toward personal endorsements, creating a central tension between the rising demand for “authentic” relatability and the traditional success of aspirational perfection. The objective of this study is to examine the financial value of influencer authenticity, challenging the industry’s reliance on engagement rates by comparatively analyzing observational data with a randomized controlled experiment. The comparison specifies the limitations of engagement as a metric and analyzes the trade-offs between perceived authenticity and professionalism across the beauty, travel, and fitness industries. A two-part methodology was utilized: a novel randomized controlled experiment using AI-generated influencer feeds to measure hypothetical “willingness to spend,” supplemented by an observational analysis of real-world influencers using engagement rates as a proxy. The analysis emphasizes that in the beauty and travel sectors, “inauthentic” (highly polished) content, a style utilized by many top-tier influencers, offers far greater financial returns, generating more than double the stated “willingness to spend” from consumers. In contrast, the fitness industry model displays a neutralization of this effect, with no statistically significant difference in spending intent found between authentic and inauthentic stimuli. The conclusion is offered by outlining implications for firms’ influencer selection, making recommendations for strategic sponsorship decisions based on industry-specific audience expectations.

**Keywords:** Influencer Marketing; Perceived Authenticity; Purchase Intent; Willingness to Spend; Experimental Design; Engagement Rate; Consumer Perception; Marketing Strategy

## INTRODUCTION

The digital marketing landscape has been fundamentally reshaped by social media influencers, an industry valued at \$13.8 billion in 2021 (1). By defining influencers as individuals who monetize personal followings through peer-like endorsements, brands

have diverted billions from traditional media toward platforms like Instagram, the preferred channel for 57% of brands (2). Central to this shift is the tension regarding authenticity, the perception of an influencer as genuine and relatable rather than scripted or commercial. While 39% of consumers rank authenticity as a top brand trait (3), this preference for “raw” content stands in direct contrast to the long-standing marketing model of polished, aspirational perfection.

Theoretical frameworks, such as the trade-off between affiliation and persuasion, suggest that overt commercialization introduces bias and reduces an influencer’s persuasiveness (4). However, these models remain largely theoretical and face two critical

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hurdles: 1) A Methodological Gap: Industry reliance on “engagement rates” is flawed, as “influencer cartels” can artificially inflate metrics through reciprocal engagement (5). 2) A Causal Gap: Existing studies are primarily correlational, failing to isolate the impact of authenticity from an influencer’s pre-existing reputation.

This study bridges these gaps by investigating: How do consumer perceptions of authenticity impact sponsorship revenue across different industries? It is hypothesized that perceived authenticity yields higher sponsorship revenue due to increased follower trust, and that this impact remains uniform across sectors. To test this, the study focuses on three primary influencer categories: Beauty (the market’s largest revenue share) (6), Fitness (valued at over \$21 billion) (7), and Travel. Our methodology employs a dual-pronged approach to circumvent the lack of public revenue data. First, a novel randomized experiment utilizes AI-generated influencer feeds to measure participants’ willingness to spend across controlled “authentic” versus “inauthentic” stimuli. Second, this is supplemented by an observational analysis of real-world influencers (sponsored by Gymshark, Sol de Janeiro, and GoPro) using traditional engagement rates to test for corroborating evidence.

Contrary to the common assumption that authenticity is universally beneficial, this research demonstrates that its impact is highly context-dependent. This study reveals that in the beauty and travel industries, “inauthentic” (i.e., highly polished) content generated an average stated purchase intent of \$26.43 (out of a possible \$50), while authentic content generated only \$9.66, a 174% difference. Conversely, in the fitness industry, authenticity was found to have no significant effect, with both authentic (\$21.94) and inauthentic (\$17.50) content yielding nearly identical spending intent. The findings suggest that influencer selection must be tailored to industry-specific audience expectations to maximize return on investment.

## **METHODS AND MATERIALS**

### **Study Design**

This study utilized a mixed-methods approach to isolate the financial impact of authenticity. The primary method was a randomized controlled experiment designed to measure causal effects on consumer spending intent. This was supplemented by a secondary, observational analysis of real-world influencers to provide ecological validity and compare experimental findings against industry-standard engagement metrics.

### **Participants**

Participants (n=93) were recruited via convenience and snowball sampling. The survey was distributed by school administrators to their student body, shared across personal and peer social media networks, and circulated via direct messaging. The survey was administered anonymously using Google Forms, and participants received no financial compensation. Targeting a highly relevant demographic deeply embedded in influencer culture, 72% of respondents were ages 12-17 (52.7% female, 35.5% male), placing them squarely within the Gen Z cohort. This demographic is central to the influencer economy; recent data shows that 77% of Gen Z consumers have made a purchase based on an influencer’s recommendation (8), making their spending intent a direct and powerful measure of sponsorship effectiveness. This group’s engagement is high, with 67.7% using social media multiple times a day and 54.8% interacting with influencer content multiple times a day. Crucially, 58.1% cited Instagram as their main social media platform, validating its use in this study.

### **Experimental Procedure**

This study is among the first of its kind to utilize AI-generated Instagram feeds to create distinct treatment (authentic) and control (inauthentic) groups. This approach is optimal as it ensures participants are responding only to the content’s perceived authenticity, rather than to pre-existing factors like an influencer’s established fame or follower count. Participants first selected an industry (beauty, fitness, or travel). They were then randomized into the authentic (treatment) or inauthentic (control) group. To validate that the stimuli were perceived as intended, manipulation checks were embedded directly into the survey design. After viewing the AI-generated feed, respondents rated the influencer on perceived authenticity, trustworthiness, genuineness, and their likelihood to follow or buy. These ratings served to verify whether the participants distinguished between the “authentic” and “inauthentic” conditions. A direct revenue proxy was captured by asking, “If you had \$50 to spend on [industry] products recommended by this influencer, how much would you spend?” This survey comprised 93 respondents; 18 participants in the beauty treatment group, 14 responses in the beauty control group, 18 responses in the fitness treatment group, 16 responses in the fitness control group, 13 responses in the travel treatment group, and 14 responses in the travel control group.

This survey was supplemented by a secondary, observational analysis of real-world influencers. To

ensure the validity of the financial proxy, only posts explicitly identified as sponsorships were included in the dataset. A post was confirmed as “sponsored” if it contained the official Instagram “Paid Partnership” label or mandated disclosure hashtags (e.g., #ad, #sponsored, #partner) in compliance with FTC guidelines, alongside a visible tag of the parent brand. This strict inclusion criterion ensured that the engagement metrics analyzed reflected consumer response to commercial endorsements rather than organic lifestyle content. For this, influencers in the beauty, fitness, and travel categories were measured in authenticity based on their content and utilized a binary metric, assigning a 1 if they met the authenticity criteria for their category and a 0 if they did not. This classification was not predicated on a single post, but rather on an influencer’s overall persona, evaluated across multiple posts. To mitigate the potential subjectivity of this binary classification, strict operational criteria were established, and a multi-rater consensus model was utilized. Specific cues were used to standardize the evaluation. For beauty, the criterion was appearing consistently with or without makeup. For fitness, the criterion for influencers who explicitly disclosed personal struggles, things such as workout failures, injuries, or setbacks, was to be labelled as authentic. For travel, the criterion of being open about exposing their travel difficulties, such as budget constraints or safety concerns, was the criterion to fall under the authentic umbrella. To ensure inter-rater reliability, a panel of five independent evaluators assessed all 42 influencers separately using these criteria. The final binary authenticity score for each influencer was determined by a majority vote. Within each industry, to maintain consistency, one representative parent brand per category was selected: Sol de Janeiro for beauty, Gymshark for fitness, and GoPro for travel. These brands were selected as they are dominant, quantifiable leaders in influencer marketing: Gymshark built its billion-pound valuation on this model (9), Sol de Janeiro attributes over 90% of its recent growth to organic social media (10), and GoPro’s brand identity is defined by its 50 million+ influencer and user-generated posts (11). In this secondary analysis, engagement rate was utilized as a traditional, though less direct, proxy for sponsorship revenue. It was calculated using the standard formula:  $\text{Engagement Rate} = (\text{Likes} + \text{Comments}) / (\text{Followers}) * 100$ . 42 influencers were examined; 8 beauty, 12 fitness, and 22 travel influencers. Data collection for this analysis was conducted in January 2025 over a three-week period. For each of the 42 influencers, 7-10 recent sponsored

posts were analyzed to determine their authenticity classification and calculate average engagement rates.

By analyzing trends within and across influencer categories, this study aims to determine whether authenticity in social media influencers correlates positively, negatively, or at all with engagement rate, providing insight into its potential impact on sponsorship value.

### **Ethical Considerations**

This study involving human participants was reviewed and approved by the Prospect High School Institutional Review Board (IRB). All procedures were conducted in accordance with relevant ethical guidelines. Informed consent was obtained from all participants prior to participation, and parental or guardian consent was secured for participants under the age of 18. The survey was administered anonymously using Google Forms, participants received no financial compensation, and the study protocol ensured no personally identifiable information was recorded.

### **RESULTS**

The results of this study indicate that authenticity’s impact on stated purchase intent and engagement metrics is not uniform, but rather varies markedly across the influencer categories examined. It is important to note that the financial figures reported below represent hypothetical willingness to spend rather than actual transactional data.

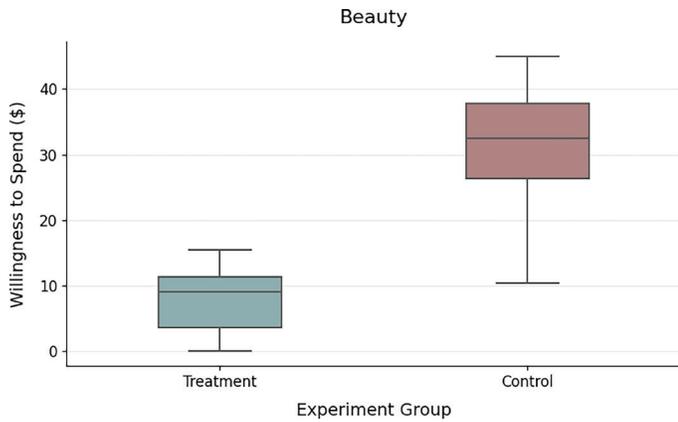
#### **Effect of Authenticity on Willingness to Spend: Beauty Industry**

##### Stated Purchase Intent

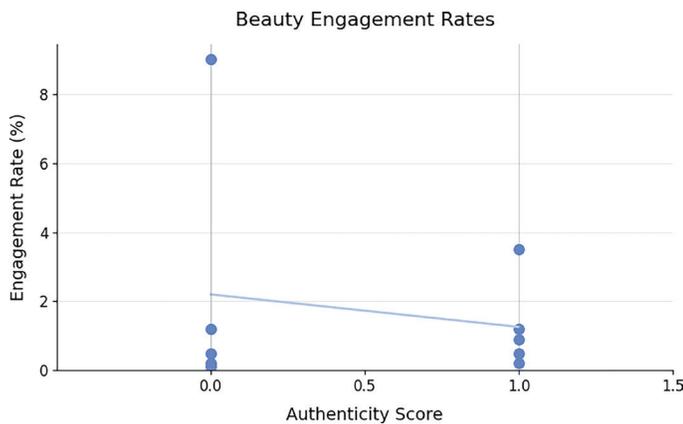
For the beauty industry, the inauthentic group reported significantly higher perceived trustworthiness (3.9 vs. 2.39) and genuineness (3.71 vs. 2.28) than the authentic group. Most importantly, as seen in Figure 1, spending intent was dramatically higher for the inauthentic influencer: respondents were willing to spend \$28.57 of their hypothetical \$50, compared to just \$7.78 for the authentic influencer. This difference was found to be highly statistically significant ( $p < .001$ ).

##### Engagement Rate Correlation

As demonstrated in Figure 2, the observational analysis provides corroborating evidence for this trend. Authentic beauty influencers (defined as appearing



**Figure 1.** Box plot comparing “willingness to spend” (\$) from a hypothetical \$50 from participants viewing Beauty “Treatment” (Authentic) stimuli (n=18) versus “Control” (Inauthentic/Polished) stimuli (n=14).



**Figure 2.** Scatter plot showing the relationship between post engagement rate (%) and a binary authenticity score (0 = Inauthentic, 1 = Authentic), with linear regression line for beauty influencers in selected study (n=8).

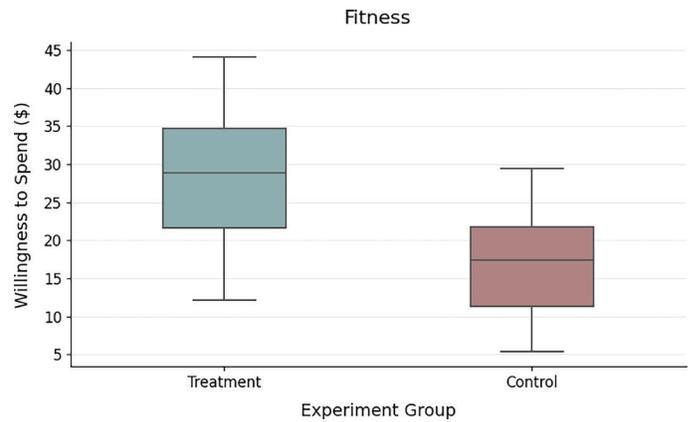
without makeup) exhibited a lower average engagement rate (1.80%). In contrast, inauthentic beauty influencers (defined as always wearing makeup) achieved a higher average engagement rate of 2.52%, reflecting a negative correlation between authenticity and engagement in this sector. However, this difference was not statistically significant ( $p = .56$ ), likely due to the high variance in the inauthentic group shown in the scatter plot.

### Effect of Authenticity on Willingness to Spend: Fitness Industry

#### Stated Purchase Intent

The fitness industry showed a different trend from

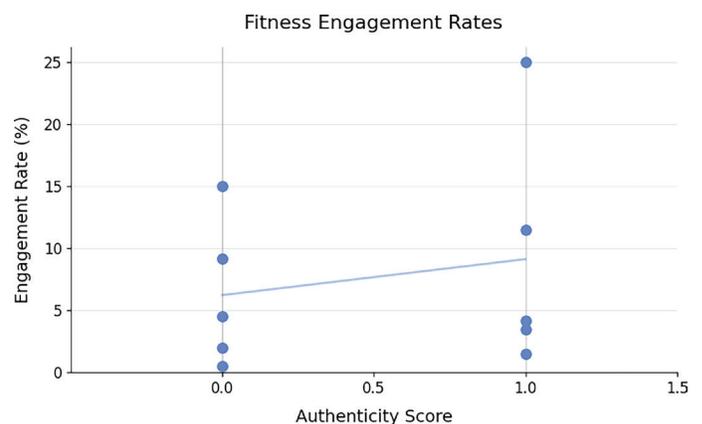
the controlled experiment. Shown in Figure 3, Perceived trustworthiness was identical (3.5) for both the authentic and inauthentic groups. Spending intent was also relatively similar for the authentic group (\$21.94) and the inauthentic group (\$17.50). A t-test confirmed that this difference was not statistically significant ( $p = .35$ ).



**Figure 3.** Box plot comparing “willingness to spend” (\$) from a hypothetical \$50 from participants viewing Fitness “Treatment” (Authentic) stimuli (n=18) versus “Control” (Inauthentic/Polished) stimuli (n=16).

#### Engagement Rate Correlation

These findings align with the secondary observational data, which reveal no significant difference in engagement rates between authentic and inauthentic influencers, as detailed in Figure 4. Authentic fitness influencers had



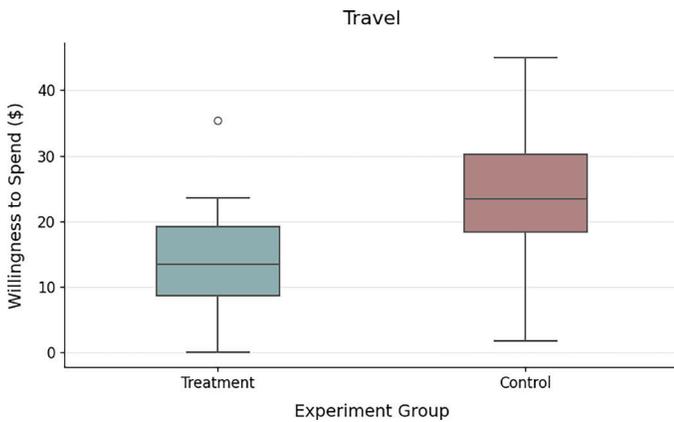
**Figure 4.** Scatter plot showing the relationship between post engagement rate (%) and a binary authenticity score (0 = Inauthentic, 1 = Authentic), with linear regression line for fitness influencers in selected study (n=12).

an average engagement rate of 6.78%, while inauthentic fitness influencers had an average engagement rate of 6.42%. The statistical comparison confirmed this lack of correlation ( $p = .97$ ), suggesting that authenticity is not strongly associated with engagement in this sector.

### Effect of Authenticity on Willingness to Spend: Travel Industry

#### Stated Purchase Intent

For the travel industry, the findings in Figure 5 mirrored the beauty category. The inauthentic group was perceived as significantly more trustworthy (3.71 vs. 2.0) and genuine (3.14 vs. 2.77) than the authentic group. This translated directly to spending, with the inauthentic influencer driving more than double the stated spending intent (\$24.29) compared to the authentic one (\$11.54). This difference was statistically significant ( $p = .027$ ).

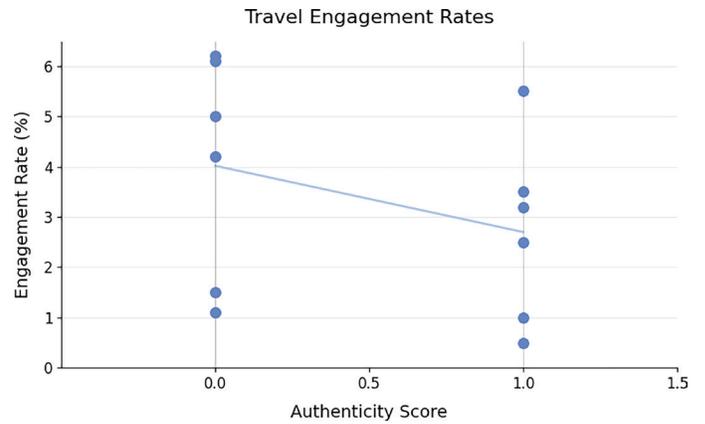


**Figure 5.** Box plot comparing “willingness to spend” (\$) from a hypothetical \$50 from participants viewing Travel “Treatment” (Authentic) stimuli ( $n=13$ ) versus “Control” (Inauthentic/Polished) stimuli ( $n=14$ ).

#### Engagement Rate Correlation

Figure 6 visually supports this from the alternative method, showing a similar pattern to beauty influencers as well. Authentic travel influencers, who exposed travel difficulties, had a lower engagement rate of 2.67%, while inauthentic travel influencers, who presented only idealized travel experiences, had a higher engagement rate of 4.26%.

This difference in the observational data was found to be statistically significant ( $p = .019$ ), providing strong corroborating evidence that polished content performs better in this sector.



**Figure 6.** Scatter plot showing the relationship between post engagement rate (%) and a binary authenticity score (0 = Inauthentic, 1 = Authentic), with linear regression line for travel influencers in selected study ( $n=22$ ).

### Analysis

The analysis of the findings strongly suggests that the financial value of authenticity is not universal; rather, it is dictated by consumer expectations endemic to a specific industry. In both the beauty and travel industries, the data indicates that consumers equate polished, aspirational content with expertise and product effectiveness. This is evidenced by the “inauthentic” (control) stimuli generating superior perceptions of trustworthiness and genuineness, which in turn resulted in a consumer willingness to spend that was more than double that of the authentic (treatment) stimuli.

A possible interpretation is that for these “escapist” categories, perceived value is synonymous with professionalism, quality, and fantasy fulfillment. The introduction of “raw” content (e.g., no makeup, travel struggles) appears to degrade this illusion, consequently reducing consumer trust and purchase intent. When an influencer presents a flawless image, it triggers a psychological association with product efficacy and fantasy fulfillment. Consequently, “authentic” content, such as visible skin texture or travel mishaps, breaks the suspension of disbelief required for the fantasy, degrading the perceived value of the sponsorship. This nuances standard persuasion theories (e.g., Pei & Mayzlin (4)), suggesting that in aspirational markets, the “quality signal” of high production values overrides the natural skepticism consumers typically feel toward commercial content.

Conversely, the fitness industry demonstrated a neutralization of this effect, with no measurable impact

of authenticity on engagement. This result is notable given marketing data highlighting consumer demand for vulnerability (12). A possible explanation for this lack of correlation is that fitness content viewers may seek practical advice; followers often engage not for relatability, but for physique and inspiration.

These factors are directly tied to expertise, not relatability, as many top influencers are professional athletes.

The correlation analysis, therefore, highlights that authenticity's impact on engagement is industry-dependent. While authenticity is often viewed as a universally positive trait, this study reveals that aspirational content continues to drive superior financial metrics in beauty and travel, while fitness remains neutral to authenticity's effects.

## **DISCUSSION**

A critical contribution of this study is the nuance it adds to the understanding of authenticity in influencer marketing. While the initial hypothesis predicted a uniform positive relationship between authenticity and sponsorship value, the results reveal a more complex and valuable insight: the financial impact of authenticity is strictly context-dependent rather than universal. This divergence from the original prediction advances the field by demonstrating that in "escapist" industries like beauty and travel, consumers actually place a higher financial premium on the polished aesthetic of "inauthentic" content.

By identifying where the "authenticity premium" ends, this study highlights the necessity of tailoring marketing strategies to specific industry norms rather than relying on a one-size-fits-all approach.

This study's primary strength is its novel experimental design using AI-generated stimuli, which provides a controlled environment to measure spending intent, a more direct proxy for revenue than engagement rates. But while AI-generated feeds provided necessary experimental control, they lack the dynamic elements of real influencer marketing such as voice, video, and long-term parasocial interaction.

Consequently, the study measures responses to visual authenticity rather than relational authenticity.

Additionally, the survey relies on hypothetical spending, which may not perfectly predict real-world purchasing behavior. Therefore, while the data suggests a higher perceived value for polished content, this should be viewed as a measure of consumer sentiment rather

than a guarantee of direct revenue outcomes. With only 93 people surveyed, 42 influencers analyzed, and one parent brand per category, the sample size limits the generalizability of these findings. The secondary observational data is also correlational and cannot prove causation; furthermore, engagement rates can be artificially manipulated, which is why it was used as a supplementary, not primary, source. Engagement metrics are susceptible to algorithmic bias, where platforms systematically favor polished, high-resolution content regardless of user sentiment, as well as artificial inflation (e.g., bots or engagement pods). Therefore, higher engagement for "inauthentic" influencers may partially reflect platform architecture rather than purely organic consumer interest.

The sample size for the experimental study was heavily skewed to Gen Z (72% ages 12-17). This cohort's perception of online aesthetics may differ fundamentally from older demographics, limiting the generalizability of these findings to the broader consumer population. Future research should explore alternative revenue proxies, such as affiliate link clicks or product purchases, and expand the dataset to include influencers from many more platforms and industries.

## **CONCLUSION**

The relationship between authenticity and engagement rates is highly dependent on industry norms and audience preferences. Based on these findings, brands should tailor their influencer selection strategies accordingly.

For beauty influencers, highly polished and aspirational content appears to resonate more with audiences, meaning that brands should prioritize influencers who maintain a consistent, glamorous aesthetic over those who focus on raw, unfiltered appearances.

For fitness influencers, authenticity does not significantly impact engagement, so brands may benefit more from focusing on content quality, workout routines, and audience engagement strategies rather than prioritizing authenticity as a selection criterion.

For travel influencers, audiences seem to prefer idealized travel experiences, suggesting that brands should collaborate with influencers who create aspirational content rather than those who focus on the challenges of travel.

These findings highlight the context-dependent nature of perceived authenticity in influencer marketing, emphasizing that one-size-fits-all strategies do not apply across industries. Brands should align their influencer

marketing strategies with industry-specific engagement trends to maximize sponsorship effectiveness.

## CONFLICT OF INTEREST

The author declares there are no conflicts of interest related to this work.

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