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RESEARCH ARTICLE

Emotional vs. Informational Content: Analyzing Their Impact on Audience Engagement in Instagram Marketing for Local Sportswear Brands in Indonesia

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ABSTRACT
This study aims to analyze the influence of content type emotional versus informational on the engagement level of Instagram posts by local sportswear brands in Indonesia. This research employs a quantitative approach with an explanatory research design. Data was collected through web scraping of Instagram posts from five local sportswear brands. The final sample consists of 330 posts, which were analyzed using multiple linear regression (OLS). Engagement is measured by an aggregate index based on the number of likes and comments, transformed logarithmically, and re-tested with alternative indicators. The model also controls for post characteristics, content format, posting time, and brand differences. The results show that emotional content has a positive and significant relationship with overall engagement, particularly in driving likes. However, this effect was not significant for comments. The video format did not increase overall engagement or moderate the effect of content type but positively influenced comments, representing a more intensive form of engagement. This study concludes that Instagram content effectiveness is contextual and multidimensional. Emotional content is more effective in triggering immediate responses, while deeper engagement is influenced by a combination of factors beyond message orientation alone. These findings contribute empirically to digital marketing literature and provide practical implications for content strategy in local sportswear brands.

1. INTRODUCTION

The advancement of social media application in marketing enabling rapid interactions between brands and consumers. In Indonesia, platforms like Instagram are key for marketing (Kemp, 2025), where emotional and informational content influence engagement behaviors such as likes and comments (Rietveld et al., 2020).

In digital marketing, engagement reflects audience involvement through actions like liking, commenting, and sharing, used to assess the relevance and value of content (Eslami et al., 2022; Trunfio & Rossi, 2021). Instagram's content algorithm uses engagement signals to enhance content visibility, expand reach, and strengthen brand-audience relationships (Moseri, 2021).

As engagement grows in importance, discussions have shifted from brand presence to identifying which content characteristics drive audience involvement. Studies show a debate over the effectiveness of emotional versus informational content. While both can influence engagement, their impact varies depending on the type of engagement, such as likes versus comments. This suggests that message orientation cannot be evaluated independently of engagement depth (Rietveld et al., 2020). Emotional content, in particular, emphasizes the affective dimension of brand communication by capturing attention, fostering psychological closeness, and eliciting rapid responses such as likes, which are commonly regarded as the lowest-effort form of engagement on social media platforms (Gu et al., 2023). Mixed evidence suggests the effectiveness of emotional versus informational content varies by industry, brand, and audience preferences.

In addition to message characteristics, content format also influences engagement, with video posts often prompting different audience responses compared to non-video content (Wahid & Gunarto, 2022). Nevertheless, existing studies do not consistently support the notion that video-based content outperforms other formats. Rather, the impact of content format appears to be contingent upon the intended communication objective whether the goal is to generate quick, low-effort reactions such as likes or to stimulate more cognitively demanding interactions such as comments as well as its fit with audience expectations (Rietveld et al., 2020; Trunfio & Rossi, 2021; Wahid & Gunarto, 2022). Accordingly, empirical analyses that focus on a single content format or rely on a single engagement metric may fail to capture the inherently complex and multidimensional nature of audience responses on social media.

In Indonesia, studying social media strategies is crucial due to the rise of local brands and competition for audience attention, especially in the sportswear sector linked to lifestyle changes. From a public health perspective, the World Health Organization (WHO) has noted physical inactivity as an important global issue, with a significant portion of the Indonesian population still categorized as insufficiently active, particularly among adults and adolescents (World Health Organization, 2024). This is highly relevant to sportswear brands, as the category is closely associated with physical activity, fitness, and performance values that often form the basis for marketing messages and are easily communicated through lifestyle-based communication.

The growing demand for sportswear in Indonesia, projected to reach USD 3.553 billion by 2033, is driven by increased fitness awareness and the rise of athleisure and digital retail (IMARC Group., 2024). At the same time, Indonesia's digital marketing space is competitive, with 103 million Instagram users in 2025, intensifying the challenge of capturing audience attention (Kemp, 2025). In this context, sportswear studies are especially relevant as the category relies heavily on visual communication and brand narratives, making the variation in content strategies including emotional versus informational content potentially impactful in driving meaningful engagement for local brands.

However, Studies comparing emotional and informational content for local brands, especially in lifestyle-related sectors like sportswear, are limited, with much research relying on perceptions rather than actual social media behavior. This study aims to fill this gap by analyzing the impact of emotional versus informational content on Instagram engagement for local sportswear brands in Indonesia, considering brand-specific audience responses.

Based on this framework, the study aims to analyze the influence of content type on Instagram engagement while controlling for several theoretically relevant factors, such as post format (video and non-video), caption characteristics, posting time, and brand differences. Additionally, to ensure that the findings are not dependent on one specific engagement measure, the analysis will also use alternative engagement indicators, namely likes and comments separately. This approach allows for a more comprehensive understanding of how different engagement metrics represent varying intensities of audience participation. Thus, the contribution of this research not only enriches the academic discussion on the debate between emotional and informational content in the Instagram context but also provides practical implications for local sportswear brands' content strategies.

2. LITERATURE REVIEW

Social media has transformed marketing by enabling two-way interaction and measurable audience responses. Engagement, now a central concept, reflects active audience interaction with brand content and is a multidimensional construct, including cognitive, emotional, and behavioral components (Pansari & Kumar, 2017; Vivek et al., 2012). The cognitive dimension refers to the mental processing that audiences undertake when accessing and evaluating the content presented. The emotional dimension involves the feelings and affective bonds that are formed between the audience and the content, while the behavioral dimension reflects the tangible actions taken by the audience, such as likes, comments, shares, or saves, which indicate the level of active engagement and response to the content (Al-Haddad et al., 2024; Levesque & Pons, 2023; Mou et al., 2025; Shahbaznezhad et al., 2021a).

Engagement in social media is often measured by observable interactions like likes and comments, though these metrics represent only partial aspects of the broader, multidimensional construct (Trunfio & Rossi, 2021). Recent engagement research in social media contexts indicates that observable audience interactions are embedded in media consumption experiences and relational processes between brands and audiences, which in turn shape how marketing messages are interpreted and how brands are perceived (Lim et al., 2022; Xiao, 2025). Therefore, the use of engagement metrics must be understood as a representation of participatory behavior, rather than just a quantitative measure of content appeal.

Differences in engagement levels are also reflected in the variations of interaction forms. Likes are generally interpreted as low-effort expressions of approval, while comments tend to demand greater cognitive involvement and therefore reflect a more intensive form of engagement (Dessart et al., 2015; Ma et al., 2022).

In the digital marketing framework, social media content acts as the primary trigger for engagement, as it serves as the main channel for conveying brand messages and values to the audience. Previous research has shown that content characteristics both in terms of messaging and presentation are closely related to variations in user engagement. Content that is designed with consideration for the message orientation and audience preferences tends to generate higher levels of engagement compared to content focused solely on exposure (de Vries et al., 2012). These findings emphasize that engagement does not emerge automatically but is the result of deliberate content strategies. Findings from emerging-market contexts indicate that variations in content attributes and message presentation on Instagram can produce differentiated effects on likes and comments, underscoring the importance of modeling engagement in a context-sensitive manner (Wahid & Gunarto, 2022).

The discourse on the effectiveness of messages in social media content generally centers on comparing messages that emphasize factual information with those that highlight emotional dimensions. Informational messages are aimed at providing clear, rational, and useful information, helping audiences reduce uncertainty and gain a better understanding of a product or brand. Several empirical findings in social media studies suggest that the presence of informational cues often contributes in increasing audience engagement, particularly when the content presents data, specifications, or explanations that are perceived as valuable and relevant. (Gu et al., 2023).

In contrast, emotional content builds affective connections through storytelling and symbolism, capturing attention quickly and eliciting likes or brief comments. However, its effectiveness varies depending on platform, product type, and audience motivations (Berger & Milkman, 2012; Gu et al., 2023; Tiwari et al., 2025).

Content format also influences engagement, with video often seen as superior due to its dynamic nature. However, evidence is mixed, with some studies finding video promotes deeper interaction, while others show static content is better for quick responses like likes (de Vries et al., 2012). These mixed findings indicate that format effectiveness depends on alignment between message characteristics and audience consumption habits.

Additional post characteristics, such as caption length and hashtag usage, are commonly included in social media research as control variables. Captions provide contextual meaning and guide audience interpretation, but excessively long captions may increase cognitive load and reduce engagement (de Vries et al., 2012; Tafesse & Wien, 2018). Similarly, hashtags can enhance content visibility, although their effectiveness depends on context and relevance (Pletikosa Cvijikj & Michahelles, 2013; Small, 2011). Controlling for these attributes helps isolate the effects of message orientation and format on engagement.

The sportswear category blends functional and symbolic consumption, linking practical use with identity, aspirations, and lifestyle, making both emotional and informational content important. The rapid growth of social media in Indonesia and rising competition among local brands highlight the need for effective content strategies in emerging markets (Kemp, 2025; Wafa, 2025).

Engagement is also influenced by content curation mechanisms, as Instagram uses user interaction signals, such as likes and comments, to determine content visibility (Moseri, 2021). This means engagement not only reflects audience response but can also affect content reach. Research on engagement determinants has strategic implications for brands, especially local sportswear brands relying on social media.

Based on the overall review, it can be concluded that engagement is a key concept in digital marketing, influenced by message type, content format, and post characteristics. Literature suggests that the effectiveness of emotional vs. informational content is contextual and needs empirical testing in specific markets. This study positions itself to fill this gap by examining the effect of content type on Instagram engagement for local sportswear brands in Indonesia, and evaluating whether this effect is influenced by content format and varies by engagement indicator used.

Based on the literature reviewed, several hypotheses are developed to test the relationship between content type and engagement on Instagram, particularly in the context of local sportswear brands.

H1: Emotional content has a positive effect on the level of Instagram engagement compared to informational content.

In digital marketing, social media content is a key driver of audience engagement as it serves as the primary channel for conveying brand messages. Literature suggests that content emphasizing emotional appeal often results in higher engagement due to its ability to capture attention and prompt spontaneous reactions such as likes or comments (Berger & Milkman, 2012; Calder et al., 2009). Emotional content is more likely to generate quick responses, making it particularly effective on platforms like Instagram, where users consume content rapidly. Therefore, it is hypothesized that emotional content will be more effective in driving engagement than informational content.

H2: Video posts have an effect on the level of Instagram engagement.

In addition to the message type, the format of content can also influence engagement levels. Video content is often associated with higher media richness and is thought to be more engaging due to its dynamic and visually rich nature. However, empirical evidence shows that video content does not always lead to higher engagement across all contexts (de Vries et al., 2012). Therefore, it is hypothesized that video posts will have a positive effect on engagement, but the strength of this effect will depend on the context and the type of engagement measured.

H3: The effect of emotional content on Instagram engagement differs between video and non-video posts.

It is further hypothesized that the impact of emotional content on engagement may vary depending on the format of the post. Emotional content presented in a video format may resonate more strongly with audiences due to the combination of visual and emotional stimuli. However, the effect may not be consistent across all contexts, warranting empirical testing. This hypothesis explores whether the type of content interacts with the post format to influence engagement levels differently.

H4a: Emotional content has a positive effect on the number of likes on Instagram posts.
H4b: Emotional content has an effect on the number of comments on Instagram posts.

Engagement is multidimensional, with likes and comments representing different intensities of involvement. Likes generally reflect quick, low-effort responses, while comments signify deeper engagement. Emotional content is expected to have a stronger influence on likes, but its effect on comments may be moderated by other factors such as content format or audience interest in discussion.

3. METHODOLOGY

3.1 Research Design and Approach

This study uses a quantitative explanatory design to analyze the impact of social media content characteristics on audience engagement, focusing on comparing emotional vs. informational content on Instagram. This approach allows for systematic testing of relationships between variables based on observational data reflecting actual user behavior (Kozinets et al., 2014).

3.2 Research Objects and Justification for Brand Selection

The research focuses on Instagram posts from five local Indonesian sportswear brands: Specs, Eiger, Ortuseight, Eagle, and Astec. The selection of these five brands is based on both empirical and methodological considerations. Consumer preference data released by GoodStats indicates that these brands are among the most well-known and selected local sportswear brands in Indonesia, with Specs ranking at the top, followed by Eiger and Ortuseight, and Eagle and Astec maintaining relatively high public recognition (Wafa, 2025).

The use of more than one brand with varying levels of popularity is intended to capture the heterogeneity of brand characteristics and minimize potential bias that may arise if the analysis focuses solely on a dominant brand. Additionally, limiting the study to local

brands ensures that the findings have strong contextual relevance to Indonesia's creative industry dynamics and domestic market.

To enhance the representativeness of the sample, the selected brands were intended to capture variation in positioning, target segments, and stages of brand development within the Indonesian local sportswear industry. Specs and Ortuseight are primarily associated with performance-focused sports products, while Eiger reflects a broader outdoor and lifestyle orientation. In contrast, Eagle and Astec represent brands with different levels of market penetration and digital visibility. This diversity enables the study to account for heterogeneity in content strategies and audience engagement across multiple types of local sportswear brands, rather than relying on a single dominant brand. As a result, the sample is expected to better reflect the wider marketing practices of local sportswear firms in Indonesia and to improve the external validity of the findings within this context.

3.3 Data Sources and Data Collection Procedures

The dataset was collected using an automated web scraping procedure on the Apify platform, extracting publicly available information from Instagram brand accounts. Data collection occurred in January 2026, with posts published between September 16, 2023, and January 11, 2026, ensuring a consistent observation window. Only publicly available content was included, adhering to ethical principles (Townsend et al., 2016).

The scraping process initially yielded over a thousand rows of raw data, which included posts and metadata, along with blank rows and non-post entries. After cleaning, 734 valid posts remained. Data filtering ensured the consistency of primary variables, such as engagement metrics, caption text, and content classification. The final sample for regression analysis consisted of 330 posts, with the reduction reflecting common methodological practices to enhance internal consistency and statistical validity.

3.4 Content Type Classification

In this study, content classification was performed using a rule-based approach with predefined emotional appeal and informative content keyword dictionaries. Each Instagram caption was preprocessed by converting the text to lowercase and removing unnecessary characters to ensure a standardized format for analysis.

The classification process followed these steps:

1) Data Preprocessing: Each caption was cleaned by removing noise such as emojis and URLs, and the text was converted to lowercase for consistency.
2) Keyword Matching: Two dictionaries were utilized: one for emotional appeal (e.g., words like "bangga," "semangat," "inspirasi") and one for informative content (e.g., "fitur," "harga," "material"). The occurrence of matching words from each dictionary was counted for each caption.
3) Classification: The caption was classified as:

- Emotional Appeal (1) if the number of emotional words exceeded the number of informative words.
- Informative Content (0) if the number of informative words was higher.
- Ambiguous (NA) if the scores were equal or if no keywords matched.

This approach was automated using Python with regular expressions (regex) to detect keyword matches. A rule-based classification system ensures transparency and reproducibility. Although inter-coder reliability testing was not conducted due to resource constraints, a manual review and external validation were performed to assess classification consistency. Ambiguous content, with equal emotional and informational word counts or no matched keywords, was labeled as NA to prevent bias.

Despite efforts to minimize classification bias through careful selection of keywords, it is acknowledged that the rule-based method may still be subject to biases, particularly in the selection of keywords. While the keyword lists were constructed with careful consideration to include relevant terms, they may not fully capture all variations in language use, which could influence the results. This is an inherent limitation of the approach, but the method remains transparent, reliable, and reproducible.

This classification approach aligns with the common practice of quantitative content analysis in digital communication research (Neuendorf, 2017). The content type is coded as a dummy variable, with 1 for emotional content and 0 for informational content.

3.5 Variable Definitions and Measurement

The dependent variable is the engagement index, formed by aggregating likes and comments, reflecting audience interaction with each post. Engagement here focuses on the intensity of interaction, with likes indicating quick responses and comments representing deeper involvement. Focusing on these two metrics is adequate for assessing the depth of interaction occurring on the Instagram platform, where observable behavioral interactions (likes and comments) serve as the primary indicators for evaluating audience engagement. Shares and saves were excluded due to inconsistent data and limited availability. Engagement was measured by absolute interaction counts, not normalized by follower size, to focus on post-level characteristics and better examine how content features influence audience responses.

To address the right-skewed distribution of the data and avoid issues with zero values, the engagement index is transformed using a natural logarithm. Mathematically, the measurement is as follows:

$$\text{ln\_engagement\_index} = \ln(\text{likes} + \text{comments} + 1)$$

A summary of the operational definitions and measurements for all research variables is provided in Table 2.

Table 1. Operational Definitions and Variable Measurement

Variable	Definition	Measurement
ln_engagement_index	Audience engagement level	ln(likes + comments + 1)
content_type	Type of content	Dummy (1 = emotional)
is_video	Post format	Dummy
caption_word_count	Caption length	Word count
hashtag_count	Hashtag intensity	Number of hashtags
time buckets (time_00_03; time_04_07; time_08_11; time_16_19; time_20_23. Time 12-15 used as reference category)	Posting time	Dummy time slots
brand dummy (brand_specs; brand_ortuseight; brand_eagle; brand_astec. Brand Eager Adventure used as reference category)	Brand identity	Dummy

This aggregation and logarithmic transformation approach is commonly used in social media research to represent audience engagement intensity in a more stable and normally distributed manner (Pletikosa Cvijikj & Michahelles, 2013).

The primary independent variable in this study is content_type. Additionally, several control variables were included in the model, such as post format (is_video), caption word count (caption_word_count), hashtag count (hashtag_count), posting time categorized into several time slots (time buckets), and brand dummy variables to control for brand characteristic differences. Eiger Adventure was used as the reference category for brand dummy variables, as it is one of the most established and recognized local sportswear brands in Indonesia. This provides a stable benchmark for comparing engagement differences across brands with varying market positioning and visibility. Conceptually, control variables are defined as those that are not the primary focus of analysis but are theoretically and empirically known to be related to the dependent variable. Therefore, this study includes several control variables in the regression model to ensure that the effect of the main variable on engagement is not distorted by external factors outside the scope of the research.

3.6 Empirical Model and Analytical Techniques

Empirical analysis was conducted using multiple linear regression with the Ordinary Least Squares (OLS) method. The main model is designed to examine the effect of emotional content on engagement levels while controlling for post characteristics and brand differences. The model is formally expressed as follows:

Equation (1): Main Model

$$\ln(Engagement_i) = \beta_0 + \beta_1 ContentType_i + \beta_2 IsVideo_i + \beta_3 CaptionWordCount_i + \beta_4 HashtagCount_i + \sum \beta_k TimeBucket_{ik} + \sum \beta_m BrandDummy_{im} + \varepsilon_i$$

In addition, the study also estimates an interaction model between content_type and video format to examine whether the effect of emotional content on engagement differs between video and non-video posts. The interaction model is expressed as follows:

Equation (2): Interaction Model

$$\ln(Engagement_i) = \beta_0 + \beta_1 ContentType_i + \beta_2 IsVideo_i + \beta_3 (ContentType_i \times IsVideo_i) + \beta_4 CaptionWordCount_i + \beta_5 HashtagCount_i + \sum \beta_k TimeBucket_{ik} + \sum \beta_m BrandDummy_{im} + \varepsilon_i$$

As part of the robustness check, the model estimation was also repeated using alternative engagement measures, namely ln_likesCount and ln_commentsCount. This step aims to ensure that the direction and significance of results are not dependent on a single engagement indicator. The specification of the robustness model generally follows Equation (1), where Model R1 uses as the dependent variable and Model R2 uses as the dependent variable.

All analysis was conducted using IBM SPSS software, with multicollinearity tested based on the Variance Inflation Factor (VIF), all of which were below the commonly accepted tolerance level (<5). In addition, residual diagnostics were conducted to assess the assumptions of heteroskedasticity and normality. The Gleyser test showed that there was no significant heteroskedasticity in the model ($p > 0.05$), supporting the assumption of homoskedasticity. Normality was assessed using both the Kolmogorov-Smirnov and Shapiro-Wilk tests. The results from both tests (Kolmogorov-Smirnov $p = 0.049$, Shapiro-Wilk $p = 0.019$) suggested slight deviations from normality but given the large sample size ($n = 330$), the regression results are still considered robust. Diagnostic tests indicate no influential outliers in the model. The maximum Cook's distance (0.052) is substantially below the critical threshold, and studentized residuals remain within acceptable bounds, confirming the stability of the regression estimates.

3.7 Validity and Methodological Limitations

The use of observational data from social media allows this study to capture actual audience behavior in a digital context. However, this approach does not allow for causal conclusions to be drawn experimentally. Therefore, the results are interpreted as empirical relationships that are associative, with control for relevant variables. Although likes and comments provide a practical measure for behavioral engagement, this approach has limitations as it does not capture the emotional or cognitive dimensions of

deeper engagement. Likes and comments merely reflect visible reactions, but do not account for the internal processes that occur within the audience as they consume content. Therefore, while these two metrics are sufficiently representative for the purposes of this study, the results only reflect a portion of the total engagement that takes place. Additionally, the analysis limitation to local brands and a specific observation period should be considered when generalizing findings to broader contexts.

4. RESULTS

4.1 Descriptive Statistics

The analysis was conducted on 330 Instagram posts from five local sportswear brands in Indonesia that passed the data cleaning and filtering stages. Descriptive statistics show that approximately 21% of the posts were videos, while the remaining content consisted of non-video posts (images or carousels). The proportion of emotional and informational content was relatively balanced, with an average content_type value of 0.51, indicating that more than half of the posts were classified as emotional content.

The average number of likes per post was 5,079, while the average number of comments was 54.9, demonstrating a highly skewed distribution (right-skewed). This was particularly evident from the large difference between the minimum and maximum values, especially for engagement and likes variables. To stabilize variance and improve regression estimate validity, the engagement variable underwent a natural logarithmic transformation.

In terms of caption characteristics, the average post contained 47 words and 2 hashtags, with considerable variation. The distribution of posting times showed that most content was published between 4:00 PM and 7:00 PM, with very few posts published in the early morning hours. Descriptive statistics for all research variables are presented in Table 3.

Table 2. Descriptive Statistics

Variable	N	Minimum	Maximum	Mean	Std. Deviation
likesCount	329	12	114,596	5,079.53	10,572.82
commentsCount	330	-	1,596	54.91	163.70
engagement_index	330	16	116,958	5,173.95	10,744.98
ln_likesCount	330	-	11.65	6.45	2.38
ln_commentsCount	330	-	7.38	2.53	1.66
ln_engagement_index	330	2.83	11.67	6.54	2.31
content_type	330	-	1.00	0.51	0.50
is_video	330	-	1.00	0.21	0.41
hashtag_count	330	-	9.00	2.17	1.55
caption_word_count	330	9	173	47.13	21.11
brand_specs	330	-	1.00	0.10	0.30
brand_ortuseight	330	-	1.00	0.08	0.27
brand_eagle	330	-	1.00	0.18	0.38
brand_astec	330	-	1.00	0.38	0.49
time_00_03	330	-	1.00	0.01	0.10
time_04_07	330	-	-	-	-
time_08_11	330	-	1.00	0.12	0.32
time_16_19	330	-	1.00	0.50	0.50
time_20_23	330	-	1.00	0.13	0.33
interaction_emotional_video	330	-	1.00	0.13	0.34

Source: Research results, processed

4.2 Main Model: The Effect of Content Type on Engagement

The main regression model used ln_engagement_index as the dependent variable. The estimation results show that the model is statistically significant overall ($F = 59.607$, $p < 0.001$),

with an Adjusted R^2 value of 0.681, indicating that approximately 68.1% of the variation in engagement can be explained by the variables in the model. Table 4 presents a summary of the regression model's estimation results, testing the effect of content type on Instagram engagement levels while controlling for post characteristics, posting time, and brand differences.

Table 3. Model Summary

Model Statistics	Value
Observations (N)	330
Adjusted R^2	0.681
F-statistic	59.607
Prob > F	0.000

Source: Research results, processed

Table 5. Main Model Estimation Results (Dependent Variable: ln_engagement_index)

Variable	Coefficient (β)	Std. Error	t-statistic	p-value
(Constant)	8.445	0.332	25.425	0.000
content_type	0.360	0.158	2.273	0.024
is_video	−0.380	0.185	−2.060	0.040
caption_word_count	0.000	0.004	−0.030	0.976
hashtag_count	−0.024	0.065	−0.364	0.716
brand_specs	0.293	0.296	0.990	0.323
brand_ortuseight	−0.542	0.325	−1.668	0.096
brand_eagle	−1.640	0.304	−5.390	0.000
brand_astec	−4.122	0.202	−20.397	0.000
time_00_03	−0.009	0.790	−0.011	0.991
time_08_11	−0.147	0.274	−0.537	0.592
time_16_19	−0.105	0.188	−0.556	0.578
time_20_23	0.098	0.269	0.362	0.717

Source: Research results, processed

The main results indicate that emotional content has a positive and significant effect on engagement. The coefficient for content_type is positive (β = 0.360; p = 0.024), indicating that after controlling for post characteristics, posting time, and brand differences, posts with emotional content tend to generate higher engagement levels than informational content. These findings provide empirical support for the argument that affective elements in digital communication enhance audience engagement.

The post format variable shows that video content has a negative and significant coefficient (β = −0.380; p = 0.040). This result indicates that, in the context of local sportswear brands, video posts do not always generate higher engagement compared to non-video posts, after controlling for other variables.

In contrast, caption length and hashtag count did not show a significant effect on engagement. This suggests that merely the quantity of text and hashtags is not enough to drive audience engagement without relevant message quality or content.

The brand dummy variables show substantial differences between brands. Compared to the reference category, posts from Eagle and especially Astec show significantly lower engagement levels, reflecting substantial brand heterogeneity in audience responses.

4.3 Interaction Model: Emotional Content and Video Format

To test whether the effect of emotional content differs between video and non-video posts, an interaction model between content_type and is_video was estimated. The model remained statistically significant overall (F = 55.360, p < 0.001), with an Adjusted R^2 of 0.682,

which is relatively similar to the main model. To examine the role of video format as a moderating variable, Table 6 presents the estimation results for the interaction model.

Table 6. Interaction Model Estimation Results

Variable	Coefficient (β)	Std. Error	t-statistic	p-value
(Constant)	8.367	0.336	24.890	0.000
content_type	0.471	0.176	2.673	0.008
is_video	−0.060	0.290	−0.206	0.837
interaction_emotional_video	−0.524	0.367	−1.429	0.154
caption_word_count	−7.864E-5	0.004	−0.022	0.982
hashtag_count	−0.026	0.064	−0.408	0.683
brand_specs	0.308	0.296	1.042	0.298
brand_ortuseight	−0.549	0.325	−1.691	0.092
brand_eagle	−1.625	0.304	−5.346	0.000
brand_astec	−4.103	0.202	−20.294	0.000
time_00_03	−0.110	0.792	−0.139	0.889
time_08_11	−0.129	0.274	−0.469	0.639
time_16_19	−0.076	0.189	−0.404	0.686
time_20_23	0.114	0.269	0.425	0.671

Source: Research results, processed

However, the coefficient for the interaction variable (content_type × is_video) is not statistically significant (β = −0.524; p = 0.154). This finding indicates that the positive effect of emotional content on engagement does not differ significantly between video and non-video posts. In other words, the emotional content's effect remains relatively consistent, regardless of the visual format used.

This suggests that the emotional quality of the message is more important than the medium through which it is delivered in driving audience engagement.

4.4 Robustness Check: Alternative Engagement Measures

As part of the robustness check, the analysis was repeated using two alternative engagement measures: the number of likes (ln_likesCount) in Model R1 and the number of comments (ln_commentsCount) in Model R2. The results of the robustness check using these alternative engagement measures are presented in Table 7.

Table 7. Robustness Check Estimation Results

Main Variable	Main Model (ln_engagement_index)	Model R1 (ln_likesCount)	Model R2 (ln_commentsCount)
content_type	0.360 (p = 0.024)	0.350 (p = 0.035)	0.048 (p = 0.732)
is_video	−0.380 (p = 0.040)	−0.466 (p = 0.016)	0.378 (p = 0.022)
Adjusted R^2	0.681	0.671	0.509
F-statistic	59.607	56.891	29.405
N	330	330	330

Source: Research results, processed

The regression results show that emotional content remains positively and significantly associated with the number of likes (β = 0.350; p = 0.035). This finding is consistent with the main model and reinforces the argument that emotional content is effective in driving quick responses from the audience, such as likes.

In contrast, when the dependent variable is the number of comments, emotional content does not show a significant effect (p = 0.732). However, the format of the post (video) does have a positive and significant effect on the number of comments (β = 0.378; p = 0.022). This indicates that comments representing a more intensive form of engagement are more influenced by content format than by the emotional appeal of the content.

Overall, the robustness check confirms that emotional content has the most substantial effect on aggregate engagement and likes. However, its effect is less consistent when it comes to comments, which require more cognitive effort and deeper participation from the audience. The video format appears to play a more significant role in encouraging comment-based engagement, emphasizing the importance of considering both the content type and the format when analyzing engagement metrics.

5. DISCUSSION

This study demonstrate that emotional content has a positive and significant relationship with aggregate engagement, measured through an index based on likes and comments. On this visual platform where users consume content rapidly, emotionally driven messages more effectively trigger audience responses than purely informational posts.

These findings are in line with digital marketing literature, which emphasizes the role of emotions in attracting attention and accelerating initial engagement (Berger & Milkman, 2012; Calder et al., 2009; Dessart et al., 2015). In the case of sportswear brands, the relevance of these findings is even more pronounced, as this product category is not only linked to utilitarian functions but also to lifestyle symbolism, self-identity, and aspirations. However, this advantage should be interpreted contextually, influenced by product characteristics, communication objectives, and audience habits.

Contrary to common assumptions, video posts showed a negative relationship with aggregate engagement after controlling for post characteristics. Interaction tests revealed that the effect of emotional content was consistent across video and non-video formats, suggesting message quality matters more than the medium itself (de Vries et al., 2012).

The lack of video format effect can be understood through several theoretical perspectives. Media Richness Theory posits that richer media requires more effort from users (Aydin et al., 2021; Shahbaznezhad et al., 2021b). Videos format may demand greater time and attention from users, which may result in lower engagement.

From the perspective of Uses and Gratifications Theory, users engage with media to fulfill specific needs, such as entertainment or information. Therefore, video content fails to meet these needs may result in disengagement (Chen et al., 2025a; Xiao et al., 2023). In addition, the literature on persuasion knowledge suggests that users are increasingly aware of promotional content such as video that contains explicit branding and calls to action (Chen et al., 2025b; Zheng et al., 2024). Furthermore, video content can disrupt the flow experience. Video that is too long, poorly edited, or lacks emotional resonance would not guide into psychological state that fosters deep engagement (Zhang et al., 2023; Zheng et al., 2024).

Lastly, Instagram's algorithm and the principle of optimal vividness suggest that video is not always the most effective format; overly complex or lengthy videos can overwhelm users and reduce engagement (Aydin et al., 2021; Konak, 2023).

Robustness checks using likes and comments separately revealed that emotional content drives quick, low-effort engagement (likes) but not deeper participation (comments), indicating a distinction between passive and active audience involvement (Dubovi & Tabak, 2021; Kohout et al., 2022) (Dubovi & Tabak, 2021)Commenting involves a more deliberate process, including reflection and self-expression, which goes beyond immediate emotional reactions. This finding reinforces the distinction between affective

and cognitive engagement and suggests that emotional content alone may be insufficient to stimulate deeper user-generated responses.

The results also show that video content significantly increases comments but does not affect overall engagement, suggesting that video may stimulate conversational interaction rather than broad engagement. Consistent with Media Richness Theory, video provides richer contextual cues that can prompt discussion and clarification. However, the greater time and cognitive effort required to consume video may reduce users' tendency to engage in low-effort behaviors such as liking. From a Uses and Gratifications perspective, the effectiveness of video format determined by the efficiency of content to fulfills viewer needs. Aligned with this study findings, effective video contents may lack in overall viewer engagement but enhanced comments. These results reinforce the multidimensional nature of engagement: likes and comments reflect different intensities of audience involvement (Dessart et al., 2015).

Platform-specific characteristics, such as Instagram's visual and affect-oriented design, amplify emotional content's effectiveness, though these effects may not generalize to other platforms with different content norms and user motivations. Future research is therefore encouraged to examine the robustness of these findings across different cultural settings, industries, and digital platforms in order to better understand the boundary conditions of emotional and informational content effectiveness.

While this study focused on sportswear, its implications extend to other symbolic product categories like fashion and cosmetics. In contrast, highly utilitarian or information-intensive products, such as financial services or technology, may favor informational content due to the audience's prioritization of clarity and risk reduction.

In summary, emotional content excels at eliciting quick, spontaneous engagement, whereas deeper involvement is shaped by additional factors, including content format and audience expectations. These findings provide empirical support for tailoring digital marketing strategies to both communication goals and the multidimensional nature of engagement.

5.1 Theoretical Implications

This study clarifies how emotional and informational message orientations shape audience engagement on social media. While prior research focused largely on global brands, our findings show that emotional content is especially effective for local sportswear brands in emerging markets, where symbolic consumption and social orientation are strong.

Emotional content primarily drives initial, low-effort engagement (likes), highlighting the affective foundation of digital engagement. By distinguishing between likes and comments, this study reinforces that engagement is multidimensional, with different content types influencing distinct audience behaviors. This conceptualization of engagement opens new avenues for future research, particularly in refining the measurement and understanding of engagement in digital marketing.

The lack of moderation by video format indicates that message orientation may matter more than media richness in driving engagement. Finally, situating the analysis in a collectivist, emerging market context emphasizes that cultural and contextual factors shape the relative effectiveness of emotional versus informational content, suggesting the need for context-sensitive theorizing in digital marketing research.

5.2 Practical Implications

For digital marketers, particularly local sportswear brands on Instagram, these findings highlight the importance of tailoring content to engagement objectives. Emotional content effectively drives quick responses, such as likes, and should be incorporated through inspirational narratives, lifestyle imagery, or calls to action.

However, deeper engagement, such as comments, depends on additional factors like content format. Video may be better suited for stimulating in-depth interactions, but does not automatically increase overall engagement. Brands should therefore prioritize relevance and quality over format alone, aligning content with audience expectations to maximize engagement efficiently.

This approach encourages resource-efficient content creation and emphasizes strategic selection of message type and format based on communication goals, supporting more targeted and effective social media marketing strategies.

6. CONCLUSION

This study aimed to investigate the impact of emotional versus informational content on Instagram engagement for local sportswear brands in Indonesia. The findings suggest that emotional content significantly drives audience engagement, particularly through likes, indicating that affective messages are more effective in triggering initial responses.

The results also highlight that the effect of emotional content on engagement does not differ significantly between video and non-video posts, challenging the commonly held belief that video content always outperforms other formats in terms of engagement. While video content did not enhance the effectiveness of emotional content, it did contribute positively to comment-based engagement, suggesting that video content may play a more significant role in fostering deeper, more intensive audience participation.

The robustness check, using alternative engagement measures (likes and comments), confirmed that emotional content had a more substantial impact on likes, but its effect on comments was not significant. This distinction emphasizes the importance of considering different forms of engagement, as likes and comments represent varying levels of audience involvement. Furthermore, the study found that content characteristics, such as message orientation (emotional vs. informational) and content format (video vs. non-video), jointly contribute to engagement but in different ways depending on the type of interaction.

In addition to these findings, this study has several limitations. It is confined to a single platform and market, relies on observational web-scraped data that establish associations but not causality, measures engagement only via likes and comments without capturing deeper emotional or cognitive dimensions, considers only emotional versus informational content ignoring other content types such as humor, user-generated, or interactive posts, and may be affected by endogeneity, omitted variables (followers, algorithm exposure, promotions), and limited sample size, suggesting future research should incorporate experimental or longitudinal designs, broader platforms and content types, normalized and additional engagement metrics, and larger, more diverse samples to improve robustness and generalizability.

Considering these limitations, future research could expand to a broader range of product categories and industries to test the consistency of these findings across various market contexts; conduct cross-cultural research to examine potential cultural influences; employ experimental or longitudinal design to establish causal relationships; investigating the role of other content characteristics, such as humor, interactivity, or

user-generated content, in influencing engagement on social media platforms; and compare different social media platforms to understand whether content strategies need to be adapted based on platform characteristics.

By addressing these limitations and offering directions for future studies, this study contributes to the growing body of literature on social media marketing by providing empirical evidence on the effectiveness of emotional content in driving engagement for local sportswear brands in Indonesia. The findings emphasize the importance of aligning content strategies with audience expectations and engagement behaviors, while also highlighting the need for a nuanced understanding of how message type and format interact to influence social media engagement. By addressing the limitations and suggesting future research directions, this study paves the way for a more comprehensive understanding of content strategy effectiveness in the digital age.

Author Contributions

M.M.R: Conceptualization; Data Curation; Formal Analysis; Funding Acquisition; Investigation; Methodology; Project Administration; Resources; Software; Supervision; Validation; Visualization; Writing – Original Draft Preparation; Writing – Review & Editing.

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