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ANALYSIS OF INSTAGRAM BESA UPI VISUAL CONTENT AND VISUAL LITERACY AMONG BUSINESS EDUCATION 2023

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ABSTRACT
This study investigates how structured visual content shared by BESA UPI on Instagram influences visual literacy among Business Education undergraduates at Universitas Pendidikan Indonesia. Despite Indonesia having over 103 million Instagram users, research exploring its educational role remains limited. Using a quantitative explanatory design, data were collected from 73 students (73.97% female, aged 20-30) from the Business Education Study Program, class of 2023, selected through purposive sampling. Participants actively engaged with BESA posts at least three times weekly over three months. A validated 16-item questionnaire measured visual content quality (6 items) and visual literacy (10 items) using a five-point Likert scale. Validity was confirmed through Pearson correlation ($r > 0.205$, $p < 0.01$) and reliability through Cronbach's alpha ($\alpha = 0.892$ and 0.915). Data were analyzed using simple linear regression in SPSS 26. Results revealed a significant positive effect of Instagram visual content on visual literacy ($\beta = 1.170$, $R^2 = 0.531$, $p < 0.001$), explaining 53.1% of variance in students' literacy skills. These findings support Visual Grammar Theory and Visual Literacy Theory, confirming that intentionally designed educational visuals enhance interpretive, analytical, and creative competencies. The study concludes that student organization social media functions as effective pedagogical infrastructure. Institutions should invest in professional, theory-driven content creation to strengthen visual literacy in digital learning environments, preparing students for visual-centric professional contexts.

Keywords: Instagram Visual Content; Visual Literacy; Business Education; Educational Social Media

INTRODUCTION

Social media has become a vital part of daily life, reshaping how people communicate, learn, and access information. Instagram, with more than 2 billion monthly users, exemplifies the dominance of visual communication online. Yet despite this high exposure, many users still lack visual literacy, making them vulnerable to misinformation based on images and videos (Aljalabneh, 2024; Hailey et al., 2023). Visual literacy, defined as the ability to interpret and create meaningful visual messages, is therefore increasingly essential, especially for students as active digital participants.

In Indonesia, 74,6 percent of the population uses the internet and over 103 million people are active on Instagram in 2024 (DataReportal, 2025), visual content dominates youth interaction. Highly visual platforms like Instagram shape how young people interpret information, highlighting both challenges and opportunities for developing critical and creative literacy (McCrory, Best, & Maddock, 2020). This underscores the need to examine how structured, educational visuals can foster literacy in digital learning contexts.

This study examines two core constructs: Instagram visual content and students' visual literacy. Visual content communicates meaning through representational, interactive, and compositional dimensions (Kress & van Leeuwen, 2020). Visual literacy is operationalized across five dimensions: visual communication, visual language learning, visual literacy, visual perception, and visual thinking (Debes, 1968, cited in Hailey, Miller, & Yenawine, 2015; Šupšáková, 2016), providing measurable criteria for assessing literacy development.

Previous studies have linked Instagram use to visual learning but often with methodological or contextual limitations. For example, Matusiak et al. (2019) noted that students use images without verifying credibility, and Prameswari et al. (2023) found that Instagram enhances visual literacy but with limited generalizability. Similarly, Fardiah et al. (2023) examined digital literacy broadly without focusing on visual sub-skills. While these works confirm the connection between visual content and literacy, few explore how educational social media initiatives influence visual literacy within informal academic environments. A systematic review by Lim, Toh, and Nguyen (2022) further emphasized that multimodal learning integrating visual, textual, and spatial elements enhances students' interpretive and productive literacy, yet research on informal multimodal spaces such as student organization media remains limited.

Addressing this gap, the present study investigates how structured Instagram content from BESA UPI, the Business Education Student Association at Universitas Pendidikan Indonesia, influences students' visual literacy. Unlike general social media content, BESA's posts are educational, goal-oriented, and aligned with organizational objectives. This study contributes new evidence on how student organization media can serve as an effective pedagogical tool, offering insights for optimizing visual communication strategies in higher education.

METHOD

This study employed a quantitative research design with both descriptive and explanatory purposes. The descriptive component aimed to capture respondents' perceptions and abilities related to Instagram visual content and visual literacy, whereas the explanatory component tested theoretical assumptions and hypotheses. Descriptive analysis provided an overview of the participants' characteristics, while explanatory analysis examined causal relationships among variables based on empirical data.

The sample consisted of 73 undergraduate students from the Business Education Study Program at Universitas Pendidikan Indonesia, class of 2023, out of a total population of 90 students. The sample size was determined through an a priori power analysis using G*Power software, which indicated that detecting a medium effect size ($f^2 = 0.15$) with 80 percent power at $\alpha = 0.05$ required a minimum of 55 participants. Participants were selected using purposive sampling to ensure direct exposure to Instagram content posted by BESA for educational or informational purposes. Active engagement was defined as accessing BESA posts at least three times per week for three consecutive months and interacting through likes, comments, or shares at least once per week.

Data were collected using a structured questionnaire comprising 16 items. Six items measured attributes of visual content, including representational, interactive, and compositional dimensions, while ten items assessed visual literacy through five constructs: visual communication, visual language learning, visual literacy, visual perception, and visual thinking. All items were rated on a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Construct validity was evaluated using Pearson's product–moment correlation, following recommended procedures for social and behavioral research (Boateng et al., 2018; Taherdoost, 2016). All items showed significant correlations above the critical value ($r > 0.205$, $p < 0.01$), confirming their validity. Internal consistency reliability was then examined using Cronbach's alpha, with coefficients greater than 0.70 regarded as acceptable (Taber, 2018); the obtained values were $\alpha = 0.892$ for Visual Content and $\alpha = 0.915$ for Visual Literacy, indicating high reliability.

After confirming the validity and reliability of the instrument, data were analyzed using simple linear regression in SPSS version 26 to examine the effect of Instagram visual content on students' visual literacy. Regression assumptions, including linearity, normality of residuals, and homoscedasticity, were tested to ensure model appropriateness and result reliability. The regression model is expressed as follows:

$$Y = a + bX + e$$

Where Y represents visual literacy, X represents visual content, a is the constant, b is the regression coefficient, and e is the error term. The research hypotheses were formulated as follows:

$H_0 : \beta = 0$: Visual content has no significant effect on visual literacy.
$H_1 : \beta > 0$: Visual content has a significant positive effect on visual literacy.

In this study, it is expected that higher-quality or more informative Instagram visual content will be positively associated with higher levels of visual literacy among Business Education students, providing a basis for testing the hypothesized relationship.

RESULTS AND DISCUSSION

This study aims to examine the influence of visual content on visual literacy among undergraduate students. A total of 73 valid responses were collected through a structured questionnaire. The respondents were undergraduate students of the Business Education Study Program at Universitas Pendidikan Indonesia, class of 2023. To provide a clearer overview of the respondents' characteristics, Table 1 presents the gender distribution of participants involved in this study.

Table 1. Respondents Gender Distribution

Gender	Frequency	Percentage
Male	19	26.03%
Female	54	73.97%
Total	73	100%

Based on Table 1, it can be observed that the majority of respondents were female (73.97%), while male respondents accounted for 26.03%. This gender distribution indicates that female students were more actively involved in this study, which aligns with the general demographic trend within the Business Education program. All respondents were within the age range of 20–30 years, representing the typical profile of undergraduate students. This distribution suggests that the sample adequately reflects the characteristics of the study population,

ensuring that the findings are representative of Business Education students who actively use Instagram for educational and informational purposes.

Among 73 undergraduate students of the Business Education Study Program at Universitas Pendidikan Indonesia, class of 2023, the psychometric properties of the measurement instrument were evaluated prior to hypothesis testing. Construct validity was assessed using Pearson's product–moment correlations between individual items and their respective construct totals. All items demonstrated significant correlations: Visual Content items (X1–X6) ranged from r = 0.347 to r = 0.606 ($p < 0.01$), while Visual Literacy items (Y1–Y10) ranged from r = 0.294 to r = 0.699 ($p < 0.01$). These values exceed the minimum correlation coefficient (r = 0.205, $\alpha = 0.05$, n = 73) based on the Pearson critical value table, following the construct validity testing procedure suggested by Taher (2017).

These results confirm that the instrument is both valid and reliable, suitable for examining the impact of Instagram Visual Content on students' Visual Literacy, and provides a solid foundation for subsequent multivariate analyses. The presence of strong correlations among certain items (e.g., X1–X4, r = 0.606; Y9–Y10, r = 0.699) suggests careful consideration of potential multicollinearity in further analyses, and the high internal consistency supports the creation of composite scores or factor-based data reduction if necessary.

Table 2. Descriptive Statistics of Study Variables

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Visual Content	73	16.00	30.00	24.9589	3.35592
Visual Literacy	73	27.00	50.00	40.9863	5.38901
Valid N (listwise)	73				

The Visual Content construct ($M = 24.96$, $SD = 3.36$) demonstrated high mean scores, representing 83.2% of the maximum possible score, indicating that respondents consistently perceived BESA UPI's Instagram content as clear, informative, and aesthetically appropriate. The relatively small standard deviation suggests homogeneity in these perceptions across the sample. The Visual Literacy construct ($M = 40.99$, $SD = 5.39$) achieved a mean representing 82.0% of maximum possible scores, suggesting that respondents generally possess well-developed visual literacy competencies. The larger standard deviation relative to Visual Content indicates greater individual variation in visual literacy abilities, potentially reflecting differential prior exposure to visual media or varying levels of formal instruction in visual interpretation.

Prior to regression analysis, the assumptions underlying ordinary least squares estimation were systematically examined, including normality, multicollinearity, and heteroskedasticity. Normality was assessed using histogram visualization, probability-probability (P-P) plots, and the Kolmogorov–Smirnov test, which indicated that residuals were approximately normally distributed (sig. = 0.200 > 0.05). Multicollinearity was not an issue given the study involved only a single predictor and outcome variable, as reflected by VIF = 1.000 and Tolerance = 1.000. Homoscedasticity was evaluated by plotting standardized residuals against standardized predicted values, which showed random dispersion around zero without systematic patterns or funnel shapes, confirming constant variance. Visual inspection of scatterplots further supported linearity between Instagram Visual Content and Visual Literacy. Collectively, these diagnostics demonstrate that all regression assumptions were met, supporting the appropriateness and reliability of the linear regression model for examining the relationship between the variables.

To examine the effect of Instagram visual content on students' visual literacy, a simple linear regression analysis was conducted using SPSS version 26. The results of the regression model are summarized in Table 3.

Table 3. Determination Coefficient

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.729[a]	.531	.525	3.71603

a. Predictors: (Constant), Visual Content
b. Dependent Variable: Visual Literacy

The analysis revealed a correlation coefficient (R) of 0.729, indicating a strong positive relationship between Instagram visual content and students' visual literacy. The R Square value of 0.531 implies that 53.1% of the variance in visual literacy can be explained by variations in Instagram visual content, while the remaining 46.9% may be attributed to other external factors not included in this model. The Adjusted R^2 value of 0.525 confirms the model's stability and suitability for prediction.

Further analysis presented in Table 4 displays the regression coefficients for the independent variable.

Table 4. Coefficients of Simple Linear Regression Analysis

Coefficients[a]

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.	Collinearity Statistics Tolerance	Collinearity Statistics VIF
1	(Constant)	11.777	3.286		3.584	.001		
	Visual Content	1.170	.130	.729	8.968	.000	1.000	1.000

a. Dependent Variable: Visual Literacy

The regression equation obtained from Table 4 can be expressed as:

$$Y = 11.777 + 1.170X$$

Where Y represents Visual Literacy and X represents Instagram Visual Content. The results indicate that Instagram Visual Content has a significant positive effect on students' visual literacy, with each one-unit increase in content quality contributing to a 1.17-point increase in literacy scores. These findings empirically support the idea that structured and meaningful visual content enhances students' ability to interpret, analyze, and construct visual messages. Pedagogically, visual elements such as infographics, narratives, and conceptual imagery facilitate better processing and retention of information compared to text alone. This aligns with previous research indicating that exposure to visually rich learning materials improves students' capacity to derive meaning from visual media, thereby enhancing digital literacy and academic performance. Overall, higher-quality and educationally engaging Instagram content is positively associated with increased visual literacy among Business Education students at Universitas Pendidikan Indonesia, class of 2023, confirming the study's hypothesis.

Instagram visual content shared by BESA UPI significantly enhances Business Education students' visual literacy, explaining a substantial portion of variance in outcomes. Supporting Visual Grammar Theory (Kress & van Leeuwen, 2020) and Visual Literacy Theory (Šupšáková, 2016), the study shows that representational, interactive, and compositional elements facilitate interpretation, analysis, and creation of meaningful messages. Gains arise from intentional educational design rather than passive exposure, helping counter misinformation and reinforcing structured visual learning (Aljalabneh, 2024; Hailey et al., 2023).

Advancing prior research limited by small or aggregate samples (Prameswari et al., 2023; Fardiah et al., 2023), this study uses a validated multi-item instrument and a sufficiently powered sample to capture distinct literacy dimensions. Structured, credible content strengthens evaluative and analytical skills while potentially reducing misinformation vulnerability (Matusiak et al., 2019). Remaining variance may relate to prior visual experience, engagement intensity, and motivations such as self-expression or passing time (Alhabash & Ma, 2017). The cross-sectional design limits causal inference, and focusing on a single institution restricts generalizability. indicating the need for comparative studies across contexts.

Practically, these findings underscore student organization social media as pedagogical infrastructure. Integrating visual design training, content quality standards, and curricular alignment can enhance educational impact. With over 108 million Indonesians using Instagram (DataReportal, 2025), leveraging engagement patterns offers scalable learning interventions and strengthens the broader pedagogical ecosystem of student-led media, aligning with Kędra's (2019) emphasis on interpretive, creative, and ethical visual practices in higher education.

CONCLUSION

This study confirms that Instagram visual content from student organizations can meaningfully enhance undergraduate visual literacy. The analysis shows that BESA UPI's structured and educational posts explain 53.1 percent of the variance in literacy outcomes ($R^2 = 0.531$, $\beta = 1.170$, $p < 0.001$), providing empirical validation for visual literacy theories within Indonesian higher education. These findings demonstrate that intentionally designed content contributes directly to the development of analytical and creative visual skills. While the study advances current understanding, several limitations remain. The cross-sectional design restricts causal inference, single-institution sampling limits external validity, and nearly half of the variance remains unexplained, implying the influence of external factors. Future research should adopt longitudinal and multi-institutional designs, analyze specific content features, and explore how sustained visual exposure contributes to literacy development and misinformation resilience. At the institutional level, student organization social media should be recognized as legitimate pedagogical infrastructure. Universities are encouraged to invest strategically in professional, theory-based content creation to strengthen students' visual literacy and critical competencies. As visual communication increasingly dominates digital interaction, purposeful social media strategies represent an essential avenue for integrating education, creativity, and civic engagement in the 21st century.

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