

Scroll, Click, Checkout: Does Visual Appeal Take Women's Attention to Buy Impulsively?

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ABSTRACT

Purpose: This study investigates how visual appeal in e-commerce influences impulse buying among women, with browsing behavior as a mediating factor. It explores how the appearance of e-commerce applications facilitates both hedonic and utilitarian browsing, which may lead to impulse buying.

Method: This study used a quantitative approach by distributing online questionnaires via Google Forms through social media. The sample included 170 Gen Z and Millennial women aged 17–44 years who use Shopee in Indonesia. We analyzed the data using Structural Equation Modeling with the Partial Least Squares (PLS-SEM) method in SmartPLS4.

Result: The results show that visual appeal significantly influences both hedonic and utilitarian browsing. Only hedonic browsing directly drives impulse buying. Visual appeal and utilitarian browsing do not significantly affect impulse buying. Moreover, hedonic browsing fully mediates the effect of visual appeal on impulse buying, while utilitarian browsing does not act as a significant mediator.

Practical Implications for Economic Growth and Development: This study emphasizes the importance of visual design in e-commerce platforms. Appealing visuals enhance users' enjoyment during hedonic browsing, increasing the chance of impulse buying. By creating engaging visual experiences, developers and sellers can foster user satisfaction, loyalty, and sales growth.

Originality/Value: This study offers new insights by focusing on Gen Z and Millennial women in Indonesia—an underrepresented group in e-commerce research. It also clarifies the distinct mediating roles of hedonic and utilitarian browsing in the relationship between visual appeal and impulse buying.

Keywords: Hedonic Browsing, Impulse Buying, Utilitarian Browsing, Visual Appeal

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INTRODUCTION

Technological advancements in mobile devices and the internet have significantly changed the way consumers shop. Today, the growth of e-commerce has made shopping more convenient for consumers. E-commerce, as an online shopping platform, is widely used in Indonesia. According to data from the Ministry of Trade's Data Center and Information System (PDSI Kemendag), as cited by *databoks.katadata.co.id*, the number of e-commerce users in Indonesia has shown a consistent upward trend since 2020. In that year, the number of users stood at approximately 38 million and is projected to reach 65 million by 2024, reflecting a growth rate of around 69%.

One of the most widely used e-commerce platforms is Shopee. Semrush data cited by *databoks.katadata.co.id* shows that Shopee recorded 145.1 million visits in December 2024, surpassing other e-commerce platforms in Indonesia. Shopee is particularly popular among



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Gen Z and Millennials. Based on a 2024 Populix survey, Shopee was the preferred e-commerce platform for 76% of Gen Z and 60% of Millennials—significantly higher than other platforms, which were preferred by only 15% and 26%, respectively (*databoks*, 2024). The survey also revealed that the majority of Shopee users are women in both generations. Among Gen Z, 86% of women used Shopee compared to 63% of men. Among Millennials, 72% of women used Shopee, while only 46% of men did. One reason women reportedly prefer Shopee is its bright orange color, which conveys a cheerful and attractive impression.

Shopee offers a variety of conveniences for consumers, such as a broad selection of products, multiple payment options, and fast delivery services. It also appeals to consumers by providing attractive promotions and interactive features, including free shipping vouchers, discounts, cashback offers, and live-streamed game features within the app. These interactive and user-friendly services are key characteristics of Shopee's e-commerce model and can contribute to increased impulse buying (Lee et al., 2014). According to Piron (1991), impulse buying refers to unplanned purchases made in response to a certain stimulus. One such stimulus is visual appeal, which includes external elements of the application that can indirectly influence consumers' impulse buying behavior (Zheng et al., 2019).

According to Li and Yeh (2010), visual appeal is conveyed through elements such as language, color, layout, and animation—designed to create a high-quality appearance. Visual appeal is a crucial factor in attracting users to e-commerce platforms (Yang et al., 2021). Shopee, commonly referred to as the “orange app,” has a distinctive color scheme that reinforces its brand identity. Its clear layout and user-friendly interface enhance user comfort, making the browsing experience more enjoyable. This visually attractive and intuitive app design helps consumers navigate the platform more easily (Yang et al., 2021).

Browsing is a vital part of the online shopping process, especially since products are only visible on a mobile screen, requiring more attention to detail when reviewing product specifications. According to Bloch et al. (1989), there are two types of browsing based on purpose: utilitarian browsing, which is goal-oriented and information-seeking, and hedonic browsing, which is for recreation or entertainment. Some consumers use e-commerce platforms like Shopee not only to shop or find specific products but also for leisure purposes such as “window shopping” or exploring current promotions. The browsing process is essential in helping consumers achieve their individual shopping goals, and it is the responsibility of e-commerce platforms to facilitate this experience effectively.

Previous studies have shown differing perspectives regarding the effect of visual appeal on impulse buying. Yang et al. (2022) found that visual appeal has a direct effect on consumer impulse buying, while Amanah and Harahap (2020) argued otherwise. Chen et al. (2020) concluded that visual appeal indirectly influences impulse buying, acting as a stimulus that precedes such behavior. Additionally, Akram et al. (2023) examined the relationship between visual appeal and consumer browsing behavior—specifically hedonic and utilitarian browsing—and found that visual appeal significantly influences both. The relationship between browsing and impulse buying has also been supported by Budiman et al. (2022) and Husada et al. (2023), who found that hedonic browsing has a positive effect on impulse buying. Conversely, Rezaei et al. (2016) demonstrated that utilitarian browsing also affects impulse buying. However, Budiman et al. (2023) presented conflicting findings, showing that utilitarian browsing has no significant effect on impulse buying. These inconsistencies highlight a research gap that warrants further investigation into the relationships among these variables.

Most previous research exploring the relationship between visual appeal, browsing behavior, and impulse buying in e-commerce settings has used mixed-gender samples, without examining how gender-specific traits may influence these behaviors. However, Atulkar and Kesari (2018) found that women are more susceptible to impulse buying than men, particularly when influenced by visual elements in the store environment. Given these findings, the present study focuses specifically on Gen Z and Millennial women—demographic groups that constitute the majority of Shopee users in Indonesia. This focus allows for a deeper exploration of gender-based behavioral patterns and offers the potential to yield different

insights from prior studies that included male participants. Thus, this research contributes theoretically to the understanding of gender-specific impulse buying behavior in the digital context.

The purpose of this study is to examine how the visual appeal of an e-commerce platform affects consumers' browsing experiences—both hedonic and utilitarian—and their impulse buying behavior among female consumers. The findings of this research are expected to offer practical implications for e-commerce developers by emphasizing the importance of optimizing application design and product catalog presentation with visually appealing elements to encourage impulse purchases. Moreover, the results can also be beneficial for small and medium-sized enterprises (SMEs) selling women's products, by highlighting the importance of displaying high-quality, informative product images in their online stores to capture the attention of female consumers and increase the likelihood of impulse buying during product exploration.

Hypotheses Development

Visual Appeal and Impulse Buying

Visual appeal is a critical component in enhancing the presentation of online sales platforms (Parboteeah et al., 2009). Consumers often form initial impressions based on visual aesthetics, which subsequently influence their perceptions of other aspects of the e-commerce shopping experience (Chopdar & Balakrishnan, 2020). An attractive and aesthetically pleasing interface in an online shopping application can stimulate consumer impulsivity, potentially leading to impulse buying behavior (Chopdar & Balakrishnan, 2020; Himawari et al., 2018). Chen et al. (2021) also found that consumers are more likely to make impulsive purchases when exposed to aesthetically designed and professionally presented product images. The more visually appealing the e-commerce platform, the greater the consumer satisfaction, which in turn increases the likelihood of impulse buying (Liu et al., 2013). This suggests a strong link between the aesthetic quality of an application's interface and the tendency of consumers to engage in impulsive purchases. Empirical evidence by Huang and Suo (2021) further supports the notion that visual appeal significantly influences consumer impulse buying behavior.

H1: Visual appeal has a significant effect on impulse buying.

Visual Appeal and Browsing (Hedonic and Utilitarian)

When using online shopping applications such as Shopee, visual appeal plays a crucial role in encouraging consumers to browse and efficiently obtain the information they need (Zheng et al., 2019). A visually appealing interface enhances content accessibility, allowing consumers to navigate and view e-commerce content with ease (Yang et al., 2021). In such environments, high-quality photos and videos not only improve consumers' task performance—such as searching, browsing, and evaluating products—but also enhance their sense of enjoyment when using the platform (Yang et al., 2021; Liu et al., 2013). This increased sense of pleasure fosters greater consumer engagement and satisfaction, positively influencing their overall experience. Consequently, visual appeal contributes to both utilitarian browsing (goal-oriented and information-seeking) and hedonic browsing (pleasure-driven and exploratory). Supporting this, empirical evidence from Mufadhil and Alversia (2021) confirms that visual appeal significantly influences both browsing types among e-commerce consumers.

H2: Visual appeal has a significant effect on hedonic browsing.

H3: Visual appeal has a significant effect on utilitarian browsing.

Browsing (Hedonic and Utilitarian) and Impulse Buying

In the context of online shopping, browsing activities are crucial for consumers before making a purchase decision. Empirical evidence suggests that hedonic browsing, driven by pleasure or enjoyment, can trigger impulse buying in consumers (Budiman et al., 2023; Park et al., 2012; Suarmaja et al., 2016). When consumers experience pleasure while browsing, it can lead to spontaneous purchases. Zheng et al. (2019) further confirm that hedonic browsing can encourage consumers to buy impulsively. Similarly, utilitarian browsing—driven by goal-oriented behavior—can also lead to impulse buying. Stern (1962) introduced the concept of planned impulse buying, referring to purchases made outside of the initial plan when consumers unexpectedly purchase additional items while searching for the desired product. Kimiagari and Malafe (2021) and Rezaei et al. (2016) also found that utilitarian browsing can lead to impulse buying behavior.

H4: Hedonic browsing has a significant effect on impulse buying.

H5: Utilitarian browsing has a significant effect on impulse buying.

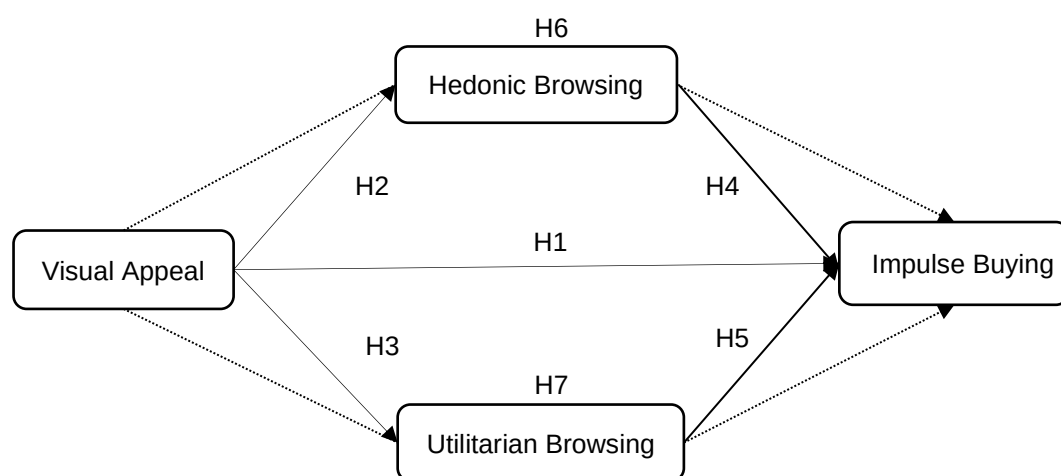
Browsing (Hedonic and Utilitarian) as the Mediator between Visual Appeal and Impulse Buying

The level of consumer impulsivity can increase when an application's appearance is visually appealing (Chopdar & Balakrishnan, 2020). Stern (1962) identified three types of impulse buying: reminder impulse buying, suggestive impulse buying, and planned impulse buying. These forms occur when consumers are reminded of product information, visualize the need for a product, or make a purchase outside their initial plan. Visual appeal plays a significant role in making it easier for consumers to view product content while browsing e-commerce platforms (Yang et al., 2021). Attractive visuals can not only encourage consumers to browse but also help them efficiently find the products they need (Zheng et al., 2019). Therefore, the visual design of an application is crucial for attracting consumers, as it can enhance their impulsivity by facilitating product discovery. According to Zheng et al. (2019), visual appeal is one of the key factors contributing to impulse buying through browsing.

H6: Hedonic browsing mediates the effect of visual appeal on impulse buying.

H7: Utilitarian browsing mediates the effect of visual appeal on impulse buying.

Figure 1. Research Framework



Source: Developed by the authors (2024)

METHOD

This study employs a quantitative research design with an explanatory approach, aiming to analyze the relationships, differences, or influences among the variables through statistical testing. The primary objective is to examine the relationships between visual appeal, hedonic browsing, utilitarian browsing, and impulse buying. Data for this study will be collected using an online questionnaire developed with Google Forms and distributed via social media platforms such as WhatsApp, X (formerly Twitter), Instagram, and Telegram. The questionnaire uses a 5-point Likert scale, where 1 indicates "Strongly Disagree" and 5 indicates "Strongly Agree."

Table 1. Variables Measurement

Variables	Codes	Statements
Visual Appeal (Loiacono et al., 2007)	VA1	The Shopee app is visually pleasing.
	VA2	The Shopee app displays a visually pleasing design.
	VA3	The Shopee app is visually appealing.
Hedonic Browsing (Park et al., 2012)	HB1	When I browse on Shopee, I can forget about my issues and feel relaxed.
	HB2	I enjoy browsing Shopee enough that I lose track of time.
	HB3	I browse items on Shopee just for fun.
	HB4	While browsing Shopee, I feel very excited, like I'm playing.
Utilitarian Browsing (Park et al., 2012)	UB1	I browse Shopee to buy items that are better in price and quality.
	UB2	I browse Shopee to gather product information.
	UB3	I browse Shopee to compare stores.
	UB4	I browse Shopee to get as much added value as possible.
	UB5	I browse Shopee for efficient online shopping.
Impulse Buying (Verhagen & Van Dolen, 2011)	IB1	My purchase was spontaneous.
	IB2	My purchase was unplanned.
	IB3	Before visiting Shopee, I did not intend to make this purchase.
	IB4	I did not intend to make this purchase before this shopping trip.
	IB5	I could not resist making this purchase on Shopee.

Source: Authors' compilation (2025)

The target population consists of female Shopee users in Indonesia. As the exact population size is unknown, the study adopts a non-probability purposive sampling technique. Respondents must meet the following criteria: (1) female, (2) own a Shopee account, (3) have made at least one purchase on Shopee, and (4) be aged between 17 and 44 years (classified as Gen Z and Millennials). The sample size is determined based on the guidelines by Hair et al. (2010), which recommend a minimum of 5 to a maximum of 10 times the number of indicators used. With 18 indicators in total, the required sample size is 170 respondents.

Data analysis will be conducted using Structural Equation Modeling (SEM) with the Partial Least Squares (PLS) approach, utilizing SmartPLS 4 software. The measurement model will be assessed for validity and reliability. Convergent validity will be confirmed if the outer loading of each indicator exceeds 0.70 and the Average Variance Extracted (AVE) is above 0.50. Discriminant validity will be evaluated using the Fornell-Larcker criterion. Reliability will be assessed through Cronbach's alpha and composite reliability, both of which must exceed 0.70. The structural model will be evaluated using R-square (R^2) values and model fit,

particularly the standardized root mean square residual (SRMR). Hypothesis testing will be conducted through bootstrapping, with relationships considered significant at a p-value of less than 0.05.

RESULT AND DISCUSSION

Respondents' Characteristics

This study categorizes the characteristics of respondents based on age, highest level of education, occupation, income, frequency of purchases on Shopee, and the type of product most frequently purchased on Shopee. As shown in Table 2, among the 170 Gen Z and Millennial women who participated in this study, the majority are aged 17–22 years (60.6%), followed by those aged 23–28 years (31.8%). In terms of occupation, most respondents are students (47%), followed by employees or civil servants (26%). Regarding product types, respondents were allowed to select multiple categories of frequently purchased items, with beauty products (33.9%) being the most selected, followed by fashion products (29.3%). This reflects the tendency of women to be more interested in products related to personal appearance.

Table 2. Respondents' Characteristics

Category		Number of Respondents	Percentage
Age	17-22 years	86	50.6%
	23-28 years	54	31.8%
	29-34 years	22	12.9%
	35-40 years	8	4.7%
	41-44 years	0	0%
Highest education level	High school/ equivalent	86	50.6%
	Diploma	9	5.3%
	Undergraduate	73	42.9%
	Postgraduate	2	1.2%
Occupation	Students	81	47.6%
	Employee/ civil servant	45	26.5%
	Entrepreneurship	5	2.9%
	Part-time workers	16	9.4%
	Housewife	12	7.1%
	Others	11	6.5%
Income	< IDR 1,000,000	73	42.9%
	IDR 1,000,001 – IDR 3,000,000	53	31.2%
	IDR 3,000,001 – IDR 5,000,000	30	17.6%
	IDR 5,000,001 – IDR 10,000,000	14	8.2%
	> IDR 10,000,001	0	0.0%
Frequency of purchase at Shopee	< 3 times	62	36.5%
	3-5 times	78	45.9%
	6-10 times	26	15.3%
	> 10 times	4	2.4%
Product types	Beauty	150	33.9%
	Fashion	130	29.3%
	Electronics	23	5.2%

Category		Number of Respondents	Percentage
	Food/ beverage	61	13.8%
	Home appliance	59	13.3%
	Others	20	4.5%

Source: Processed data (2025)

Measurement Model (Outer Model)

The measurement model will be evaluated through validity and reliability tests. These tests aim to ensure that the instrument used is both reliable and accurate in measuring the intended constructs. Table 3 presents the results of the convergent validity test, including outer loadings and Average Variance Extracted (AVE), as well as the results of the reliability test, namely Cronbach's alpha and composite reliability.

Table 3. Validity and Reliability Test Result

Construct	Codes	Outer Loadings	Composite Reliability	Cronbach's Alpha	AVE
Visual Appeal (VA)	VA1	0.920	0.914	0.906	0.841
	VA2	0.929			
	VA3	0.902			
Hedonic Browsing (HB)	HB1	0.812	0.782	0.772	0.593
	HB2	0.754			
	HB3	0.706			
	HB4	0.804			
Utilitarian Browsing (UB)	UB1	0.734	0.793	0.787	0.536
	UB2	0.730			
	UB3	0.709			
	UB4	0.781			
	UB5	0.703			
Impulse Buying (IB)	IB1	0.744	0.905	0.890	0.694
	IB2	0.841			
	IB3	0.871			
	IB4	0.877			
	IB5	0.828			

Source: Processed data (2025)

Based on the data shown in Table 3, the outer loading values for each indicator exceed 0.7, and the AVE values for each construct are above 0.5. Additionally, the Cronbach's alpha and composite reliability values for each construct are greater than 0.7. These results indicate that all constructs meet the required thresholds.

Table 4. Fornell-Lacker Criterion (Correlations between Constructs)

Construct	Hedonic Browsing (HB)	Impulse Buying (IB)	Utilitarian Browsing (UB)	Visual Appeal (VA)
Hedonic Browsing (HB)	0.770			
Impulse Buying (IB)	0.389	0.833		
Utilitarian Browsing (UB)	0.347	0.143	0.732	
Visual Appeal (VA)	0.406	0.168	0.343	0.917

Source: Processed data (2025)

The results of the discriminant validity test, assessed using the Fornell-Larcker criterion, are shown in Table 4. The square root of the AVE for each construct is higher than the correlation with other constructs, indicating that the Fornell-Larcker criterion is met and discriminant validity is established. Therefore, the overall validity and reliability tests confirm that the research instruments used are both valid and reliable.

Structural Model (Inner Model)

The structural model is evaluated using the R-square (R^2) test and model fit assessment, specifically the Standardized Root Mean Square Residual (SRMR) value. The R-square value measures the extent to which the independent variables explain the variance in the dependent variables. According to Hair et al. (2021), an R-square value of 0.10 is the minimum threshold considered acceptable. As shown in Table 5, the R-square values for hedonic browsing and utilitarian browsing are 0.165 and 0.117, respectively. This indicates that visual appeal explains 16.5% of the variance in hedonic browsing and 11.7% in utilitarian browsing. Meanwhile, the R-square value for impulse buying is 0.152, meaning that visual appeal, hedonic browsing, and utilitarian browsing collectively explain 15.2% of the variance in impulse buying, with the remaining variance attributable to other factors not included in this study.

Table 5. R-Square (R^2) Test Result

Constructs	R-Square	R-Square Adjusted
Hedonic Browsing (HB)	0.165	0.160
Impulse Buying (IB)	0.152	0.136
Utilitarian Browsing (UB)	0.117	0.112

Source: Processed data (2025)

Furthermore, model fit is evaluated using the SRMR (Standardized Root Mean Square Residual) value, which assesses how well the proposed model fits the research data. The acceptable threshold for SRMR is ≤ 0.08 . In this study, the SRMR value obtained is 0.082, which is slightly above the threshold but still considered to indicate a fairly good model fit. Therefore, the model in this study demonstrates an adequate level of fit and meets the general criteria for model fit.

Hypotheses Testing

Hypothesis testing was conducted to examine the relationships between variables in this study and to evaluate the impact of each variable. The results of the hypothesis testing were calculated using the bootstrapping method and analyzed using p-values to determine whether each hypothesis was accepted or rejected. Table 6 presents the results of the direct effect test in this study.

Based on Table 6, Hypothesis 1 which examines the relationship between visual appeal and impulse buying has a p-value of 0.914 (>0.05), indicating that Hypothesis 1 is rejected. Hypothesis 2 which tests the effect of visual appeal on hedonic browsing has a p-value of 0.000 (<0.05), thus Hypothesis 2 is accepted. The results for Hypothesis 3 which investigates the effect of visual appeal on utilitarian browsing show a p-value of 0.000 (<0.05), meaning Hypothesis 3 is also accepted. Furthermore, Hypothesis 4 which examines the relationship between hedonic browsing and impulse buying has a p-value of 0.000 (<0.05), indicating that Hypothesis 4 is accepted. Lastly, Hypothesis 5 which explores the relationship between utilitarian browsing and impulse buying has a p-value of 0.930 (>0.05), leading to the rejection of Hypothesis 5.

Table 6. Direct Effect

Direction	Original Sample (O)	Standard Deviation (STDEV)	T Statistics	P-Values	Conclusion
VA → IB (H1)	0.010	0.093	0.108	0.914	Rejected
VA → HB (H2)	0.406	0.076	5.351	0.000	Accepted
VA → UB (H3)	0.343	0.067	5.117	0.000	Accepted
HB → IB (H4)	0.382	0.083	4.590	0.000	Accepted
UB → IB (H5)	0.007	0.085	0.087	0.930	Rejected

Source: Processed data (2025)

The next analysis involves testing the indirect effect or mediation hypotheses. This study classifies mediation relationships into three categories: partial mediation, full mediation, or no mediation. Partial mediation occurs when both the direct and indirect effect tests yield significant results. Full mediation occurs when the direct effect is insignificant, but the indirect effect is significant (Hair et al., 2021). No mediation is identified when the direct effect is significant and the indirect effect is not, or when both are insignificant (Hair et al., 2021). A significant result is indicated by a t-statistic value greater than 1.96. The results of the indirect effect tests are presented in Table 7.

Based on Table 7, Hypothesis 6 shows that hedonic browsing mediates the relationship between visual appeal and impulse buying with a p-value of 0.002 (<0.05), indicating that Hypothesis 6 is accepted. This mediation is categorized as full mediation as the direct effect test (Hypothesis 1) has a t-statistic value of 0.108 (<1.96) which is not significant, while the indirect effect test (Hypothesis 6) has a t-statistic value of 3.128 (>1.96) which is significant. Meanwhile, Hypothesis 7 which examines whether utilitarian browsing mediates the effect of visual appeal on impulse buying has a p-value of 0.934 (>0.05), thus Hypothesis 7 is rejected. This result indicates no mediation as both the direct effect (t-statistic = 0.108) and the indirect effect (t-statistic = 0.082) are not significant.

Table 7. Indirect Effect

Direction	Original Sample (O)	Standard Deviation (STDEV)	T Statistics	P-Values	Conclusion
VA → HB → IB (H6)	0.155	0.050	3.128	0.002	Accepted
VA → UB → IB (H7)	0.003	0.031	0.082	0.934	Rejected

Source: Processed data (2025)

Discussion

Based on the results of the hypothesis test, visual appeal has no effect on impulse buying, meaning Hypothesis 1 is rejected. This finding is consistent with previous research by Amanah & Harahap (2020) and Kimiagari & Malafe (2021), which state that visual appeal does not have a direct effect on impulse buying. This suggests that features of the Shopee application—such as animations, color schemes, and product layouts—are not sufficient to directly influence Gen Z and Millennial women to make impulse purchases. These results indicate that other factors may play a role in strengthening this relationship.

However, the results of Hypothesis 6 show that visual appeal has an indirect effect on impulse buying through hedonic browsing. This finding aligns with Chen et al. (2020), who argue that a pleasant and attractive layout can enhance the sense of enjoyment while browsing, which can subsequently trigger impulse buying. Thus, although Shopee's visual appeal does not

directly influence impulse buying, it contributes to a positive shopping experience that can indirectly increase the likelihood of impulse purchases.

The results also show that visual appeal significantly influences hedonic browsing, supporting Hypothesis 2. This finding is consistent with the research of Akram et al. (2023) and Zheng et al. (2019), which found that visual appeal affects hedonic browsing. These results suggest that visual elements—such as layout, color, and animations—in Shopee's e-commerce platform can enhance the hedonistic browsing behavior of Gen Z and Millennial women in Indonesia. Appealing visual displays can create a comfortable and enjoyable browsing experience, even when there is no intention to make a purchase.

This study further finds that utilitarian browsing is also influenced by visual appeal, supporting Hypothesis 3. This aligns with prior research by Mufadhil & Alversia (2021) and Zheng et al. (2019), which show that visual appeal affects utilitarian browsing. This indicates that well-organized visuals in the Shopee application help users—especially Gen Z and Millennial women—search for product information and find the best deals. Akram et al. (2023) also note that consumers tend to prefer products on e-commerce platforms that offer superior visual presentation in terms of images, colors, graphics, and other design elements. Therefore, an efficient and attractive interface can enhance the ease of finding desired products.

Moreover, the results of Hypothesis 4 show that hedonic browsing significantly influences impulse buying, thus Hypothesis 4 is accepted. This finding is in line with studies by Husada et al. (2023) and Kimiagari & Malafe (2021), which state that hedonic browsing affects impulse buying. When Gen Z and Millennial women enjoy browsing Shopee for fun, they are more susceptible to making impulse purchases. Products encountered during this type of browsing—even without prior purchase intentions—can attract attention and lead to unplanned purchases. Zheng et al. (2019) support this by stating that consumers who browse without a specific goal derive hedonistic value from the activity, which can drive impulse buying.

The findings from Hypothesis 5 reveal that utilitarian browsing does not significantly affect impulse buying. This supports previous research by Budiman et al. (2023), which found that utilitarian browsing has no significant impact on impulse buying. This suggests that when Gen Z and Millennial women already know what they want to buy, they tend to engage in focused, goal-oriented searches. Consumers with utilitarian values view their purchases as tasks to be completed (Babin et al., 1994). As a result, they focus on gathering detailed product information and comparing options to get the best deal. If the desired product is not found, they will move to other sellers without being distracted by unrelated items. Zheng et al. (2019) also mention that utilitarian consumers are more goal-driven and seek to meet specific needs, making them less susceptible to impulsive purchases.

Hypothesis 6 further confirms that hedonic browsing significantly mediates the relationship between visual appeal and impulse buying, indicating that Hypothesis 6 is accepted. This mediation is categorized as full mediation, as visual appeal does not directly influence impulse buying but does so through hedonic browsing. This finding is supported by Zheng et al. (2019), who emphasize the importance of attractive e-commerce design in encouraging hedonistic browsing that leads to impulsive purchases. Chen et al. (2020) also highlight that positive emotions experienced during browsing can drive impulse buying. This suggests that the appearance of the Shopee application evokes enjoyment among Gen Z and Millennial women, which may result in impulse purchases even without initial buying intentions.

Finally, the results of Hypothesis 7 indicate that utilitarian browsing does not significantly mediate the effect of visual appeal on impulse buying, and therefore Hypothesis 7 is rejected. This shows that there is no mediating effect of utilitarian browsing, and visual appeal also has no direct effect on impulse buying. This is in line with findings by Kimiagari & Malafe (2021), who found that visual appeal does not influence impulse buying through utilitarian browsing. Although a well-designed interface may help users efficiently find product information, it does not necessarily encourage impulse buying when users are engaged in goal-directed browsing.

CONCLUSION

The purpose of this research is to examine the influence of visual appeal in e-commerce on impulse buying among women users, by involving browsing as a mediating factor that connects the appearance of e-commerce applications with consumers' ease in searching both hedonically and utilitarianly, which in turn encourages impulse buying. This study focuses on women Shopee users from Gen Z and Millennials in Indonesia. Based on the results of the hypothesis test, visual appeal is found to directly affect both hedonic and utilitarian browsing. Furthermore, hedonic browsing directly affects impulse buying. However, visual appeal and utilitarian browsing do not directly influence impulse buying. Moreover, hedonic browsing significantly mediates the effect of visual appeal on impulse buying, indicating a full mediation. Meanwhile, utilitarian browsing does not significantly mediate the impact of visual appeal on impulse buying, thus it has no mediation effect.

This research has practical implications for e-commerce developers and sellers on the platform. Application visuals are important to support consumers' comfort and convenience in searching for products; therefore, developers must ensure that the application has an attractive interface design. Based on the study results, attractive visuals can encourage women consumers to browse, which can then trigger impulse buying, especially during hedonic browsing. In addition, app developers can establish product description standards that must be met by sellers. As a result, sellers should create detailed product descriptions and use high-quality product photos or videos that accurately represent the actual product. These detailed descriptions can strengthen consumer confidence and minimize the potential for regret following impulse purchases. Beyond sellers on e-commerce platforms, these findings also provide implications for small and medium enterprises (SMEs) that sell online, encouraging them to enhance the quality of product displays in their online stores. Thus, a pleasant search experience resulting from attractive visual displays has the potential to increase application loyalty and drive up transaction volumes in e-commerce.

This study has several limitations that should be considered for future research development. First, the age distribution of respondents was uneven, with the majority being in their early 20s and having a student background, indicating a need for broader distribution of the research instruments. Second, the relatively low R-square (R^2) value is also a limitation, even though it still meets the minimum threshold. This suggests that there are still many factors influencing consumer browsing behavior and impulse buying. Therefore, future research could explore internal consumer factors, such as self-preference and positive emotions, to better understand how individual psychological aspects influence impulse buying decisions.

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