

Determinants of impulse buying behaviour toward fashion clothing on tiktok live among female students at IIUM

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Abstract - The growing popularity of social commerce has transformed the way consumers shop, particularly through live-streaming platforms such as TikTok Live. The interactive features of TikTok Live, coupled with promotional and visual marketing strategies, have increased the tendency of consumers to make unplanned purchases. This study investigates the influence of sales promotion, brand equity, and visual appeal on impulse buying behaviour toward fashion clothing on TikTok Live among female students at the International Islamic University Malaysia (IIUM), with perceived risk examined as a mediator. Guided by the Stimulus–Organism–Response (S–O–R) framework, a quantitative survey was conducted among 150 female undergraduate students. Data were analysed using descriptive statistics, zero-order correlation, and partial correlation analyses. The findings revealed that sales promotion, brand equity, visual appeal and perceived risk were positively related to impulse buying behaviour. Among the variables examined, brand equity demonstrated the strongest association with impulse buying behaviour. Furthermore, perceived risk partially mediated the relationships between sales promotion, brand equity, visual appeal, and impulse buying behaviour. These findings suggest that although consumers may perceive certain risks when purchasing fashion clothing through TikTok Live, such concerns do not necessarily prevent impulsive purchasing decisions. The study extends the application of the S–O–R framework in the context of social commerce and contributes to a better understanding of consumer behaviour in live-stream shopping environments. The findings also provide practical insights for marketers, retailers, and content creators in designing effective promotional and communication strategies on TikTok Live.

Keywords: impulse buying behaviour, TikTok live, social commerce, sales promotion, brand equity, visual appeal, perceived risk

1. Introduction

The rapid growth of social commerce has transformed consumers' purchasing behaviour by integrating shopping activities into social media platforms. Unlike traditional e-commerce, social commerce combines commercial transactions with social interaction, allowing consumers to discover products, exchange information, and make purchasing decisions within digital communities. The increasing adoption of social media for shopping purposes has created new opportunities for businesses to engage consumers through interactive and immersive experiences. According to Bazaarvoice (2025), approximately 79% of generation Z and millennial consumers integrate social media into their shopping journey. Among the emerging social commerce platforms, TikTok has become one of the most influential platforms, particularly among young consumers.

The introduction of TikTok Live has further accelerated the development of social commerce by enabling real-time interaction between sellers and consumers. Through live-



streaming features, sellers can demonstrate products, respond to consumers' questions, and provide immediate feedback during the purchasing process (Lee & Chen, 2021). Such interactions create a more engaging shopping environment than conventional online shopping because consumers are able to obtain product information, observe product demonstrations, and communicate directly with sellers before making purchasing decisions. These communication features have contributed to the growing popularity of TikTok Live as a platform for promoting and selling products, particularly fashion clothing.

Fashion clothing is among the most frequently purchased products in live-stream commerce environments (Pangarkar, 2026). The visual nature of fashion products makes them particularly suitable for live-stream marketing, where sellers can showcase clothing through product demonstrations, try-on sessions, and interactive presentations. Previous studies have shown that consumers are more likely to make spontaneous purchasing decisions when shopping in live-stream environments due to the combination of entertainment, social interaction, and persuasive communication (Huang & Suo, 2021; Kei, 2022). Consequently, impulse buying behaviour has become increasingly prevalent within TikTok Live shopping environments.

Impulse buying behaviour refers to an unplanned and spontaneous purchasing decision that occurs without prior intention (Kathuria & Bakshi, 2025). Previous studies have identified several factors that influence consumers' impulse buying behaviour in online and live-stream shopping contexts. Among these factors, sales promotion, brand equity, and visual appeal have received considerable scholarly attention. Sales promotion strategies such as discounts, vouchers, and limited-time offers are designed to stimulate immediate purchasing behaviour and have been found to positively influence impulse buying decisions (Mishra et al., 2024; Wardani et al., 2023). Similarly, brand equity contributes to consumers' confidence and familiarity with products, encouraging spontaneous purchasing behaviour, particularly within digital shopping environments (Pham et al., 2023; Kriti & Aruan, 2023). In addition, visual appeal plays a crucial role in live-stream commerce because consumers rely heavily on visual cues when evaluating products online. Attractive product presentations, streamers' appearances, and visual demonstrations have been shown to increase consumers' purchasing intentions and impulse buying tendencies (Liu & Zhang, 2023; Shi et al., 2025).

Despite the growing popularity of social commerce, perceived risk remains an important concern among online consumers. Perceived risk refers to consumers' perceptions of uncertainty and potential negative consequences associated with purchasing products online (Zhang & Yu, 2020). Consumers may be concerned about product quality, financial loss, privacy issues, or the possibility of receiving products that do not match their expectations. Previous studies generally suggest that perceived risk discourages online purchasing behaviour and reduces consumers' willingness to make spontaneous purchases (Gazali & Suyasa, 2020; Ha, 2020). Although TikTok Live may reduce certain forms of uncertainty through real-time interactions, consumers may still perceive risks related to product quality, sizing accuracy, and transaction security. Therefore, perceived risk is expected to negatively influence impulse buying behaviour.

Emerging studies also suggest that perceived risk may function as a mediating mechanism between marketing stimuli and consumers' behavioural responses. Promotional incentives, strong brand equity, and attractive visual presentations may influence consumers' perceptions of risk, which subsequently affect their purchasing decisions (Ying, 2022; Sanjaya et al., 2023). Nevertheless, existing findings remain inconclusive. While some studies reported that perceived risk mediates the relationships between marketing stimuli and impulse buying behaviour, others found limited or no mediating effects. These inconsistencies indicate the need for further investigation, particularly within the context of TikTok Live.

The rapid growth of live-streaming commerce has significantly transformed consumer purchasing behaviour, particularly by increasing the tendency toward impulse buying. Research consistently demonstrates that live-streaming features such as real-time interaction, product demonstrations, entertainment value, and persuasive communication stimulate consumers'

emotional responses and encourage unplanned purchases (Afifah et al., 2025; Chung et al., 2025; Huo et al., 2023). The Stimulus–Organism–Response (SOR) framework has become one of the most widely used theoretical models for explaining this phenomenon, suggesting that environmental stimuli in live-streaming platforms influence consumers' internal psychological states, which subsequently trigger impulsive purchasing decisions (Huo et al., 2023; Fitria et al., 2024).

Studies focusing on fashion and lifestyle products indicate that live-streaming platforms, particularly TikTok Live and Shopee Live, effectively create a sense of urgency and excitement that increases consumers' likelihood of making spontaneous purchases (Kaniati et al., 2024; Sawitri & Afwa, 2026; Prasetyo & Hartono, 2025). Promotional strategies such as discounts, limited-time offers, and shopping-oriented lifestyles further strengthen impulse buying tendencies among consumers (Safitri et al., 2025). Similar findings reveal that scarcity persuasion and favourable price perceptions amplify the influence of live-streaming environments on impulsive buying behaviour (Feng et al., 2024). Research among university students also suggests that young consumers are particularly susceptible to impulsive purchasing due to their intensive engagement with social media and digital commerce platforms (Ahmad et al., 2026; Ye & Baloran, 2025).

The effectiveness of live-streaming commerce is also influenced by several communication and content-related factors. Streamer attractiveness, expertise, visual appeal, and interactivity have been found to positively influence consumers' purchasing intentions and impulsive buying behaviour (Fajar et al., 2024). Likewise, real-time interactivity and promotional information can enhance perceived trust, which subsequently encourages consumers to make spontaneous purchases during live sessions (Martin et al., 2025). Studies conducted in Vietnam further demonstrate that live-stream channels shape impulse buying behaviour through social engagement, entertainment, and persuasive communication mechanisms (Pham et al., 2023; Ngo et al., 2025).

Service quality and customer satisfaction are closely interconnected in service-oriented industries. Comparative evidence from the banking sector indicates that service quality is an important determinant of customer satisfaction, while digital financial services also contribute to improving customers' perceptions and satisfaction (Ghimire et al., 2024; Shrestha & Agrawal, 2023). In culinary tourism, service quality is similarly complemented by the physical ambiance of restaurants, suggesting that both functional and experiential dimensions influence customer experiences (Sukartini et al., 2024). Tourist preferences further demonstrate that price, authentic recipes, and restaurant service systems are important considerations when selecting Balinese local food (Pugra et al., 2026).

Quality management and organizational efficiency are also significant themes across service and business organizations. The implementation of Total Quality Management (TQM) can strengthen efficiency, quality control, and continuous organizational improvement, particularly in construction and other competitive business environments (Waheed & Abbas, 2024). These findings emphasize the importance of systematic quality-management practices for achieving sustainable organizational performance (Waheed & Abbas, 2024).

Employee-related factors represent another important dimension of service quality and organizational performance, particularly in hospitality. Employee engagement and job satisfaction are associated with employees' intentions to remain in or leave an organization, highlighting the importance of maintaining a supportive work environment (Sudiarta et al., 2025). Similarly, employee satisfaction in hotels can be assessed through Importance–Performance Analysis (IPA) to identify areas requiring managerial improvement (Kencanawati et al., 2026). Effective guest complaint management also depends on active listening, empathy, prompt problem resolution, and consistent follow-up, demonstrating the central role of employees in maintaining guest satisfaction (Sudiarta et al., 2025).

Digitalization provides additional opportunities for improving business performance and market reach. Social media marketing, particularly through Facebook, can be employed



strategically to increase product visibility, customer engagement, and sales performance among small businesses (Azmir & Purnomo, 2025). Overall, the literature suggests that service quality, customer satisfaction, quality management, employee performance, and digital marketing are mutually supportive factors in strengthening organizational competitiveness and sustainable performance in banking, hospitality, culinary tourism, construction, and small-business contexts.

Although the literature consistently reports a positive relationship between live-streaming commerce and impulse buying behaviour, several limitations remain. Many studies focus primarily on specific platforms such as TikTok Shop and specific product categories such as fashion and cosmetics, limiting the generalizability of findings to other industries and cultural contexts. Furthermore, most studies rely on cross-sectional survey data, making it difficult to establish long-term causal relationships between live-streaming exposure and consumer behaviour. Existing research also tends to emphasize psychological and marketing factors while giving less attention to ethical concerns, consumer self-control, and potential negative consequences of excessive impulse buying. A recent systematic review highlights the need for more longitudinal, cross-cultural, and experimental studies to better understand the evolving dynamics of impulse buying in live-streaming e-commerce environments (Li et al., 2025). Future research should also examine the moderating roles of trust propensity, self-congruence, digital literacy, and platform-specific characteristics to develop a more comprehensive understanding of consumer behaviour in social commerce settings (Chen et al., 2025).

Although research on impulse buying behaviour in social commerce has increased considerably in recent years (Lee & Chen, 2021; Huang & Suo, 2021), several gaps remain. First, much of the existing literature focuses on general online shopping or live-stream commerce platforms other than TikTok Live (Liu & Zhang, 2022; Lee & Chen, 2021). Second, previous studies often examine sales promotion, brand equity, and visual appeal independently rather than investigating their combined influence on impulse buying behaviour (Kriti & Aruan, 2023; Pham et al., 2023). Third, empirical evidence regarding the mediating role of perceived risk remains inconsistent (Ying, 2022; Sanjaya et al., 2023). Finally, limited studies have focused on university students, who represent one of the most active groups of TikTok users and online shoppers (Bazaarvoice, 2025).

The present study is guided by the Stimulus–Organism–Response (S-O-R) model developed by Mehrabian and Russell in 1974 (Hochreiter et al., 2023). The model suggests that environmental stimuli influence individuals' internal cognitive and emotional states, which subsequently affect behavioural responses. Within the context of TikTok Live, sales promotion, brand equity, and visual appeal function as stimuli, perceived risk represents the organism, and impulse buying behaviour represents the response. The S-O-R framework has been widely applied in studies of online consumer behaviour and provides a useful explanation of how communication and marketing stimuli influence purchasing decisions in digital environments.

Accordingly, this study investigates impulse buying behaviour toward fashion clothing on TikTok Live among female students at the International Islamic University Malaysia (IIUM). Specifically, it examines the relationships between sales promotion, brand equity, visual appeal, perceived risk, and impulse buying behaviour, as well as the mediating role of perceived risk. By doing so, the study contributes to the growing literature on social commerce and provides a better understanding of the factors influencing consumers' purchasing behaviour within live-stream shopping environments.

The following hypotheses are proposed:

H1: Sales promotion is positively associated with impulse buying behaviour toward fashion clothing on TikTok Live.

H2: Brand equity is positively associated with impulse buying behaviour toward fashion clothing on TikTok Live.

H3: Visual appeal is positively associated with impulse buying behaviour toward fashion clothing on TikTok Live.



H4: Perceived risk is negatively associated with impulse buying behaviour toward fashion clothing on TikTok Live.

H5: Perceived risk mediates the relationship between sales promotion and impulse buying behaviour toward fashion clothing on TikTok Live.

H6: Perceived risk mediates the relationship between brand equity and impulse buying behaviour toward fashion clothing on TikTok Live.

H7: Perceived risk mediates the relationship between visual appeal and impulse buying behaviour toward fashion clothing on TikTok Live.

2. Method

This study employed a quantitative cross-sectional survey design to examine the relationships between sales promotion, brand equity, visual appeal, perceived risk, and impulse buying behaviour toward fashion clothing on TikTok Live among female students at the International Islamic University Malaysia (IIUM). A quantitative approach was deemed appropriate because it enables the testing of hypothesised relationships among variables and facilitates statistical analysis of consumer behaviour (Creswell, 2014; Wimmer & Dominick, 2014).

The study was conducted at the International Islamic University Malaysia (IIUM), Gombak campus. The target population comprised female undergraduate students from various departments at the university. Female students were selected because previous studies have shown that women are more actively engaged in fashion consumption and are more likely to make impulse purchases in online and social commerce environments, making them a relevant population for investigating impulse buying behaviour toward fashion clothing on TikTok Live.

A convenience sampling technique was employed to recruit respondents who met the study criteria. Data were collected from female undergraduate students through both online and face-to-face approaches. The survey link was distributed via WhatsApp, Telegram, and Instagram, while additional respondents were recruited from classrooms and common areas within the university. Prior to participation, respondents were screened to ensure that they were undergraduate students. A total of 150 valid responses were obtained and included in the analysis.

Data were collected using a structured questionnaire adapted from established instruments in previous studies. The questionnaire consisted of five sections: demographic information, general TikTok Live shopping behaviour, sales promotion, brand equity, visual appeal, perceived risk, and impulse buying behaviour. All measurement items for the main study variables were assessed using a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Sales promotion was measured using six items adapted from Ying (2022) and Laroche et al. (2003), while brand equity was measured using six items adapted from Schivinski et al. (2014). Visual appeal was assessed using six items adapted from Liu, Li and Hu (2013) and Vonkeman et al. (2017). Perceived risk was measured using eight items adapted from Masoud (2013), and impulse buying behaviour was measured using eight items adapted from Neves (2016).

To ensure instrument validity and reliability, all measurement items were adapted from previously validated scales. Prior to the main data collection, a pilot study involving 33 respondents was conducted. The questionnaire was reviewed by an expert in the field and assessed for internal consistency using Cronbach's alpha. The reliability coefficients ranged from .79 to .91, exceeding the recommended threshold of .70 (Wimmer & Dominick, 2014), indicating satisfactory reliability for all study variables. Specifically, Cronbach's alpha values were .90 for sales promotion, .88 for brand equity, .91 for visual appeal, .82 for perceived risk, and .79 for impulse buying behaviour.

Following data collection, the responses were screened and cleaned to ensure accuracy and completeness. The data were then analysed using the Statistical Package for the Social Sciences (SPSS) version 29. Descriptive statistics were used to summarise respondents'



demographic characteristics and TikTok Live shopping behaviour. Reliability analysis was performed to assess the internal consistency of the measurement scales. One-sample t-tests were used to determine respondents' levels of behavioural responses toward sales promotion, brand equity, visual appeal, perceived risk, and impulse buying behaviour. Pearson's zero-order correlation was employed to examine the relationships among the study variables and test Hypotheses 1 to 4. Finally, partial correlation analysis was conducted to examine the mediating role of perceived risk in the relationships between sales promotion, brand equity, visual appeal, and impulse buying behaviour (Hypotheses 5 to 7).

3. Results and Discussion

3.1 Results

Table 1 presents the demographic characteristics of the respondents. The study involved 150 female students from various departments at the International Islamic University Malaysia (IIUM). Most respondents were aged between 21 and 23 years (40%), followed by those aged 18–20 years (34.6%). The majority were Malaysian (80%), while 20% were international students. In terms of year of study, second-year students constituted the largest group (28.7%), followed by third-year students (26.7%). Regarding household income, most respondents reported a monthly household income between RM5,001 and RM7,000 (31.3%).

Characteristics	Category	Frequency	Percentage
Age	18-20 years old	52	34.6
	21-23 years old	60	40
	24-26 years old	28	18.7
	26 years old and above	10	6.7
Nationality	Malaysian	120	80
	Non-Malaysian	30	20
Year of study	First year	31	20.7
	Second year	43	28.7
	Third year	40	26.6
	Fourth year	36	24
Household income	Below RM1000	6	4
	RM 1000 – RM 3000	18	12
	RM 3001 – RM 5000	21	14
	RM 5001 – RM 7000	47	31.3
	RM 7000 – RM 9000	35	23.3
	RM 9001 and above	23	15.4

Table 2 presents respondents' TikTok Live shopping behaviour. More than half of the respondents (50.7%) reported watching fashion clothing content on TikTok Live four times per week or more. Most respondents spent less than RM100 per month on fashion clothing purchases through TikTok Live (62.7%). Online banking was the most preferred payment method (80%), followed by cash on delivery (13.3%) and credit or debit cards (6.7%).

Table 2: Respondents' Fashion Clothing Purchasing Behaviour on TikTok Live (N = 150)



Shopping Characteristics	Category	Frequency	Percentage
Frequency of watching fashioned clothing on TikTok Live	Once a week	25	16.7
	Twice a week	11	7.3
	3 times a week	38	25.3
	4 times a week and above	76	50.7
Amount of money spent on buying fashioned clothing from TikTok Live every month	Less than RM 100	94	62.7
	RM 150 – RM 250	47	31.3
	More than RM 250	9	6
Preferred payment method	Online banking	120	80
	Credit/Debit card	10	6.7
	Cash on delivery	20	13.3

Table 3 presents the results of the one-sample t-test analyses. Among the variables examined, sales promotion recorded the highest mean score ($M = 3.83$, $SD = 0.87$), followed by perceived risk ($M = 3.55$, $SD = 0.77$), visual appeal ($M = 3.53$, $SD = 0.86$), impulse buying behaviour ($M = 3.46$, $SD = 0.88$), and brand equity ($M = 3.39$, $SD = 0.89$). All variables recorded mean scores above the midpoint value of 3.00, indicating generally positive responses among the respondents.

Table 3: Descriptive Statistics of Key Variables (N = 150)

Variables	Mean	SD
Sales Promotion	3.83	0.87
Brand Equity	3.39	0.89
Visual Appeal	3.53	0.86
Perceived Risk	3.55	0.77
Impulse Buying Behaviour	3.46	0.88

Table 4 presents the Pearson's zero-order correlation results among the study variables. Sales promotion was positively and significantly associated with impulse buying behaviour ($r = .571$, $p < .001$). Similarly, brand equity ($r = .703$, $p < .001$) and visual appeal ($r = .602$, $p < .001$) were positively related to impulse buying behaviour. Perceived risk was also positively associated with impulse buying behaviour ($r = .638$, $p < .001$). Overall, the findings indicate significant relationships among all study variables.

Table 4: Zero-Order Correlations Among Variables (N = 150)

Variables	1	2	3	4	5
Sale promotion	-				
Brand equity	.759**	-			
Visual appeal	.721**	.742**	-		
Perceived risk	.537**	.529**	.563**	-	
Impulse buying	.571**	.703**	.602**	.638**	-

Note. $p < .01$

Table 5 presents the Partial correlation results among all the study variables. Partial correlation analysis was conducted to examine the mediating role of perceived risk in the relationships between sales promotion, brand equity, visual appeal, and impulse buying behaviour. The findings revealed that the correlation coefficient between sales promotion and impulse buying behaviour decreased from $r = .571$ to $r = .351$ after controlling for perceived risk, indicating partial mediation.

Similarly, the relationship between brand equity and impulse buying behaviour decreased from $r = .703$ to $r = .560$ after controlling for perceived risk. The relationship between visual appeal and impulse buying behaviour also decreased from $r = .602$ to $r = .382$. These findings suggest that perceived risk partially mediated the relationships between sales promotion, brand equity, visual appeal, and impulse buying behaviour.

Table 5: Pearson Correlation Coefficients among Study Variables
with Perceived Risk as a Control Variable

Controlled variable	Variables	1	2	3	4
Perceived risk	Sale promotion	-			
	Brand equity	.663**	-		
	Visual appeal	.601**	.633**	-	
	Impulse buying	.351**	.560**	.382**	-

Note. $p < .01$

3.2 Discussion

This study examined the relationships between sales promotion, brand equity, visual appeal, perceived risk, and impulse buying behaviour toward fashion clothing on TikTok Live among female students at the International Islamic University Malaysia (IIUM). It also investigated the mediating role of perceived risk in these relationships. Overall, the findings indicate that sales promotion, brand equity, and visual appeal positively influence impulse buying behaviour, while perceived risk demonstrated an unexpected positive relationship with impulse buying behaviour. Furthermore, perceived risk partially mediated the relationships between the three antecedent variables and impulse buying behaviour.

To further elaborate, the findings revealed a significant positive relationship between sales promotion and impulse buying behaviour, supporting H1. This finding is consistent with previous studies which reported that promotional incentives such as discounts, vouchers, flash sales, and limited-time offers encourage consumers to make spontaneous purchasing decisions (Mishra et al., 2024; Wardani et al., 2023). Similarly, Tang et al. (2026) found that promotional stimuli significantly increase consumers' tendency to engage in impulse purchases by creating a perception of greater value and urgency. In live-stream commerce environments, promotional messages are often delivered in real time, increasing consumers' emotional arousal and encouraging immediate purchasing behaviour. Consequently, consumers may feel compelled to purchase products before promotional opportunities expire. This finding highlights the effectiveness of promotional communication strategies in shaping consumer behaviour in social commerce environments.

The study also found a significant positive relationship between brand equity and impulse buying behaviour, supporting H2. Among all variables examined, brand equity demonstrated the strongest relationship with impulse buying behaviour. This finding suggests that consumers who possess favourable perceptions of fashion brands are more likely to make spontaneous purchases when exposed to products on TikTok Live. The result supports previous research indicating that brand awareness, brand loyalty, and positive brand associations enhance consumers' confidence in purchasing decisions and increase their tendency to buy products impulsively (Lee & Chen, 2021; Pham et al., 2023). Ahada et al. (2025) likewise argued that consumers tend to rely on brand-related knowledge and associations when making purchasing decisions. In live-stream commerce environments, strong brand equity may reduce consumers' cognitive effort during the decision-making process because trusted brands are perceived as less risky and more reliable. Consequently, consumers may rely on their existing trust in a brand rather than engaging in extensive information evaluation.

The findings further indicated that visual appeal was positively associated with impulse buying behaviour, supporting H3. The present finding aligns with prior research which reported that attractive visual presentations significantly influence consumers' purchasing decisions and

increase impulse buying tendencies in online shopping environments (Liu & Zhang, 2023; Kriti & Aruan, 2023). Along the same lines, Shi et al. (2025) found that aesthetically appealing online environments enhance consumers' emotional responses and stimulate unplanned purchases. In the context of TikTok Live, visual appeal is particularly important because consumers rely heavily on visual information when evaluating fashion products. Product demonstrations, clothing try-on sessions, and attractive live-stream presentations allow consumers to visualise product usage and appearance, thereby increasing product desirability. The finding underscores the importance of visual communication strategies in shaping consumer behaviour within social commerce environments.

Contrary to the proposed hypothesis, perceived risk was positively associated with impulse buying behaviour, resulting in the rejection of H4. This finding differs from previous studies which reported that perceived risk discourages online purchasing behaviour by increasing consumers' concerns regarding product quality, privacy, financial security, and delivery uncertainties (Ha, 2020; Phamthi et al., 2024). A possible explanation for this unexpected finding lies in the unique characteristics of TikTok Live. TikTok Live provides real-time product demonstrations, direct interactions with sellers, and immediate feedback from other viewers. These features may reduce the impact of perceived risk on consumers' decision-making processes. Although consumers recognise the potential risks associated with purchasing fashion clothing online, these concerns may be outweighed by attractive promotional offers, trusted brands, and engaging visual presentations. The finding suggests that within live-stream commerce environments, consumers may continue to engage in impulse buying despite being aware of potential risks. This highlights the complex nature of risk perceptions in social commerce settings and suggests that perceived risk may not always function as a barrier to impulsive purchasing behaviour.

Furthermore, perceived risk was found to partially mediated the relationship between sales promotion and impulse buying behaviour, supporting H5. This finding concurs with earlier evidence suggesting that consumers evaluate promotional offers through a risk-benefit assessment process before making purchasing decisions (Huang & Sou, 2021). Previous research has shown that attractive promotional incentives can stimulate impulse buying behaviour, yet consumers often remain concerned about product quality, sizing accuracy, and transaction security when purchasing online (Ying, 2022). The present finding suggests that although sales promotions encourage spontaneous purchasing behaviour, perceived risk may reduce the strength of this relationship. Nevertheless, because the mediation effect was partial, promotional incentives continue to exert a substantial influence on impulse buying behaviour despite the presence of perceived risk.

Perceived risk also partially mediated the relationship between brand equity and impulse buying behaviour, supporting H6. This finding is consistent with previous studies suggesting that strong brand equity reduces consumers' perceived uncertainty and increases confidence in purchasing decisions (Sanjaya et al., 2023). Kriti and Aruan (2023) likewise found that favourable brand perceptions enhance consumer trust and mitigate the negative effects of perceived risk. However, the present study demonstrates that perceived risk remains relevant even when consumers possess positive perceptions of a brand. Consumers may trust a particular fashion brand while simultaneously worrying about product fit, colour accuracy, or delivery outcomes. Therefore, brand equity does not completely eliminate perceived risk but rather reduces its influence on purchasing decisions. This explains why perceived risk only partially mediated the relationship between brand equity and impulse buying behaviour.

Finally, the study found that perceived risk partially mediated the relationship between visual appeal and impulse buying behaviour, supporting H7. This finding aligns with previous studies indicating that visually appealing online environments increase consumers' purchase intentions by enhancing product evaluations and emotional engagement (Lee & Chen 2021; Vonkeman et al., 2017). At the same time, research on online consumer behaviour suggests that visual information alone may not completely eliminate consumers' concerns regarding product

quality and performance (Sanjaya et al., 2023). The present finding suggests that attractive visual presentations on TikTok Live encourage impulse buying behaviour by stimulating positive emotional responses, while perceived risk simultaneously introduces caution into the decision-making process. Consequently, both affective and cognitive mechanisms operate together in shaping consumers' purchasing behaviour.

From a theoretical perspective, these findings support and extend the Stimulus–Organism–Response (S-O-R) model. Consistent with the model's assumptions, sales promotion, brand equity, and visual appeal functioned as environmental stimuli that influenced consumers' behavioural responses in the form of impulse buying behaviour. The findings further demonstrate the importance of perceived risk as an organism variable that partially explains how consumers process marketing stimuli before making purchasing decisions. However, the positive relationship observed between perceived risk and impulse buying behaviour suggests that consumers' responses in live-stream commerce environments may differ from those predicted in traditional online shopping contexts.

The findings also highlight the unique characteristics of TikTok Live as a social commerce environment where entertainment, social interaction, and commercial activities converge. In such settings, consumers may continue to engage in impulse buying despite recognising potential risks because real-time product demonstrations, direct interactions with sellers, and engaging visual presentations can reduce uncertainty and enhance purchasing confidence. This suggests that the influence of perceived risk may be more complex in live-stream commerce than in conventional e-commerce environments.

Overall, the findings demonstrate that perceived risk serves as an important psychological mechanism linking marketing stimuli to impulse buying behaviour. At the same time, they underscore the importance of contextualising the S-O-R model within contemporary social commerce environments, where consumers' cognitive evaluations and behavioural responses may be shaped by the interactive and immersive features of live-stream shopping platforms such as TikTok Live.

4. Conclusion

This study examined the relationships between sales promotion, brand equity, visual appeal, perceived risk, and impulse buying behaviour toward fashion clothing on TikTok Live among female students at the International Islamic University Malaysia (IIUM). The findings indicate that sales promotion, brand equity, and visual appeal are significant positive predictors of impulse buying behaviour, with brand equity emerging as the strongest determinant. Contrary to expectations, perceived risk was positively associated with impulse buying behaviour, suggesting that consumers may continue to make spontaneous purchases despite recognising potential risks associated with online shopping. Furthermore, perceived risk partially mediated the relationships between sales promotion, brand equity, visual appeal, and impulse buying behaviour, highlighting its role as an important psychological mechanism influencing consumer decision-making in live-stream commerce environments.

Overall, these findings support the core assumptions of the Stimulus–Organism–Response (S-O-R) model by demonstrating that marketing stimuli influence consumers' behavioural responses through internal cognitive evaluations. However, the results also underscore the importance of contextualising the S-O-R model within contemporary social commerce environments. In the context of TikTok Live, real-time interactions, product demonstrations, promotional communication, and engaging visual presentations may reduce the constraining effect of perceived risk, enabling consumers to engage in impulse buying behaviour despite recognising potential uncertainties. The study therefore extends the application of the S-O-R framework by highlighting the complex role of perceived risk within highly interactive live-stream shopping platforms.



These findings have important practical implications for marketers, retailers, and content creators operating on TikTok Live. Businesses should strategically utilise promotional incentives, strengthen brand equity, and enhance visual presentation strategies to encourage consumer engagement and purchasing behaviour. At the same time, efforts to reduce consumers' perceived risk through transparent product information, accurate product demonstrations, responsive communication, and reliable transaction processes remain essential. Such strategies may help foster consumer trust and create more effective live-stream shopping experiences. Future research may consider examining additional psychological and social factors, such as trust, fear of missing out (FOMO), parasocial interaction, or social influence, to provide a more comprehensive understanding of impulse buying behaviour in social commerce environments.

References

- Adeyemo, T. P. (2025). Influence of social media on SMES marketing performance evidence from Bodija, Ibadan north local government OYO state. *Journal of Commerce, Management, and Tourism Studies*, 4(2), 256–271. <https://doi.org/10.58881/jcmts.v4i2.348>
- Afifah, S. A., Purwihartuti, K., & Nazofatullidya, N. (2025). The Influence Of Live Streaming On Impulsive Buying Behavior Toward Ready-To-Wear Clothing Products. *Jurnal Maneksi*. <https://doi.org/10.31959/jm.v14i2.3055>
- Ahada, R., Dhahri, I., & Al-Shreifeen, I. A. (2025). Brand equity on consumer purchasing decisions. *International Journal of Economic Literature (INJOLE)*, 3(4), 185–196. <https://sociohum.net/index.php/INJOLE/article/view/14>
- Ahmad, R., Siew, P. H. K., & Dada, M. (2026). A Study on Impulsive Buying Behaviour on TikTok among University Students in Indonesia, Java. *Electronic Journal of Business and Management*. <https://doi.org/10.65136/ejbm.v9i4.33>
- Azmir, A., & Purnomo, A. (2025). Digital marketing strategy through facebook social media to increase sales at Rifki Jaya furniture store Bandar Lampung. *Journal of Commerce, Management, and Tourism Studies*, 4(1), 23–33. <https://doi.org/10.58881/jcmts.v4i1.210>
- Bazaarvoice. (2025, April 12). *Gen Z and millennials lead in social commerce trends*. Bazaarvoice. <https://www.bazaarvoice.com/blog/gen-z-and-millennials-lead-in-social-commerce-trends/>
- Chen, X., Kim, S., & Kim, D. Y. (2025). Integrative analysis of antecedents and consequences of TikTok impulse buying behavior: the moderating role of trust propensity and self-congruence. *Asia Pacific Journal of Marketing and Logistics*. <https://doi.org/10.1108/apjml-12-2024-1876>
- Chung, X. L., Yasmin, F., Haider, S., Sinnappan, P., Poulková, P., Baskaran, S., Tehseen, S., & Idris, I. (2025). Impulsive buying behaviour in live-streaming commerce: an application of S-O-R theory. *Cogent Social Sciences*, 11. <https://doi.org/10.1080/23311886.2025.2474861>
- Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage publications.
- Fajar, F., Widjanarko, B., & O. (2024). The Effect of Attractiveness, Expertise, Visual Attractiveness and Interactivity on Online Impulsive Buying Behavior. *Jurnal Ilmiah Manajemen Kesatuan*. <https://doi.org/10.37641/jimkes.v12i4.2741>
- Feng, Z., Mamun, A. A., Masukujaman, M., Wu, M., & Yang, Q. (2024). Impulse buying behavior during livestreaming: Moderating effects of scarcity persuasion and price perception. *Heliyon*, 10. <https://doi.org/10.1016/j.heliyon.2024.e28347>
- Fitria, S., Mahrinasari, M., & Fihartini, Y. (2024). Impulsive Buying Behavior in E-Commerce Live Streaming Based on the Stimulus Organism Response (SOR) Framework in Women's Clothing Products (Study on Live Streaming Shopee). *Journal Of Economics, Finance And Management Studies*. <https://doi.org/10.47191/jefms/v7-i3-32>
- Gazali, A. V., & Suyasa, P. T. (2020). The role of the perceived risk to purchase decision (for consumers who use online shopping technology). *Proceedings of the Tarumanagara International Conference on the Applications of Social Sciences and Humanities (TICASH 2019)*, 439. <https://doi.org/10.2991/assehr.k.200515.066>
- Ha, N. T. (2020). The impact of perceived risk on consumers' online shopping intention: An integration of TAM and TPB. *Management Science Letter*, 10, 2029–2036. <https://doi.org/10.5267/j.msl.2020.2.009>
- Hochreiter, V., Benedetto, C., & Loesch, M. (2023). The stimulus-organism-response (S-O-R) paradigm as a guiding principle in environmental psychology: Comparison of its usage in consumer behaviour and organizational culture and leadership theory. *Journal of Entrepreneurship and Business Development*, 3(1), 7–16. <https://doi.org/10.18775/jebd.31.5001>



- Huang, Y., & Suo, L. (2021). Factors affecting Chinese consumers' impulse buying decision of Live streaming e-commerce. *Asian Social Science*, 17(5), 16. 10.5539/ass.v17n5p16
- Huo, C., Wang, X., Sadiq, M., & Pang, M. (2023). Exploring Factors Affecting Consumer's Impulse Buying Behavior in Live-Streaming Shopping: An Interactive Research Based Upon SOR Model. *SAGE Open*, 13. <https://doi.org/10.1177/21582440231172678>
- Kaniati, S. P., Sosianika, A., & Setiawati, L. (2024). Factors Driving Consumer Impulse Buying On Fashion Products at Tiktok Live. *Journal of Marketing Innovation (JMI)*. <https://doi.org/10.35313/jmi.v4i1.109>
- Kathuria, A., & Bakshi, A. (2024). Unveiling the dynamics that shape online impulse buying behaviour. *Journal of Research in Interactive Marketing*, 19(5), 770-786. <https://doi.org/10.1108/JRIM-03-2024-0147>
- Kei, L. K. (2022). *Factors affecting consumers' impulse buying in Live streaming commerce towards clothing and fashion products*. [Final year project, University Tunku Abdul Rahman].
- Kencanawati, A. A. A. M., Meirejeki, I. N., Supiatni, N. N., & Suarta, I. K. (2025). The role of digital promotion in enhancing hotel competitiveness in Bali's tourism sector. *Journal of Commerce, Management, and Tourism Studies*, 4(2), 300-313. <https://doi.org/10.58881/jcmts.v4i2.366>
- Kencono, D. B. L., Rompis, F. Z., Wirjadinata, V., Rumangkit, S., & Leksana, C. J. (2025). The Impact of Live Streaming E-Commerce on Impulsive Buying Behavior in the Fashion and Lifestyle Industry. 2025 1st International Conference on Emerging Trends in Information Systems and Informatics (ICETISI), 1-6. <https://doi.org/10.1109/icetisi67983.2025.11406010>
- Kristi, G. O., & Aruan, D. T. H. (2023). Factors affecting online impulse buying behaviors of fashion products on Live: Instagram vs TikTok. *Indonesian Interdisciplinary Journal of Sharia Economics*, 6(3), 2163-2185. <https://doi.org/10.31538/ijse.v6i3.3157>
- Laroche, M., Pons, F., Zgolli, N., Cervellon, M., & Kim, C. (2003). A model of consumer response to two retail sales promotion techniques. *Journal of Business Research*, 56 (7), 513-522. [https://doi.org/10.1016/S0148-2963\(01\)00249-1](https://doi.org/10.1016/S0148-2963(01)00249-1)
- Lee, C. H., & Chen, C. W. (2021). Impulse buying behaviors in Live streaming commerce based on the stimulus-organism-response framework. *Information*, 12(6), 241. <https://doi.org/10.3390/info12060241>
- Li, Y., Garcia-de-Frutos, N., & Ortega-Egea, J. M. (2025). Impulse buying in live streaming e-commerce: A systematic literature review and future research agenda. *Computers in Human Behavior Reports*. <https://doi.org/10.1016/j.chbr.2025.100676>
- Liu, X., & Zhang, K. (2023). Web celebrity economy under the background of E-commerce live streaming with goods marketing model: Take TikTok as an example. 2127-2136. https://doi.org/10.2991/978-94-6463-098-5_239
- Liu, Y., Li, H., & Hu, F. (2013). Website attributes in urging online impulse purchase: An empirical investigation on consumer perception. *Decision Support Systems*, 55, 829-837. <https://doi.org/10.1016/j.dss.2013.04.001>
- Martin, R., H., Purmono, B. B., & Pebrianti, W. (2025). Pengaruh Real Time Interactivity dan Promotion Incentive Information terhadap Impulse Buying Behavior dengan Mediasi Perceived Trust Fashion di Live TikTok. *Mutiara: Jurnal Ilmiah Multidisiplin Indonesia*. <https://doi.org/10.61404/mutiara.v3i2.398>
- Masoud, E. Y. (2013). The effect of perceived risk on online shopping in Jordan. *European Journal of Business and Management*, 5(6), 76-87.
- Mishra, M., Kushwaha, R., & Gutpa, N. (2024). Impact of sales promotion on consumer buying behaviour in the apparel industry. *Cogent Business & Management*, 11(1). <https://doi.org/10.1080/23311975.2024.2310552>
- Neves, J. A. (2016). *Factors influencing impulse buying behaviors amongst generation Y students*. [Degree dissertation, North-West University]. https://www.academia.edu/89883167/Factors_influencing_impulse_buying_behavior_amongst_Generation_Y_students
- Ngo, T. T. A., Nguyen, H., Mai, H. T. A., & Nguyen, H. P. (2025). Key determinants of online impulse buying behavior: A study from TikTok Shop users in Vietnam.. *Acta psychologica*, 260, 105593. <https://doi.org/10.1016/j.actpsy.2025.105593>
- Pangarkar, T. (2026, May 07). *Live commerce statistics by sales, revenue and trend*. ElectroIQ. https://electroiQ.com/stats/live-commerce-statistics/?utm_source=chatgpt.com
- Paramita, R., & Zulfan, M. (2024). Implementation of social media platform for increasing brand awareness of Tista tourism village. *Journal of Commerce, Management, and Tourism Studies*, 3(3), 199-208. <https://doi.org/10.58881/jcmts.v3i3.225>
- Pastini, N. W., & Lilasari, L. N. T. (2023). Building customer's brand awareness through social media platform. *Journal of Commerce, Management, and Tourism Studies*, 2(3), 155-162. <https://doi.org/10.58881/jcmts.v2i3.148> (Original work published December 1, 2023)
- Pham, A. D., Pham, N. H., Nguyen, M. N., Giap, N. T. H., Bui, D., Bui, T., & Dao, T. T. T. (2023). How do live-stream channels shape impulse buying behaviour? Empirical research on Vietnamese youth. *Asia Pacific Business Review*, 31, 567 - 592. <https://doi.org/10.1080/13602381.2023.2265320>



- Phamthi, V. A., Nagy, A., & Ngo, T. M. (2024). The influence of perceived risk on purchase intention on e-commerce: Systematic review and research agenda. *International Journal of Consumer Studies*, 48(4). <https://doi.org/10.1111/ijcs.13067>
- Prasetyo, C. S. A., & Hartono, W. (2025). The Effect of TikTok Live Shopping on Consumer Behavior in Surabaya Fashion Industry. *Journal of Accounting and Finance Management*. <https://doi.org/10.38035/jafm.v6i5.2764>
- Ratih, N. K. P. A., Putra, K. D. C., & Wajdi, M. (2025). Optimizing instagram for strategic communication: A study on engagement, branding, and digital audience connection. *Journal of Commerce, Management, and Tourism Studies*, 4(2), 249–363. <https://doi.org/10.58881/jcmts.v4i2.373>
- Safitri, K., Khasanah, S. A., & Dedu, M. (2025). The Effect of Live Streaming, Discounts, and Shopping Lifestyle on Impulse Buying in Cosmetics on Tiktok Shop. *Journal of World Science*. <https://doi.org/10.58344/jws.v4i4.1392>
- Sanjaya, D. E., Barkah., Afifah, N., Sulitiwati., & Daud, I. (2023). The effect of price promotion, promotion time limit, and interpersonal interaction on Indonesian consumers' online purchase intention through TikTok Live streaming platform. *Scientific Research Journal of Economics and Business Management*, 3(1), 76-87.
- Sawitri, S., & Afwa, A. (2026). The Influence of Fashion Involvement, Shopping Lifestyle, and Live Streaming Shopping on E-Impulse Buying Fashion Products. *Jurnal Ilmiah Bisnis dan Ekonomi Asia*. <https://doi.org/10.32815/jibeka.v20i1.2382>
- Schivinski, Bruno, Dabrowski, Dariusz. (2014). The consumer-based brand equity inventory: Scale construct and validation. *GUT FME Working Paper Series*, 4(22). <https://hdl.handle.net/10419/173318>
- Shi, W., Li, F., & Hu, M. (2025). The influence of atmospheric cues and social presence on consumers' impulse buying behaviours in e-commerce live streaming. *Electronic Commerce Research*, 25, 3325-3353. [10.1007/s10660-023-09793-3](https://doi.org/10.1007/s10660-023-09793-3)
- Tang, X., Shao, F., & Zhang, Y. (2026). The influence mechanism of scarcity promotion on consumers' future-oriented emotions and impulse buying intention. *Asia Pacific Journal of Marketing and Logistic*, 38(5), 1551-1569. <https://doi.org/10.1108/APJML-12-2024-1864>
- Tyozenda, A., Jato, T. P. J., & Tyoakosu, S. A. (2026). Digital risk intelligence and supplier failure in African public infrastructure delivery: evidence from Nigeria. *Journal of Commerce, Management, and Tourism Studies*, 5(1), 68–82. <https://doi.org/10.58881/jcmts.v5i1.445>
- Vonkeman, C. Verhagen, T., & Dolen, W. (2017). Role of local presence in online impulse buying. <http://dx.doi.org/doi:10.1016/j.im.2017.02.008>
- Wardani, R., Suhud, U., Aditya, S. (2023). Evaluation of determinants of purchase decision for women customers of fashion products through TikTok Live streaming. *International Journal of Current Economics & Business Ventures*, 1 (3) 2023, 495-523.
- Wenas, P. L., Natos, C. D., Rompas, M. D., & Towoliu, B. I. (2024). How the word of mouth marketing strategy influence the consumer buying interest? (A case of genestick product) . *Journal of Commerce, Management, and Tourism Studies*, 3(3), 146–152. <https://doi.org/10.58881/jcmts.v3i3.203>
- Wimmer, R. D., & Dominick, J. R. (2014). *Mass media research: An introduction* (10th Ed.). United States: Wadsworth Cengage Learning.
- Ye, F., & Baloran, A. (2025). Research on the Influencing Factors of University Students' Impulsive Buying in Live Streaming Commerce. *Proceedings of the 2025 16th International Conference on E-business, Management and Economics*. <https://doi.org/10.1145/3760557.3760610>
- Ying, L. J. (2022). *A study on consumer's impulse buying behavior decision: Live streaming shopping on cross-border e-commerce platform*. [Final year project, University Tunku Abdul Rahman]. <http://eprints.utar.edu.my/id/eprint/4849>
- Zhang, X., & Yu, X. (2020). The impact of perceived risk on consumers' cross platform buying behavior. *Frontiers in Psychology*, 11. <https://doi.org/10.3389/fpsyg.2020.592246>
- Zhang, X., Cheng, X., & Huang, X. (2022). "Oh, My God, Buy It!" Investigating Impulse Buying Behavior in Live Streaming Commerce. *International Journal of Human-Computer Interaction*, 39, 2436 - 2449. <https://doi.org/10.1080/10447318.2022.2076773>

