



Enhancing purchase intention in tiktok live-stream: the roles of streamers' credibility, interactivity, and perceived risk among generation z buyers

Volume 15 Issue 2
(Oktober, 2024)
e-ISSN 2716-5191
doi: 10.30997/jsh.v15i2.10539

Rusyda Hamidah¹, Christian Haposan
Pangaribuan², Calista Luhur³

¹Program Studi Manajemen, Sampoerna University

²Program Studi Magister Manajemen, Universitas
Bunda Mulia

³Program Studi Manajemen, Sampoerna University

ARTICLE INFO

Article history:

Received: 25-09-2024

Revised version received: 9-10-2024

Accepted: 10-10-2024

Available online: 11-10-2024

Keywords:

TikTok; Streamers' Credibility;
Interactivity; Perceived Risk; Purchase
Intention.

How to Cite:

APA Style 7th

Corresponding Author:

Christian H. Pangaribuan
cpangaribuan@bundamulia.ac.id

ABSTRACT

The proliferation of social media platforms has significantly impacted economic growth. Among these, TikTok has emerged as a prominent platform, offering tools that facilitate online transactions. Its live-stream feature allows sellers to showcase products and interact directly with potential buyers. However, trust concerns have hindered the widespread adoption of live-stream shopping on TikTok. This study examines the effects of streamer credibility and interactivity on Generation Z TikTok buyers' perceived risk and purchase intention in Indonesia using the Stimulus-Organism-Response (S-O-R) paradigm. One hundred and twenty-seven Indonesian Generation Z TikTok users participated in an online survey as part of a quantitative research methodology. The study employed a convenience sampling method. The data were examined using SEM-PLS. The findings reveal that streamer credibility significantly reduces perceived risk among TikTok buyers. Conversely, interactivity does not have a significant influence on perceived risk. Moreover, perceived risk negatively impacts purchase intention. Importantly, streamer credibility and interactivity both exert a positive and significant direct influence on purchase intention. Streamers are advised to prioritize cultivating a strong foundation of product knowledge, and actively engage with the audience to foster a more meaningful connection and encourage viewers to make a purchase. These results contribute to the understanding of consumer behavior in the context of TikTok live-streaming commerce and have implications for marketers and researchers targeting Generation Z consumers.

Available online at ojs.unida.ac.id/JSH/
Copyright (c) 2023 by Jurnal Sosial Humaniora



1. Introduction

In recent years, social media platforms have undergone a meteoric rise, seamlessly integrating into the fabric of contemporary life. They have transformed the way individuals connect, interact, and engage with information, transcending the limitations of time and geography (Infante & Mardikaningsih, 2022). Beyond their social functions, these platforms serve as multifaceted tools for learning, working, entertainment, and even entrepreneurial pursuits. Among the myriad of social media platforms, TikTok has emerged as a dominant force in Indonesia, boasting an estimated 92.07 million active users, solidifying its position as the second-largest TikTok user base globally (Rahimullah et al., 2022; Widjaya et al., 2022; Wijaya & Yulita, 2022). This surge in popularity is particularly pronounced among Generation Z and iGeneration individuals, born between 1997 and 2012 (Rosariana, 2021; Wulandari, 2022). Given Indonesia's population of approximately 275.8 million in 2022 (Badan Pusat Statistik, 2023), it is evident that TikTok has garnered significant traction within the Indonesian demographic.

Beyond its core social media functions, TikTok has expanded its offerings to encompass a diverse array of tools that facilitate online transactions. These features empower users to seamlessly purchase goods within the platform, often benefiting from exclusive discounts and free shipping promotions (Edwy et al., 2023). Despite the burgeoning popularity of TikTok live-stream e-commerce, a substantial portion of users remain hesitant to engage in such transactions (Rahmi et al., 2024). This reticence is often attributed to trust concerns arising from perceived risks associated with dealing with live-stream sellers (Feng, 2022). These perceived risks can significantly influence users' interactions with streamers and their ultimate decisions regarding information sharing and purchases (Lu & Chen, 2021). While perceived risk is a well-established cognitive factor influencing consumer behavior (Pangaribuan et al., 2021), the specific attributes that can mitigate consumer apprehension during live-stream purchases remain relatively unexplored (Song & Liu, 2021). This study delves into the critical role of perceived risk in shaping purchase intentions within the context of TikTok live-stream e-commerce.

Given the pivotal role of streamers in live-stream environments (Dinansyah et al., 2024), their ability to serve as the initial source of product information for potential buyers significantly impacts the likelihood of a transaction. The streamer's credibility, encompassing attributes such as attractiveness, knowledge, and believability (Ohanian, 1990), and their interactivity, a key differentiator between live-stream and traditional online shopping (Cai et al., 2018), are essential factors to consider in understanding how these elements influence buyers' perceived risks within the Indonesian TikTok live-stream ecosystem.

This study investigates the audience's perception of streamer credibility, encompassing factors such as attractiveness, knowledge, and believability (Ohanian, 1990), and interactivity, a key differentiator between live-stream and traditional online shopping (Wijaya & Susilawaty, 2023; Cai et al., 2018). The primary objective is to ascertain whether these factors directly influence Indonesian buyers' purchase intentions within the context of TikTok live-stream shopping or indirectly through their impact on perceived risks, acting as a mediating variable.

Lou and Yuan's (2019) research found the positive impact of endorser credibility on viewer trust in branded content. This credibility, encompassing attractiveness, trustworthiness, and expertise, fosters trust among consumers. Chang and Chen (2008) further elucidate the inverse relationship between perceived risk and trust, suggesting that higher levels of trust

correlate with lower perceived risk. In line with this, Soesilo et al. (2020) demonstrate that a trusted brand ambassador can effectively mitigate consumer risk perception. Song and Liu (2019) similarly emphasize the pivotal role of marketer credibility in reducing perceived risk among consumers. Accordingly, hypothesis one of this study is:

H1: Streamers' credibility negatively affects perceived risk.

Xue et al. (2020) highlighted the interactive nature of live-stream commerce platforms, enabling streamers to address shopper inquiries and concerns in a real-time, "face-to-face" manner. This personalized interaction, coupled with physical demonstrations of product specifications, can significantly alleviate shopper concerns about product quality and reduce perceived risk. Hu et al. (2017) further emphasize the collaborative atmosphere fostered by live-stream commerce, where broadcasters and buyers interact to create a socially accepting environment that enhances product trustworthiness. Moreover, the comment section of live-stream platforms allows shoppers to access the experiences and opinions of other consumers (Song & Liu, 2019). Previous research has demonstrated the effectiveness of online reviews in mitigating perceived risk and ambiguity among online shoppers (Mo et al., 2015). However, Song and Liu (2019) found that interactivity, while a valuable aspect of live-stream commerce, does not have a direct impact on reducing perceived risk. Accordingly, hypothesis two of this study is:

H2: Interactivity negatively affects perceived risk.

Fernandez (2017) mentioned about strong correlation between online buyers' attitudes toward purchases and their perception of risk, concluding that perceived risk is a primary determinant of purchase intention. Michaelidou and Christodoulides (2011) further emphasized the negative impact of heightened perceived risk on purchase intention. Yang et al. (2016) corroborated this inverse relationship, demonstrating a negative correlation between perceived risk and the customer's online purchase attitude. These findings collectively suggest that higher levels of perceived risk are associated with lower purchase intentions among online consumers. Accordingly, hypothesis three of this study is:

H3: Perceived risk negatively affects purchase intention.

Wongkitrungrueng et al. (2020) and Hu (2021) highlight the pivotal role of streamer credibility in influencing consumer engagement and purchase behavior within live-stream commerce. As consumer trust in streamers' credibility grows, their willingness to engage with live-streams, their desire to make purchases, and ultimately their actual purchase decisions may all increase.

Research has consistently demonstrated the persuasive power of experts (Aaker and Myers, 1987; Kamins et al., 1989; Ohanian, 1991). Streamers who possess a reputation for expertise can effectively enhance the credibility of their recommendations, thereby influencing consumer purchase intentions. Previous studies have also established the positive impact of perceived trustworthiness and expertise on customer sentiment and purchase intentions (Gong and Li, 2017; Willemsen et al., 2012). Moreover, an attractive live broadcaster can captivate viewers and encourage them to consider their recommendations, ultimately driving purchase decisions (Xu et al., 2020). Accordingly, hypothesis four of this study is:

H4: Streamers' credibility positively affects Generation Z TikTok buyers' purchase intention.

Previous studies by Song and Liu (2021) and Sun et al. (2021) highlighted the positive influence of vendor interactivity on consumer purchase intention within live-stream commerce. While Doong (2022) confirms the mediating role of perceived value and trust in this relationship, the study also reveals that interactivity alone has a relatively insignificant direct impact on purchase intention. Ma et al. (2022) echo this finding, emphasizing the indirect effect of interactivity on purchase intention through the mediating variable of engagement. These studies collectively suggest that engagement may be a more accurate indicator of shopper behavioral responses in live-stream commerce than purchase intention when evaluating the role of interactivity. Accordingly, hypothesis five of this study is:

H5: Interactivity in TikTok live-stream positively affects Generation Z TikTok buyers' purchase intention.

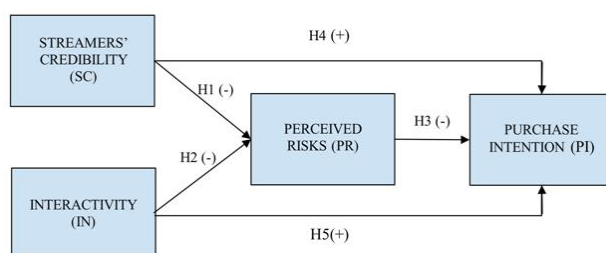


Figure 1 Proposed Conceptual Model

2. Methods

Descriptive analysis was conducted in this research with the aim of producing measurements that are precise and trustworthy (Rahman, 2020). The analysis also used validity and reliability tests to produce results that are valid and reliable. The goal of this approach is to investigate the phenomenon of TikTok live streaming specifically to assess the factors that influence purchase intention in TikTok live-stream e-commerce among Generation Z and by employing statistical techniques to evaluate the impact and significance of the associations the quantitative approach is a term used to describe a scientific study that generates numerical data and often tries to uncover links between multiple variables (Mohajan, 2020). This study also uses a mediating variable to explain how the independent and dependent variables relate to one another. Close-ended questionnaires are used to gather quantitative data and therefore primary data is used in this research via completed online questionnaires.

The study participants were Generation Z individuals who actively use TikTok and have engaged with live-stream content. Data for this research was gathered in Indonesia between January and May 2023. This study has one dependent variable (purchase intention), and two independent variables (streamers' credibility and interactivity). Furthermore, this study utilized a mediating variable, which is perceived risk. The population of this research is the total number of TikTok users in Indonesia. According to Dewi and Soetjningsih (2023), Generation Z uses TikTok more than any other demographic in Indonesia, with 75.49 million users. Therefore, because Generation Z uses TikTok the most, this study chose to concentrate on analyzing this generation in Indonesia.

Convenience sampling was used to calculate the sample size of the study as every member of the research population has an equal chance of being chosen for the study's sample as long as they match the criteria needed by this research (Meng, 2013) and this study also

used partial least squares structural equation modeling (PLS-SEM) for data analysis (Nurahmasari et al., 2023). The PLS-SEM model is used by many academic researchers from many fields and the causal modeling strategy can maximize the variance explained by modeling and dependent hidden variables (Hair et al., 2021) and therefore, is suitable to reveal the factors that influence purchase intention as the dependent variable. In PLS-SEM, the minimal sample size can be estimated using one of three techniques: the Monte Carlo simulation technique, the 10-times rule, and the minimum R-squared (Kock & Hadaya, 2018). According to Hair et al. (2014), the minimum sample size for this research is determined using the minimum R-squared (R^2) method, which applies Cohen’s (1992) statistical power analysis for multiple regression models. The maximum number of arrows for this research is 3, all of which point to the variable Purchase Intention. The lowest R^2 for this research, which employs an alpha of 5%, is predicted to be 0.10. Consequently, 124 responders are needed as the bare minimum sample size for this research.

This research divided the questionnaire into five sections. The first section consists of an introduction from the author, the goal of the questionnaire, the significance of the study, and a specific statement about the data security of the respondents. The second section is a set of filtering queries that asks about the respondent’s demographics, including their age and gender, and asks respondents to confirm that they have seen a TikTok live-stream. The third section includes inquiries regarding the variables in this study, such as streamers’ credibility, interactivity, perceived risk, and purchase intention. The fourth and fifth sections include a giveaway where survey respondents can enter their GoPay number if they want to participate in the giveaway, and lastly a thank-you note as a gratitude to survey respondents who took part in the survey.

Table 1 Outer Loadings

Construct	IN	PI	PR	SC
IN1	0.716			
IN2	0.765			
IN3	0.740			
IN5	0.776			
PI1		0.873		
PI2		0.860		
PI3		0.739		
PI4		0.576		
PR1			0.829	
PR2			0.848	
SC1				0.690
SC2				0.533
SC3				0.884
SC4				0.769
SC5				0.647

There are 19 survey items in this questionnaire, and there are four to five indications for each variable. All items in this study’s questionnaire that relate to variables are also evaluated using a Likert-type rating scale. According to Park and Wu (2019), a Likert-type rating scale, where the answers in different categories are intended to represent various degrees of approval (e.g., “Strongly agree” to “Strongly disagree”), is frequently used in numerous disciplines to quantify individual variations in characteristics, perspectives, or behaviors thus, in this study a five-point Likert scale was utilized to distinguish respondents according to their opinions

and behaviors regarding the streamers’ credibility, interactivity, perceived risk, and purchase intention.

3. Results and Discussion

3.1. Results

To evaluate the importance of each relationship between items and constructs, a convergent validity test is conducted. In this work, two convergent validity test techniques— Average Variance Extracted (AVE) and Outer Loading— are applied. In accordance with Laurinda et al. (2024), the outer loading values of the items must be greater than 0.70; if they are between 0.4 and 0.7, it is appropriate to consider eliminating them depending on how they will affect the average variance extracted (AVE) and composite reliability; however, items with outer loading values below 0.40 must be eliminated. In addition, Rasoolimanesh and Ali (2018) claimed that indicators’ outer loading values over 0.5 are allowed if the model used for measurement passes the composite reliability and convergent validity thresholds. Therefore, items with outer loading coefficients greater than 0.5 will only be used in this study (see Table 1). As a result, this research eliminated three items within the Perceived Risk variable (PR3, PR4, and PR5) and one item from the Interactivity variable (IN4).

In Table 2, the AVE values for Streamers’ Credibility, Interactivity, Perceived Risk, and Purchase Intention are 0.510, 0.562, 0.703, and 0.595, respectively. Finally, it can be said that since all indicators for all variables have AVE coefficients over 0.5, they are all valid and can be further examined. Cronbach’s alpha is also used to assess this research’s level of reliability (Taherdoost, 2016). Cronbach’s alpha value must be 0.5 or higher in order to complete the reliability test successfully (Pangaribuan et al., 2020).

Table 2 Reliability and Validity Statistics

Variable	AVE	Alpha	CR
Streamers’ Credibility	0.510	0.751	0.835
Interactivity	0.562	0.748	0.837
Perceived Risk	0.703	0.577	0.825
Purchase Intention	0.595	0.792	0.851

As all of the variables have Cronbach’s alpha value of above 0.5 according to the findings, all of them are reliable. It shows that Streamers’ Credibility, Interactivity, and Purchase Intention variables have a high degree of internal consistency, which is the consistency among questionnaire items. Meanwhile, the Perceived Risk variable has a poor degree of internal consistency because it has a value of between 0.5 and 0.6. Nevertheless, it remains acceptable for further investigation.

To evaluate the internal consistency and reliability of the measurement items, composite reliability analysis was conducted (Kalkbrenner, 2021). A composite reliability score of 0.7 or higher is considered acceptable (Schuberth, 2021). Table 2 presents the composite reliability values for each variable, incorporating all relevant indicators. The results indicate that all variables have a composite reliability value greater than 0.7. It demonstrates that all of the variables have a high degree of internal consistency, which is the consistency among questionnaire items.

The demographic data of the participants will be outlined in this part of the study. The information came from a survey shared online specifically targeted at TikTok users belonging

to Generation Z, who have watched TikTok live streaming. A total of 143 responses were initially collected. However, upon closer examination, it was determined that 16 respondents did not meet the criteria as they had never watched any TikTok live streams, and there was one who did not give any answer. Consequently, these 16 invalid responses were excluded from the analysis. This resulted in a final sample which will include information about the age and gender of the participants.

The gender information from 127 participants is shown in Figure 1. According to the findings, 81 women, or 63.78% of all participants, made up most of the participants. 46 individuals, or 36.22% of the participants, are among the remaining participants who are men. The ages of the survey participants are shown in Figure 2. The findings show that 96 of those surveyed, or 75.59% of all the participants, are between the ages of 20 and 23, representing the majority of participants. The second-highest number of responders, 16, or 12.60% of the total, were between 24 and 26. There were 10 (7.87%) participants between the ages of 17 and 19 and 5 (3.94%) participants in the range of 11 to 17. Thus, responders in the range of 11 to 17 made up the smallest group of participants.

The Multicollinearity Test is also used to determine whether there is a significant connection between independent variables (Shrestha, 2020). With the help of the variance inflation factor (VIF), multicollinearity is evaluated. The measuring criteria developed by Hair et al. (2021) will be used in this research. The VIF number is supposed to be less than 3. Collinearity problems can occur at VIF values of 3 to 5, while those over 5 signify a serious concern and advise eliminating the variable. The first model focuses on perceived risk and incorporates measurements of streamers' credibility and interactivity, which have the same VIF values of 2.599. Similarly, the second model assesses purchase intention and includes measurements of streamers' credibility, interactivity, and perceived risk, with VIF values of 2.689, 2.600, and 1.077, respectively. Both models' VIF values are below three, indicating the absence of multicollinearity among the independent variables. This means that there is no significant connection between the independent variables in either model, ensuring the reliability of the regression analysis.

The effectiveness of a predictive model in capturing the underlying variability of dependent variables is assessed using the R-square statistic. Hair et al. (2021) stated that R-squared values can be categorized as follows: 0.25 is considered poor, 0.50 is moderate, 0.75 is significant, and 0.9 or higher indicates that the model may be overestimating the data. Additionally, Huang et al. (2013) defined R-squared values as follows: values greater than 0.67 are considered significant, values in the range of 0.33 to 0.66 are regarded as average, and values of 0.32 or smaller are considered poor. Adjusted R^2 indicates the model's ability to generalize survey responses to the entire population.

For perceived risk, the R square (R^2) statistic is 0.071. The correlation coefficient (R^2) is lower than 0.25, signifying that the independent variables, streamers' credibility, and interactivity, in the regression model can only account for 7.1% of the variance in the dependent variable, perceived risk. This suggests that the independent and dependent variables have a tenuous relationship. Based on the R-squared data, it can be inferred that these two independent variables have a minimal impact on the perceived risk of Generation Z consumers purchasing from TikTok live-stream. Conversely, the remaining 92.9% of the perceived risk can be attributed to other factors that were not incorporated into the research model in this study. Also, the adjusted R^2 is 0.056, close to the R^2 value of 0.071. If R^2 is reduced by adjusted R^2 , the result is 0.015 (0.071-0.056). Accordingly, it is predicted that if the complete

population is studied and the model is fitted, the outcome variance will be decreased by 1.5%. On the other hand, the R^2 representing purchase intention is 0.388. Since this value is above 0.33, it can be inferred that there exists a moderate correlation, indicating that three independent variables (streamers' credibility, interactivity, and perceived risk) account for 38.8% of the variance in purchase intention. The remainder of 62.7% can be attributed to external factors that were not investigated in this research. Also, the adjusted R^2 is 0.373, close to the R^2 value of 0.388. If R^2 is reduced by adjusted R^2 , the result is 0.015 (0.388-0.373). The measurement bootstrapping model is illustrated in Figure 2.

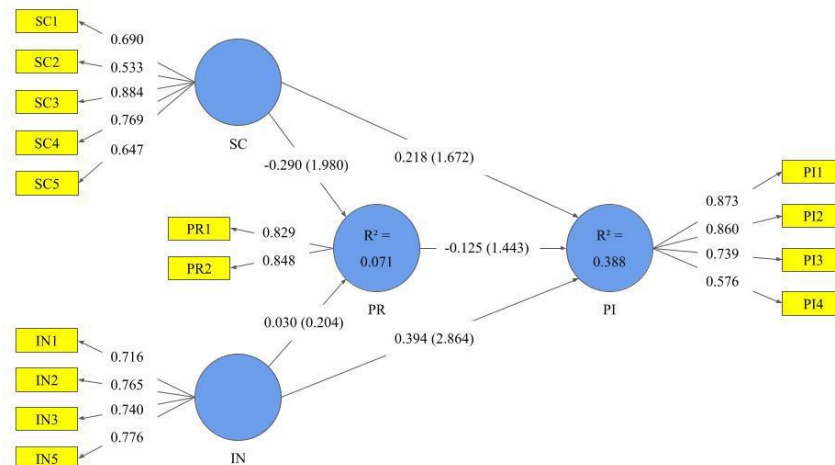


Figure 2 PLS-SEM Measurement Model

3.2. Discussion

The first hypothesis proposed that SC had a positive effect on PR. Further, in Table 3, there was validation of this hypothesis ($t = 1.980; p < 0.05$). When viewers perceive a streamer as credible, they are more likely to believe their recommendations and feel reassured about the quality and authenticity of the products being promoted. By fostering a sense of trust, credible streamers can significantly alleviate perceived risk, thereby encouraging viewers to actively engage in transactions and overcome any apprehensions they may harbor.

The result of second hypothesis suggested that IN did not have a significant effect on PR (see Table 3). This could be attributed to several factors. First, Gen Z is highly digitally savvy and may be less susceptible to the social pressure often employed in live-stream interactions. Also, the focus on entertainment and engagement within TikTok might dilute the perceived risk associated with transactions.

The result of hypothesis three indicated that PR did not have a significant effect on PI. One of the reasons could be that Gen Z is accustomed to online shopping and may be more comfortable with the inherent risk involved. Other than that, the entertainment aspect of TikTok might overshadow concerns about perceived risk.

Table 3 Model Estimates

Effect	Path coefficients	M	STDEV	t values	P
SC → PR	-0.290	-0.305	0.147	1.980	0.049
IN → PR	0.030	0.040	0.150	0.204	0.839

PR → PI	-0.125	-0.119	0.087	1.443	0.150
SC → PI	0.218	0.227	0.130	1.672*	0.095
IN → PI	0.394	0.399	0.138	2.864	0.004

Note(s): * $p < 0.10$

Hypothesis four proposed that SC positively affected PI. The results show that SC significantly affects PI ($t = 1.672$; $p < 0.10$). When viewers perceive a streamer as credible, they are more likely to trust their recommendations, which can lead to a stronger sense of confidence and a reduced perception of risk, making viewers more inclined to make a purchase.

Hypothesis five proposed that IN positively affected PI. The results show that IN significantly affects PI ($t = 2.864$; $p < 0.05$). When streamers actively engage with their audience, respond to comments, and provide personalized recommendations, they create a more interactive and engaging shopping experience. This can foster a sense of connection and trust between viewers and streamers, making viewers more likely to feel valued and appreciated, ultimately increasing their confidence in making a purchase.

4. Conclusion

Streamers’ credibility was found to have a negative and significant effect on perceived risk, while interactivity was found to have an insignificant effect on perceived risk. Furthermore, interactivity has a positive and significant impact on purchase intention, while streamers’ credibility and perceived risk have an insignificant impact on purchase intention.

Streamers’ credibility plays an important role in negatively impacting Generation Z buyers’ perceived risk. This suggests that when Generation Z shoppers interact with streamers who possess higher levels of credibility, their perception of risk towards TikTok live-streaming commerce diminishes. This finding aligns with previous research indicating that credible streamers can effectively reduce consumers’ perceived risk (Soesilo et al., 2020; Song & Liu, 2021). Contrary, this study found no significant influence of interactivity on perceived risk. While Xue et al. (2020) suggested that interactions in live-stream e-commerce can reduce perceived risk, the findings of this study contradict that claim. The limited format of interactions in TikTok live-stream, primarily through quick bullet comments, may not provide sufficient opportunity for reducing consumers’ perceived risk (Song & Liu, 2021). Therefore, interactivity does not significantly impact Generation Z shoppers’ perceived risk in this context.

The study found that streamers’ credibility and perceived risk have an insignificant influence on purchase intention among Gen Z TikTok buyers. Streamers’ credibility and buyers’ perceived risk toward TikTok live-stream does not reduce or increase their purchase intention. This finding contradicts previous research but aligns with previous studies (Masoud, 2013) stating that streamers’ credibility and certain risk factors impact purchase intention (Song & Liu, 2019; Wulandari et al., 2022) while others do not, including perceived time risk. In addition, this study found that interactivity in TikTok live-stream e-commerce has a significant positive effect on purchase intention. The level of interaction between streamers and customers directly influences the purchase intentions of prospective buyers. This finding contradicts some previous studies (Doong, 2022; Ma et al., 2022) but aligns with others (Song & Liu, 2019), highlighting the importance of interactivity in influencing purchase intention in

the live-stream e-commerce context. To conclude, interactivity in TikTok live-streaming may increase the purchase intention of Generation Z buyers.

The findings of this study have several theoretical implications for the field of consumer behavior and TikTok live-streaming commerce. Firstly, the confirmation of the influence of streamers' credibility on perceived risk contributes to the understanding of how credibility can shape consumers' risk perception in the context of live-streaming platforms. This highlights the importance of streamers' credibility as a persuasive factor in reducing consumers' perceived risk, which is in line with a previous study by Song and Liu (2021).

Secondly, the non-significant effect of interactivity on perceived risk and the effect of perceived risk on purchase intention challenge previous claims and indicate that the role of interactivity in reducing perceived risk may be context-dependent, which contradicts previous research by Xue et al. (2020). The study suggests that in the limited format of TikTok live-stream, where interactions are primarily brief and text-based, interactivity may not effectively alleviate consumers' perceived risk.

Lastly, the significant positive effects of interactivity on purchase intention shed light on the key drivers of consumer behavior in live-stream e-commerce, which contribute to prior research (Song & Liu, 2019; Sun et al., 2021). This emphasizes the significance of streamers' credibility and interactive features in motivating Generation Z TikTok buyers to make purchase decisions.

The findings of this study also have practical implications for marketers and practitioners involved in TikTok live-streaming commerce, specifically targeting Generation Z consumers. Firstly, marketers should focus on cultivating and promoting streamers' credibility through effective branding strategies, endorsements, and fostering positive consumer perceptions. This can increase consumers' trust and positive emotional responses towards streamers. Although interactivity in TikTok live-streaming commerce does not directly influence perceived risk, it has a direct and significant impact on purchase intention. Marketers should leverage interactive features within the TikTok platform to enhance customer engagement and interaction with streamers. This can be achieved through the TikTok live-stream features, such as real-time Q&A sessions and interactive polls that encourage active participation. By facilitating meaningful interactions, marketers can positively influence Generation Z buyers' purchase intentions.

Despite the valuable insights provided by this study, there are certain limitations that should be acknowledged. The research was conducted solely in the context of TikTok live-stream e-commerce, targeted Generation Z TikTok buyers, and collected small-size samples. The findings may not be generalizable to other live-stream platforms, different consumer segments, or larger sample sizes. Future studies should explore the applicability of these findings in diverse contexts and among various consumer groups.

Building on the limitations and gaps identified in this study, there are several avenues for future research. Exploring the role of other factors, such as social influence, product characteristics, and platform design, could provide a more comprehensive understanding of the determinants of purchase intention in live-stream commerce. Next, exploring the role of other mediators, such as perceived trust and perceived usefulness could provide a new understanding of mediating variable impact on this research model. Furthermore, comparative studies across different live-stream platforms and cultural contexts would provide insights into the generalizability and applicability of the findings. Understanding how cultural factors

influence consumer behavior in live-stream commerce can help marketers tailor their strategies accordingly. By addressing these avenues for future research, scholars can further advance the understanding of consumer behavior in live-stream commerce and provide valuable insights for marketers and practitioners.

References

- Badan Pusat Statistik (2023). *Jumlah Penduduk Pertengahan Tahun (Ribuan Jiwa), 2020-2022*. Badan Pusat Statistik. Retrieved February 2023, from <https://www.bps.go.id/indicator/12/1975/1/jumlah-penduduk-pertengahantahun.html>.
- Cai, J., Wohn, D. Y., Mittal, A., & Sureshababu, D. (2018). Utilitarian and hedonic motivations for live streaming shopping. In *Proceedings of the 2018 ACM international conference on interactive experiences for TV and online video*, 81-88. <https://doi.org/10.1145/3210825.3210837>.
- Cohen, J. (1992). Statistical power analysis. *Current Directions in Psychological Science*, 1(3), 98-101. <https://doi.org/10.1111/1467-8721.ep10768783>
- Dewi, N. P. S., & Soetjningsih, C. H. (2023). Self-esteem and narcissism in Generation Z who like to create content on the TikTok application. *Jurnal Scientia*, 12(02), 1225-1234. <https://doi.org/10.58471/scientia.v12i02.1330>
- Dinansyah, F., Susilo, D., & Berto, A. R. (2024). Live streaming commerce as communication media at Social Bread. *Bricolage: Jurnal Magister Ilmu Komunikasi*, 10(1), 093-106. <http://dx.doi.org/10.30813/bricolage.v10i1.4999>
- Doong, S. H. (2022). Comparing the effect of interactivity and reputation on purchase intention in live commerce: a serial mediation study. *Journal of Marketing Analytics*, 10, 329-340. <https://doi.org/10.1057/s41270-021-00139-2>
- Edwy, F. M., Anugrahani, I. S., Pradana, A. F., & Putra, I. F. A. (2023). The Phenomenon of Impulsive Buying at TikTok Shop. *International Journal of Social Science Research and Review*, 6(1), 328-334. <https://doi.org/10.47814/ijssrr.v6i1.920>
- Feng, Y. (2022). Research on Live E-commerce Based on Digital Marketing: TikTok E-commerce Live Streaming as an Example. *Highlights in Business, Economics and Management*, 2, 125-130. <https://doi.org/10.54097/hbem.v2i.2348>
- Hair, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2014). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*. SAGE.
- Hair, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., Danks, N. P., & Ray, S. (2021). *Partial least squares structural equation modeling (PLS-SEM) using R: A workbook* (p. 197). Springer Nature. <https://doi.org/10.1007/978-3-030-80519-7>
- Huang, C., Wang, Y., Wu, T., & Wang, P. (2013). An Empirical Analysis of the Antecedents and Performance Consequences of Using the Moodle Platform. *International Journal*

- of Information and Education Technology*, 3(2), 217–221.
<https://doi.org/10.7763/IJiet.2013.V3.267>
- Infante, A., & Mardikaningsih, R. (2022). The Potential of social media as a Means of Online Business Promotion. *Journal of Social Science Studies (JOS3)*, 2(2), 45-49.
<http://dx.doi.org/10.56348/jos3.v2i2.26>
- Kalkbrenner, M. T. (2021). Alpha, omega, and H internal consistency reliability estimates: Reviewing these options and when to use them. *Counseling Outcome Research and Evaluation*, 14(1), 1-12. <http://dx.doi.org/10.1080/21501378.2021.1940118>
- Kock, N., & Hadaya, P. (2018). Minimum sample size estimation in PLS-SEM: The inverse square root and gamma-exponential methods. *Information Systems Journal*, 28(1), 227-261. <https://doi.org/10.1111/isj.12131>
- Laurinda, C., Pangaribuan, C. H., & Thaib, D. (2024). Unraveling the Factors Influencing Impulsive Buying Behavior among Gen Z using Shopee Paylater: A Quantitative Analysis. *Asian Journal of Social and Humanities*, 2(12), 2963-2982.
<https://doi.org/10.59888/ajosh.v2i12.411>
- Lu, B., & Chen, Z. (2021). Live streaming commerce and consumers' purchase intention: An uncertainty reduction perspective. *Information & Management*, 58(7), 103509.
<https://doi.org/10.1016/j.im.2021.103509>
- Ma, L., Gao, S., & Zhang, X. (2022). How to use live streaming to improve consumer purchase intentions: evidence from China. *Sustainability*, 14(2), 1045.
<https://doi.org/10.3390/su14021045>
- Masoud, E. Y. (2013). The effect of perceived risk on online shopping in Jordan. *European Journal of Business and Management*, 5(6), 76-88.
- Meng, X. (2013, May). Scalable simple random sampling and stratified sampling. *Proceedings of Machine Learning Research (PMLR)*, 28(3), 531-539.
- Mohajan, H. K. (2020). Quantitative research: A successful investigation in natural and social sciences. *Journal of Economic Development, Environment and People*, 9(4), 50-79.
<http://dx.doi.org/10.26458/jedep.v9i4.679>
- Nurahmasari, M., Silfiyah, S. N., & Pangaribuan, C. H. (2023). The Intention to Use Digital Banking Services among Gen Z in Indonesia Based on Technology Acceptance Model (TAM). *Jurnal Manajemen dan Bisnis Madani*, 5(1), 15-31.
<https://doi.org/10.51353/jmbm.v5i1.692>
- Ohanian, R. (1991). The impact of celebrity spokespersons' perceived image on consumers' intention to purchase. *Journal of Advertising Research*, 31(1), 46-54.
- Pangaribuan, C. H., Wijaya, F. H., Djamil, A. B., Hidayat, D., & Putra, O. P. B. (2020). An analysis on the importance of motivation to transfer learning in VUCA environments. *Management Science Letters*, 10, 271-278. <http://doi.org/10.5267/j.msl.2019.9.005>

- Pangaribuan, C.H., Manurung, A.H., Saroso, H., & Rusmanto, T. (2021). The Influence of Risk Perception on Destination Attachment and Voluntourism Behavior: Empirical Evidence from Indonesia. *Journal of Asian Finance, Economics and Business (JAFEB)*, 8(3), 1287-1293. <https://doi.org/10.13106/jafeb.2021.vol8.no3.1287>
- Park, M., & Wu, A. D. (2019). Item response tree models to investigate acquiescence and extreme response styles in Likert-type rating scales. *Educational and Psychological Measurement*, 79(5), 911-930. <https://doi.org/10.1177/0013164419829855>
- Rahimullah, N. A., Damayanti, S. B., Izra, A. A., & Handayani, P. W. (2022). Assessing the factors influencing users accessing higher education content on TikTok. *Cogent Education*, 9(1), 2148498. <https://doi.org/10.1080/2331186X.2022.2148498>
- Rahman, M. S. (2020). The advantages and disadvantages of using qualitative and quantitative approaches and methods in language “testing and assessment” research: A literature review. *Journal of Education and Learning*, 6(1), 102-112. <http://dx.doi.org/10.5539/jel.v6n1p102>
- Rahmi, A., Pangaribuan, C. H., & Luhur, C. (2024). *The Cart Whisperers: Analyzing How Live Stream Hosts Influence Shopping Carts*. Proceeding of the 18th International Conference on Ubiquitous Information Management and Communication (IMCOM), 3-5 Jan 2024, Kuala Lumpur, Malaysia, pp. 1-7, <https://doi.org/10.1109/IMCOM60618.2024.10418322>
- Rasoolimanesh, S. M., & Ali, F. (2018). Partial least squares-structural equation modeling in hospitality and tourism. *Journal of Hospitality and Tourism Technology*, 9(3), 238-248. <http://dx.doi.org/10.1108/JHTT-10-2018-142>
- Rosariana, B. (2021). *Generasi “Milenial” Dan Generasi “Kolonial.” Kementerian Keuangan Republik Indonesia*. Retrieved February 10, 2023, from <https://www.djkn.kemenkeu.go.id/kpknl-pontianak/bacaartikel/14262/GENERASI-MILENIAL-DAN-GENERASIKOLONIAL.html>.
- Schuberth, F. (2021). Confirmatory composite analysis using partial least squares: setting the record straight. *Review of Managerial Science*, 15(5), 1311-1345. <https://doi.org/10.1007/s11846-020-00405-0>
- Shrestha, N. (2020). Detecting multicollinearity in regression analysis. *American Journal of Applied Mathematics and Statistics*, 8(2), 39-42. <http://dx.doi.org/10.12691/ajams-8-2-1>
- Soesilo, P. K., Gunadi, W., & Arimbi, I. R. (2020). The effect of endorser and corporate credibility on perceived risk and consumer confidence: The case of technologically complex products. *Journal of Marketing Communications*, 26(5), 528-548. <http://dx.doi.org/10.1080/13527266.2018.1545245>
- Song, C., & Liu, Y. L. (2021). The effect of live-streaming shopping on the consumer’s perceived risk and purchase intention in China. Presented at the 23rd Biennial Conference of the International Telecommunications Society (ITS): “*Digital societies*

and industrial transformations: Policies, markets, and technologies in a post-Covid world,” Online Conference, in Gothenburg, Sweden, 21st-23rd June, 2021.

- Sun, W., Gao, W., & Geng, R. (2021). The impact of the interactivity of internet celebrity anchors on consumers' purchase intention. *Frontiers in Psychology, 12*, 4838. <https://doi.org/10.3389/fpsyg.2021.757059>
- Taherdoost, H. (2016). Validity and reliability of the research instrument; how to test the validation of a questionnaire/survey in a research. How to test the validation of a questionnaire/survey in a research. *International Journal of Academic Research in Management, 5*(3), 28-36. <https://doi.org/10.2139/ssrn.3205040>
- Wijaya, J. A., & Susilawaty, L. (2023). The effect of social media advertising features on purchase intention mediated by brand engagement on Lenovo laptops. *Business Management Journal, 19*(2), 143-161. <https://doi.org/10.30813/bmj.v19i2.4654>
- Wijaya, G. P., & Yulita, H. (2022). The influence of content marketing, e-WOM, and brand image on purchase intention Mother of Pearl cosmetics. *Jurnal of Business & Applied Management, 15*(2), 133-142. <https://doi.org/10.30813/jbam.v15i2.3772>
- Wismiarsi, T., Pangaribuan, C. H., Prayitno, S. B., & Ainin, A. Q. (2024). The influences of content interactivity on purchase intention: An engagement mediation. *Multidisciplinary Science Journal, 6*(7), 1-10. <https://doi.org/10.31893/multiscience.2024094>
- Wulandari, A., Firnanda, A. C., Nariswari, T. S., & Agustinova, D. E. (2022, December). *Implications of Using the TikTok Application on the Character of Students at Universitas Negeri Yogyakarta*. In International Conference of Social Science and Education (ICOSSED 2021) (pp. 80-88). Atlantis Press. https://doi.org/10.2991/978-2-494069-55-8_11
- Xue, J., Liang, X., Xie, T., & Wang, H. (2020). See now, act now: How to interact with customers to enhance social commerce engagement? *Information & Management, 57*(6), 103324. <https://psycnet.apa.org/doi/10.1016/j.im.2020.103324>