The Role of Parasocial Relationships, Congruence and Source Credibility in Indonesia: A Study on Tiktok Live Streaming Commerce in the Cosmetics Industry

Caroline Lawrence[1] and Bryna Meivitawanli[2*]

Abstract

This study aimed to investigate how parasocial relationships, congruence, and source credibility influence purchase intention in TikTok Live Streaming commerce for cosmetics among Indonesian Generation Z users. Data was collected from 270 respondents through an online questionnaire, and validity and reliability tests were conducted. The data were analyzed using Structural Equation Modeling (SEM-PLS). Results showed that celebrity endorsers' attractiveness, trustworthiness, and expertise positively impact purchase intention. Parasocial relationship mediated the connection between celebrity characteristics and purchase intention. Moreover, celebrity-product congruence positively influenced endorsers' perceived credibility and mediated the relationship with purchase intention. The findings emphasize the importance of celebrity attractiveness, trustworthiness, and expertise in shaping purchase intention. The mediating role of parasocial relationships highlights the significance of strong celebrity-audience connections. Additionally, celebrity-product congruence enhances endorsers' credibility and positively influences purchase intention. These insights assist brands and marketers in optimizing influencer marketing strategies on TikTok, fostering engagement and driving purchase behavior.

Keywords: Congruence, Internet celebrity, Match-up hypothesis, Parasocial relationships, Source credibility, TikTok Live streaming.

JEL: M31, O33

---

[1] Binus Business School, Bina Nusantara University, Jakarta, Indonesia 10270. Email: caroline.lawrence@binus.ac.id
[2] Binus Business School, Bina Nusantara University, Jakarta, Indonesia 10270. Email: bryna.meivitawanli@binus.edu
ORCID ID : 0000-0003-0891-5945

1. Introduction

The rise of social media has transformed consumer behavior, with individuals increasingly relying on platforms like TikTok for information and entertainment. In the context of e-commerce, businesses have turned to internet celebrities as a marketing strategy, given their perceived social influence and ability to impact consumer purchasing decisions (Gao et al., 2018). Live streaming commerce has emerged as a popular trend, particularly on TikTok, where internet celebrities can showcase products in real-time and engage with viewers (Ma et al., 2022). Live streaming offers a more engaging experience for consumers, allowing real-time interaction and product demonstration (Wongkitrungrueng and Assarut, 2020). This is especially prevalent in the thriving cosmetic industry in Indonesia, where consumers allocate a significant portion of their income to skincare products and rely on internet celebrities for product recommendations (Wolff, 2023). Thus, understanding the impact of parasocial relationships, congruence, and source credibility in the context of TikTok live streaming commerce is essential for businesses looking to enhance consumer engagement and purchasing behavior.

Cosmetics brands face intense competition and struggle to differentiate between products (Wang et al., 2012). Brands are often perceived as inauthentic and not welcomed on social media (Fournier & Avery, 2011), and selecting the right internet celebrity for brand endorsement is challenging (Gupta et al., 2017). Brands are currently overusing video contents and missing out the opportunity in using livestream. This study aims to address the research gap in the context of TikTok live stream in Indonesia and explore the impact of parasocial relationships, congruence, and source credibility on consumers' purchasing intention in cosmetic products during live streaming sessions. By employing the match-up hypothesis, source credibility model, and parasocial theory, this research aims to provide insights into consumer behavior and offer suggestions for brands and business owners in selecting suitable internet celebrities to market their products effectively. The study focuses on Indonesian university students, primarily from Generation Z, who are active TikTok users, considering the unique social interactions and community-oriented culture in Indonesia. Through quantitative research and data collection from Indonesian university students, this study aims to enhance our understanding of the role of parasocial relationships, congruence, and source credibility in TikTok live streaming commerce, contributing to the current knowledge and addressing the problem faced by brands in the competitive cosmetic market.

2. Literature Review

Mediator: Source Credibility and Endorsement Effectiveness
Ohanian (1990) created a scale to measure the endorsement effectiveness with the positive qualities of the endorser. Consequently, the concept of celebrity endorsements where these individuals are highly admired by their followers due to their knowledge of expertise about a particular topic in the product category and they are able to convey their knowledge, experience, skills and build trust to the followers (Goldsmith et al., 2000). Source credibility models theoretical foundations, they measure the effectiveness of celebrity endorsers through three-components which includes the attractiveness, trustworthiness and expertise. Patzer (1985) explains about attractiveness in an endorser and states "physical attractiveness is an informational cue that involves effects that are subtle, pervasive and inescapable". Expertise means a person is regarded as extremely knowledgeable about a particular subject (Freeman & Chen, 2015). Erdogan (1999) stated

that the levels of honesty, plausibility and integrity that a person conveys have been referred to as trustworthiness. In order for social media users to see internet celebrities' strong perception of their credibility, intent celebrities must have high levels of both expertise and trustworthiness (Schouten et al., 2020). Therefore, a celebrity has great influence on consumer's attitude and purchase intention because of their ability to make people notice the product that they are endorsing and create a persona for a product.

Match-up Hypothesis
A group of researchers proposed the "match-up hypothesis" as a substitute to explain and help in selecting the celebrity endorsers due to the lack of findings of the source credibility models (Erdogan, 1999; Kamin & Gupta, 1994; Kamins, 1990). In addition to source credibility, the researchers suggested that there should be a congruent relationship between the celebrity and the product that they are endorsing. Congruence between internet celebrity characteristics and the qualities of a product is known as celebrity-product congruence (CPC) and it is one of the most important aspects to help determine whether celebrity endorsement will be successful (Meksi Gaied & Saied Ben Rached, 2017) through how much of a good fit the celebrity and the product is. The term "fit" signifies the relevancy between the celebrity and the product and when a celebrity endorser and the product they support are a perfect fit, the endorsement is thought to be more powerful and effective (Schouten et al., 2020). Therefore, the match-up hypothesis proposes that celebrity-product congruence can enhance the persuasiveness and effectiveness of a celebrity endorsement and identifying suitable celebrity is essential to foster a strong relationship between the brand and the consumer.

Parasocial Relationship theory
Parasocial relationships derive from the theory of parasocial interaction and the notion of supposed kinship between the audience and the celebrity (Lou & Kim, 2019), formed by mediated performers and the media user (Dibble et al., 2016). The relationship is one-sided because the celebrity, on the other hand, knows nothing about their followers, in a result there is a false sense of intimacy (Leuck, 2015). Social media allows parasocial relationships where celebrities can maintain closeness through interaction with their followers. In a result, their followers may develop long-term socioemotional attachment with the celebrities (Bond, 2016; Kurtin et al., 2018). Previous studies have studied how these relationships signify as affect-laden intimate pseudo-friendship (Hartmann et al., 2008). Parasocial relationship theory is being used to further understand consumer and brand relationships in social media (Labrecque, 2014) for brands to understand which celebrity traits are most likely to result in having a close parasocial connection (Chung & Cho, 2017).

Purchase Intention
Purchase intention (INT) is the consumers' willingness to purchase specific goods or services based on their subjective and overall evaluation. The "psychological stage" of the purchasing decision-making process is referred to as purchase intention (Wells et al., 2011). When it comes to e-commerce, purchasing intention refers to customers' initial willingness to purchase products from online sellers (Hassanein & Head, 2007). Goldsmith et al. (2000) stated that celebrity endorsement influences consumer purchasing behaviour, especially when information conveyed is from a credible source such as the internet celebrities (Wang et al., 2017).

Celebrity characteristics (Attractiveness, Trustworthiness & Expertise) and purchase intention

Perceived attractiveness (ATT) refers to the physical traits and personality qualities of celebrities that attract audiences (Mansour & Diab, 2016). It has been found to impact purchase intention, particularly on platforms like TikTok (Raymond et al., 2021). Trustworthiness (TRU) relates to celebrities' honesty, believability, and integrity, influencing consumer attitudes and beliefs (Brock, 2011). Trust between influencers and followers positively influences brand favorability and purchase decisions (AlFarraj et al., 2021). Expertise (EXP) refers to celebrities' knowledge and competence in the endorsed products or brands (Sertoglu et al., 2014). Expertise enhances credibility and the ability to provide useful information to followers (Weismueller et al., 2020). According to Erdogan (1999), consumer's opinions toward the recommended product and their purchase intention were positively impacted by their perception of the celebrity endorser's knowledge. Hypotheses are formulated based on these factors and their impact on consumers' purchase intention.

H1: Celebrity endorsers' perceived attractiveness has a positive influence on purchase intention
H2: Celebrity endorsers' perceived trustworthiness has a positive influence on purchase intention
H3: Celebrity endorsers' perceived expertise has a positive influence on purchase intention

Source Credibility and Parasocial Relationships

Mediated interpersonal connections between viewers and media personas are known as parasocial relationships, also known as PSR. Internet celebrities have similar traits to traditional celebrities, and followers may experience pseudo-friendships as a result of interactions between influencers and their followers (Bond, 2016). Moreover, Yuan et al. (2016) investigation demonstrated how parasocial relationships were directly influenced by source credibility. The parasocial relationship is a two-sided social media interaction which is able to strengthen the bond between user and the internet celebrity (Bond, 2016). Followers of celebrities are willing to believe that their favorite celebrities have greater source credibility and to be more persuaded to interact with them in a positive parasocial relationship (Hung et al., 2011). The relationship between parasocial consumers and internet celebrities is positively influenced by source credibility, which is based on attractiveness, trustworthiness and expertise (Chung & Cho, 2017). Thus, the following theories were established:

H4a: Celebrity endorser's perceived Attractiveness has a positive influence on Parasocial Relationships
H4b: Parasocial Relationships mediate the relationship between celebrity endorsers' perceived Attractiveness and Purchase Intention
H5a: Celebrity endorser's perceived Trustworthiness has a positive influence on Parasocial Relationships
H5b: Parasocial relationships mediate the relationship between celebrity endorsers' perceived Trustworthiness and Purchase Intention
H6a: Celebrity endorsers' perceived Expertise has a positive influence on Parasocial Relationships
H6b: Parasocial relationships mediate the relationship between celebrity endorsers'

perceived Expertise and Purchase Intention

Parasocial relationships and Purchase Intention
Social media provides features that enable many types of individual interaction to support this impression of intimacy (Berryman & Kavka, 2017), which, as a result, developed the parasocial relationship with influencers (Audezet et al., 2020). Studies from Kim et al. (2015), Hwang and Zhang (2018), and Hanief et al. (2019) demonstrated how parasocial relationships with internet celebrities have a favorable influence on consumer behaviour related to celebrity endorsement. The following hypotheses were established:

H7: Parasocial relationships have a positive influence on Purchase Intention

Celebrity-Product Congruence and Source Credibility
According to Meksi Gaied and Saied Ben Rached (2017), celebrity-product congruence affects the believability of endorsers. Perceived credibility is considered to have significant expertise and is believed to be objective about the themes being addressed (Goldsmith et al., 2000). Expertise refers to the degree to which a person is regarded as extremely knowledgeable about a particular subject, and trustworthiness is the sum of a person's levels of honesty, believability and integrity (Freeman & Chen, 2015). Erdogan (1999) study's findings demonstrated that participants perceived the celebrity endorser to be more credible where there was a high level of congruence between the product and the celebrity and when the celebrity and the product were complementary or congruent, the participants assessed the endorsement as being more effective. Therefore, when an endorser and the promoted product fit well, people are more likely to trust their source and be considered as more credible (Schouten et al., 2020; Yoo and Jim, 2015). When there's congruence between the message and the internet, celebrities' style can dramatically increase consumers' purchase intention (Pöyry et al., 2019; Torres et al., 2019). Hence, the following hypothesis were proposed to examine the mediating effect of different characteristics of the internet celebrity:

H8a: Celebrity-product Congruence has a positive influence on celebrity endorsers' perceived Attractiveness
H8b: Celebrity endorsers' perceived attractiveness mediated the relationship between Celebrity-Product Congruence and Purchase Intention
H9a: Celebrity-product Congruence has a positive influence on celebrity endorsers' perceived Trustworthiness
H9b: Celebrity endorsers' perceived trustworthiness mediated the relationship between Celebrity-Product Congruence and purchase intention
H10a: Celebrity-product Congruence has a positive influence on celebrity endorsers' perceived Expertise
H10b: Celebrity endorsers' perceived expertise mediated the relationship between Celebrity-Product Congruence and Purchase Intention
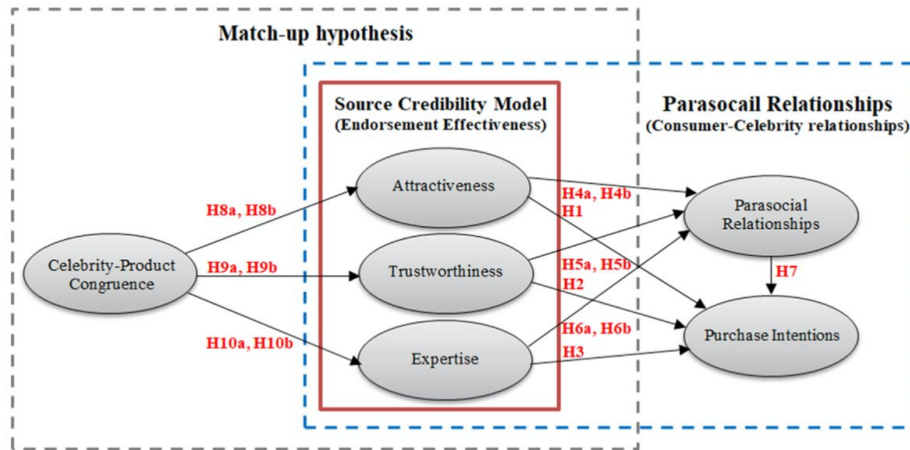
Figure 1. Theoretical Framework (Rungruangjit, 2022)

3. Materials and Methods

Data is essential in this study as the authors utilized quantitative methods to achieve results and conduct statistical analyses. Questionnaires are used to gather quantitative data from a large number of respondents efficiently and reliably. The online survey will be made using Google Form, and the link will be distributed through various social media platforms, targeting 270 Indonesian TikTok users aged 18 to 30 who have seen internet celebrities promoting products on TikTok live streams.

This study uses convenience sampling, a non-probability sampling technique, to select participants. Convenience sampling involves choosing easily accessible and available individuals from the target population who are willing to participate (Dörnyei, 2007). The author
s used convenience sampling due to its time efficiency, cost-effectiveness, and higher response rate. The population of interest in this study is TikTok users who meet specific criteria: Indonesian citizens residing in Indonesia, aged between 18 and 30 years, and have watched internet celebrities promoting products on TikTok live streams. The authors distributed the questionnaire link through social media platforms and messaging apps to eligible participants who were available and willing to complete the survey.

In this study, the sample refers to a subset of the total population that is relevant to the research topic (Omair, 2014). The replicated study suggested that a sample size of 270 to 540 is appropriate. Consequently, the authors will be collecting the lower end of the suggested sample size range based on the replicated study by selecting a sample size of 270 respondents for the current study. Prior to distributing the main survey, a pilot test and pre-test will be conducted with 30 and 10 participants, respectively, to ensure comprehension and validity of the questionnaire data. Following the successful pilot test, the main survey will be administered to the 270 participants.

The questionnaire begins with an introduction by the authors, explaining the purpose of the study and assuring respondents about privacy and anonymity. The questionnaire mainly consists of closed-ended questions. The first section includes filtered questions to ensure participants meet the targeted requirements, such as their demographic information (age, gender, income, location, occupation), and whether they are TikTok users who have

seen internet celebrities promoting products on TikTok live streams. The subsequent section comprises thirty items related to the six variables, measured on a five-point Likert scale ranging from (1) strongly disagree to (5) strongly agree.

4. Results and Discussion

The analysis reveals that all constructs demonstrate composite reliability values exceeding the acceptable threshold of 0.6, indicating their reliability. The constructs of Celebrity-Product Congruence, Attractiveness, Trustworthiness, Parasocial Relationship, and Purchase Intention all exceed Cronbach's Alpha level of 0.6. However, the construct of Expertise falls slightly below the threshold with a Cronbach's Alpha value of 0.575, suggesting lower reliability. Nonetheless, since all validity tests and composite reliability values have passed the acceptable levels, the data is deemed reliable and valid for further analysis.

As for validity test, the authors considers the average variance extracted (AVE) and discriminant validity test. The Average Variance Extracted (AVE) result, all the constructs exhibit values above the acceptable threshold of 0.5, indicating their validity for subsequent analysis. Since, all the diagonal elements are greater than the corresponding off-diagonal elements, indicating that the constructs demonstrate discriminant validity. Therefore, the overall constructs are distinct from each other and can be considered valid for further analysis.

Table 1. Outer Loadings

Constructs	Item	Outer loadings	Acceptable level	Number of Items	Conclusion
Attractiveness	ATT1	0.714	>0.7	5	Valid
	ATT2	0.733			Valid
	ATT3	0.751			Valid
	ATT4	0.750			Valid
	ATT5	0.747			Valid
Celebrity-Product congruence	CPC1	0.782	>0.7	3	Valid
	CPC2	0.817			Valid
	CPC3	0.801			Valid
Expertise	EXP2	0.714	>0.7	4	Valid
	EXP3	0.778			Valid
	EXP4	0.813			Valid
	EXP5	0.785			Valid
Purchase Intention	INT1	0.885	>0.7	2	Valid
	INT2	0.821			Valid
Parasocial Relationship	PSR2	0.831	>0.7	2	Valid
	PSR3	0.844			Valid
Trustworthiness	TRU1	0.736	>0.7	4	Valid
	TRU2	0.779			Valid
	TRU3	0.778			Valid
	TRU4	0.700			Valid

The table includes the outer loadings for each item, with values ranging from 0.714 to 0.885. According to the acceptable level of criterion of 0.7, all outer loadings meet the criterion and are considered valid. This indicates that each item is highly correlated with its construct and can be considered valid for further analysis.
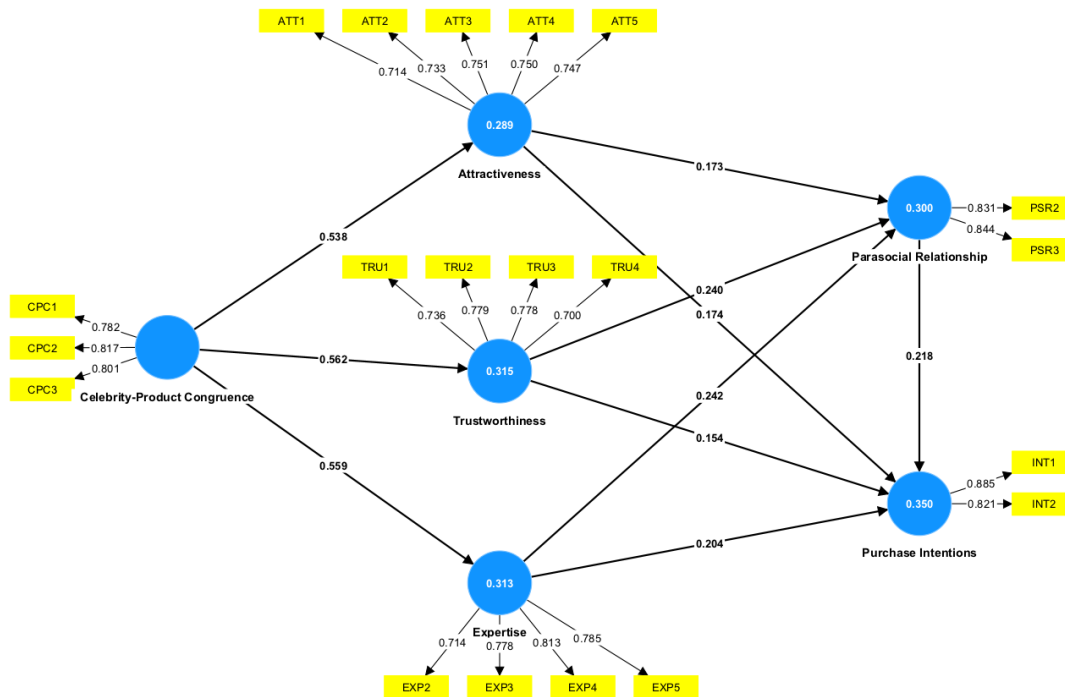

Figure 2. Structural Equation Modeling

The path model in Figure 2 depicts the theoretical framework of the study, constructed using SmartPLS 4.0 software. It includes six variables: Celebrity-Product Congruence, Attractiveness, Trustworthiness, Expertise, Parasocial Relationship, and Purchase Intention. Five variables are considered independent (Celebrity-Product Congruence, Attractiveness, Trustworthiness, Expertise, and Parasocial Relationship), while Purchase Intention is the dependent variable. Figure 1 illustrates the path coefficients and provides a visual representation of the relationships among the factors, including moderating and mediating factors. The diagram also displays the outer loading values, indicating the strength of the relationship between the indicators and latent variables. Detailed descriptions of the connections between indicators and factors will be provided in subsequent sections.

The R-square (R2) and R-square adjustment values indicate the proportion of variance explained by the independent variables in the model for different latent variables. The dependent variable in this case is Purchase intention, with an R2 value of 0.350, indicating that the independent variables explain 35 percent of the variance in Purchase Intention. These values represent the proportion of variance explained by the independent variables for each respective latent variable. Given that all of the R2 values surpass the threshold of 0.20, this indicates that the independent variables have a substantial impact on the dependent variable.

Table 2. Path Coefficients and P-Values

Variables Relationship	Direct/Mediating Effect	Path Coefficient	P-Value
Attractiveness > Purchase Intention	Direct Effect	0.174	0.005
Trustworthiness > Purchase Intention	Direct Effect	0.154	0.033
Expertise > Purchase Intention	Direct Effect	0.204	0.005
Attractiveness > Parasocial Relationship	Direct Effect	0.173	0.010
Attractiveness -> Parasocial Relationship -> Purchase Intention	Mediating/indirect effect	0.038	0.030
Trustworthiness -> Parasocial Relationship	Direct Effect	0.240	0.000
Trustworthiness -> Parasocial Relationship -> Purchase Intention	Mediating/indirect effect	0.052	0.026
Expertise -> Parasocial Relationship	Direct Effect	0.242	0.000
Expertise -> Parasocial Relationship -> Purchase Intention	Mediating/indirect effect	0.053	0.010
Parasocial Relationship -> Purchase Intention	Direct Effect	0.218	0.001
Celebrity-Product Congruence -> Attractiveness	Direct Effect	0.538	0.000
Celebrity-Product Congruence -> Attractiveness -> Purchase Intention	Mediating/indirect effect	0.094	0.011
Celebrity-Product Congruence -> Trustworthiness	Direct Effect	0.562	0.000
Celebrity-Product Congruence -> Trustworthiness -> Purchase Intention	Mediating/indirect effect	0.087	0.039
Celebrity-Product Congruence -> Expertise	Direct Effect	0.559	0.000
Celebrity-Product Congruence -> Expertise -> Purchase Intention Mediating/indirect effect)	Mediating/indirect effect	0.114	0.001

The path coefficient reflects the strength and direction of the relationship between the independent and dependent variables. When the value of the path coefficient is positive, this indicates a positive relationship, whilst negative value in the path coefficient indicates a negative relationship. Based on the result of the P-value, it suggested that all 16 hypotheses are statistically significant at the 0.05 significance level. As for the path coefficient, it shows a direct and positive relationship.

5. Conclusion

This study investigates the impact of celebrity characteristics, parasocial relationships, and celebrity-product congruence on consumers' purchase intention in the context of TikTok live stream commerce. The research was conducted among Indonesian university students, mainly from Generation Z. The findings reveal that the perceived attractiveness, trustworthiness, and expertise of celebrity endorsers positively influence purchase intention. Parasocial relationships mediate the relationship between celebrity characteristics and purchase intention, emphasizing the importance of building strong connections between internet celebrities and their audience. Celebrity-product congruence also positively influences the perceived attractiveness, trustworthiness, and expertise of celebrity endorsers, highlighting the importance of aligning the values and image of endorsers with the brand being promoted.

Based on the study's findings, there are actionable implications that brands and marketers in TikTok livestream commerce should consider. Firstly, selecting the right internet celebrities as endorsers, aligning their values with the brand, and ensuring congruence with the product can positively influence consumer perceptions and purchase intentions. Secondly, authenticity plays a pivotal role, with a focus on genuine, unfiltered content creation to enhance endorser attractiveness and trustworthiness. Building on this, brands should emphasize the expertise of their endorsers, ensuring they possess a deep understanding of the promoted products. Providing training and information can enhance their competence. Moreover, fostering parasocial relationships through active engagement with the audience, responding to comments, and sharing personal stories can deepen emotional connections and positively impact purchase behavior. Leveraging positive feedback as social proof reinforces the congruence between endorser and product. Brands should also explore interactive features, such as live Q&A sessions and giveaways, to boost engagement. Lastly, continuous improvement in content creation is vital in a competitive landscape. By implementing these actionable strategies, brands and marketers can optimize their TikTok livestream commerce efforts, resulting in improved performance, increased consumer engagement, and enhanced purchase behavior. Overall, this study provides valuable insights for marketers in utilizing TikTok live streams as a marketing tool and selecting suitable celebrity endorsers for their brands, enhancing consumer engagement and purchase behavior.

References

AlFarraj, O., Alalwan, A. A., Obeidat, Z. M., Baabdullah, A., Aldmour, R., & Al-Haddad, S., 2021, Examining the impact of influencers' credibility dimensions: attractiveness, trustworthiness and expertise on the purchase intention in the aesthetic dermatology industry. Review of International Business and Strategy, 31(3), 355-374. https://www.emerald.com/insight/2059-6014.htm

Berryman, R., & Kavka, M., 2017, 'I guess a lot of people see me as a big sister or a friend': The role of intimacy in the celebrification of beauty vloggers. *Journal of Gender Studies*, *26*(3), 307–320. https://doi.org/10.1080/09589236.2017.1288611

Bond, B. J., 2016, Following your "friend": Social Media and the strength of adolescents' parasocial relationships with media personae. *Cyberpsychology, Behavior, and Social Networking*, *19*(11), 656–660. https://doi.org/10.1089/cyber.2016.0355

Chung, S., & Cho, H., 2017, Fostering parasocial relationships with celebrities on social media: Implications for celebrity endorsement. *Psychology & Marketing*, *34*(4), 481–495. https://doi.org/10.1002/mar.21001

Dörnyei, Z., 2007, Research methods in applied linguistics. Oxford University Press.

Erdogan, B. Z., 1999, Celebrity endorsement: A literature review. Journal of Marketing Management, 15(4), 291-314. https://doi.org/10.1362/026725799784870379.

Fournier, S., & Avery, J., 2011, The Uninvited Brand. *Business Horizons*, *54*(3), 193–207. https://doi.org/10.1016/j.bushor.2011.01.001

Freeman, K. S., & Chen, C. C., 2015, Wither the Impact of Celebrity Endorsement. *Online Journal of Communication and Media Technologies, Special Issue*, 213. 213. https://doi.org/10.30935/ojcmt/5684

Gao, W., Liu, Y., Liu, Z., & Li, J., 2018, How does presence influence purchase intention in online shopping markets? an explanation based on self-determination theory. *Behaviour & Information Technology*, *37*(8), 786–799. https://doi.org/10.1080/0144929x.2018.1484514

Goldsmith, R. E., Lafferty, R. A., & Newell, S. J., 2000, The impact of corporate credibility & celebrity on consumer reaction to advertisements & brands. Journal of Advertising Research, 29, 43-54. https://doi.org/10.1080/00913367.2000.10673616

Gupta, R., Kishor, N., & Verma., 2017, Construction And Validation Of A Five-Dimensional Celebrity Endorsement Scale: Introducing The Pater Model.

Hanief, S., Handayani, P.W., Azzahro, F., & Pinem, A.A., 2019, Parasocial Relationship Analysis on Digital Celebrities Follower's purchase Intention. In IC2IE 2nd International Conference of Computer and Informatics Engineering (pp. 12–17). 7). https://doi.org/10.1109/IC2IE47452.2019.8940853

Hartmann, T., Stuke, D., & Daschmann, G., 2008, Positive parasocial relationship with drivers affect suspense in racing sport spectators. Journal of Media Psychology, 20(1), 24-34. https://doi.org/10.1027/1864-1105.20.1.24

Hassanein, K., & Head, M. M., 2007, Manipulating perceived social presence through the web interface and its impact on attitude towards online shopping. International Journal of Human-Computer Studies, 65(8), 689-708. https://doi.org/10.1016/j.ijhcs.2006.11.018

Hung, K., Chen, K., & Tse, C. H., 2011, Assessing celebrity endorsement effects in China: A consumer-celebrity relational approach. Journal of Advertising Research. https://doi.org/10.2501/JAR-51-4-608-623

Kahle, L. R., & Homer, P. M., 1985, Physical attractiveness of the celebrity endorser: A Social Adaptation Perspective. *Journal of Consumer Research*, *11*(4), 954. https://doi.org/10.1086/209029

Kamins, M. A., 1990, An investigation into the "match-up" hypothesis in celebrity advertising, when beauty may be only skin deep. Journal of Advertising Research, 19(1), 4-13.
https://doi.org/10.1080/00913367.1990.10673175

Kim, H., Ko, E., & Kim, J., 2015, SNS users' para-social relationships with celebrities: Social media effects on purchase intention. *Journal of Global Scholars of Marketing Science*, *25*(3), 279–294. https://doi.org/10.1080/21639159.2015.1043690

Labrecque, L.I., 2014, Fostering consumer-brand relationship in social media environments: The role of parasocial interaction. Journal of Interactive Marketing, 28(2), 134-148. https://doi.org/10.1016/j.intmar.2013.12.001

Leuck, M., 2015, Who is this guy? The role of parasocial relationships and source credibility in shaping online reviews. Journal of Advertising, 44(4), 346-355.

Lim, X. J., Mohd Radzol, A. R., Cheah, J.-H. & Wong, M. W., 2017, The impact of social media influencers on purchase intention and the mediation effect of customer attitude. *Asian Journal of Business Research*, *7*(2).
https://doi.org/10.14707/ajbr.170035

Lou, C., & Kim, H. K., 2019, Fancying the new rich and famous? Explicating the roles of influencer content, credibility, and parental mediation in adolescents' parasocial relationship, materialism, and purchase intention. Frontiers in Psychology, 10, 1-17.
https://doi.org/10.3389/fpsyg.2019.02673

Ma, L., Gao, S., & Zhang, X., 2022, How to use live streaming to improve consumer purchase intention: Evidence from China. *Sustainability*, *14*(2), 1045.
https://doi.org/https://doi.org/10.3390/su14021045

Mansour, I.H.F., & Diab, D.A., 2016, The relationship between celebrities' credibility & advertising effectiveness: the mediation role of religiosity. Journal of Islamic Marketing, 7(2), 148–166. https://doi.org/10.1108/JIMA-02-2015-0016.

Meksi Gaied, A., & Saied Ben Rached, K., 2017, The Congruence Effect between Celebrity and the Endorsed Product in Advertising. *Journal of Marketing Management, 5*(1), 27-44.

Ohanian, R., 1990, Construction and validation of a scale to measure celebrity endorsers' perceived expertise, trustworthiness, and attractiveness. Journal of Advertising, 19(3), 39-52.

Patzer, G. L., 1985, Source credibility as a function of communicator physical attractiveness. Journal of Business Research, 13(3), 175-184.

Pöyry, E., Pelkonen, M., Naumanen, E., & Laaksonen, S.-M., 2019, A call for authenticity: Audience responses to Social Media Influencer endorsements in strategic

communication. *International Journal of Strategic Communication*, *13*(4), 336–351. https://doi.org/10.1080/1553118x.2019.1609965

Schouten, A. P., Janssen, L., & Verspaget, M., 2019, Celebrity vs. Influencer endorsements in advertising: The role of identification, credibility, and Product-Endorser fit. *Journal Title, Volume*(Issue), 258-281. https://doi.org/10.1080/02650487.2019.1634898

Sertoglu, E., Catli, & Korkmaz., 2014, *Examining the Effect of Endorser Credibility on the Consumers' Buying Intention: An Empirical Study in Turkey*.

Weismueller, J., Harrigan, P., Wang, S., & Soutar, G. N., 2020, Influencer endorsements: How advertising disclosure and source credibility affect consumer purchase intention on social media. Australasian Marketing Journal (AMJ), 28(4), 160-170. https://doi.org/10.1016/j.ausmj.2020.03.002

Wells, J.D., Valacich, J. S., & Hess, T. J., 2011, What signal are you sending? How website quality influences perceptions of product quality and purchase intention. *MIS Quarterly*, *35*(2), 373-396. https://doi.org/10.2307/23044048

Wang, X., Yu, C., & Wei, Y., 2012, Social Media Peer Communication and impacts on purchase intention: A consumer socialization framework. *Journal of Interactive Marketing*, *26*(4), 198–208. https://doi.org/10.1016/j.intmar.2011.11.004

Wongkitrungrueng, A., & Assarut, N., 2020, The role of live streaming in Building Consumer Trust and engagement with Social Commerce Sellers. *Journal of Business Research*, *117*, 543–556. https://doi.org/10.1016/j.jbusres.2018.08.032

Yoo, J.-W., & Jin, Y. J., 2015, Reverse transfer effect of celebrity-product congruence on the celebrity's perceived credibility. *Journal of Promotion Management*, *21*(6), 666–684. https://doi.org/10.1080/10496491.2015.1055046

 Yuan, C.L., Kim, J., Kim, S.J., 2016, Parasocial relationship effects on customer equity in the social media context. Journal of Business Research, 69(9), 3795-3803. https://doi.org/10.1016/j.jbusres.2016.03.050