

Would Consumers Buy What an Influencer Recommends? The Importance of Parasocial Interaction and Consumer Confidence as Moderator Variables

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ABSTRACT

Parasocial interactions has become a common phenomenon, even in developing countries with early-stage digital infrastructure. This research aims to explore the impact of parasocial interaction on purchase intentions by considering the mediating effects of source credibility, product attitude, emotional engagement, and consumer confidence as the moderator. Empirical study with survey of 250 randomly-selected respondents is carried out to provide the data required. The questionnaire is distributed through online platforms, and the data is then analyzed using partial least square with structural equation modeling approach. Parasocial interactions positively affect purchase intentions for live streaming features. Apart from that, source credibility, product attitude, and emotional engagement completely mediates the relationship between parasocial interactions and purchase intentions. The moderating role of consumer confidence is also proven. This study is conducted in a developing country to explore the mediating role of source credibility, product attitude, emotional engagement, and consumers' confidence, thus providing a model description of how parasocial interactions influence purchase intentions.

Keywords: Consumer confidence, emotional engagement, parasocial interaction, product attitude.

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1. INTRODUCTION

In recent years, social media with live streaming features has become a marketing tool that is quite effective in attracting consumer buying interest (Lee and Chen, 2021; Li *et al.*, 2022; Wang *et al.*, 2022). As stated by Buhalis (2020), the live streaming feature has provided a new channel for marketing and promotional activities on business aspects that can be accessed by the user's smartphone. Social media platforms such as TikTok, Instagram, YouTube, and Facebook have been widely used to promote products or services by producing two-way marketing communications that influence each other (Geng *et al.*, 2020; Tseng and Wang, 2023; Wang and Hu, 2022). Xie *et al.* (2022) stated that live streaming is a feature that is

becoming popular worldwide and has been quickly adopted by various business industries including retail, food, and tourism. In addition, it has been recognized by Xu *et al.* (2023) that the presence of live streaming can minimize delays in information interactions and have more immediacy than doing business traditionally. Therefore, a live streaming-based promotional approach has become a new channel for marketing agents to promote their products (Zheng *et al.*, 2023).

Short videos broadcast via TikTok and Instagram have also become very popular. It has received great attention as it is considered as valid marketing and communication tools (Cantawee *et al.*, 2021; Zhao and Wagner, 2023). Initially, various social media applications were only used as a medium for interface interaction, but the recent development of these applications have made changes to the e-commerce sector which enable users to purchase products via live streaming broadcasts (Patel, 2021). Thus, many various social media applications are moving towards the commercial stage. According to Lo *et al.* (2022), even though the live streaming feature carried out by an influencer can effectively influence the audience, streamers realize that they have little knowledge about the audience, while the audience has access to a lot of information about the streamer. This shows that the nature of the interaction that is built must contain a good level of credibility when conveying product information (Lu and Chen, 2021).

Regarding this, the chat function which exist during live streaming can build a strong relationship, yet some marketers question this practice. This is because some positive reviews from this chat become very sceptical so consumers trust negative reviews more and these are considered more credible (Wojdyski and Evans, 2020). Therefore, it is important to investigate and provide insight to marketers about consumer attitudes towards reviews and live streaming conducted by influencers during live streaming. Addressing this gap not only enriches conceptual understanding but also provides significant implications for practitioners and advertisers seeking to optimize the effectiveness of influencer marketing (Bi and Zhang, 2023; Koay, Cheah, *et al.*, 2023).

Previous research has asserted that live streaming videos broadcast on social media can increase intimacy compared to textual reviews (Penttinen *et al.*, 2022), yet many existing research tend to focus more on textual reviews compared to videos (Diwanji and Cortese, 2020; Smith *et al.*, 2023). According to Bastrygina & Marc Lim (2023), digitally savvy consumers are currently flooded with a lot of information that can convince them to make a product purchase. Joshi *et al.* (2023) found that influencers have persuasive power that not only shapes perceptions, but can also influence consumers' propensity to buy. By utilizing influencers to build relationships with their followers, companies will find it easy to promote their newest products or services. Parasocial interaction communication styles can explain how purchasing behaviours is influenced by intimacy, friendship, and imagined identification (Sokolova & Perez, 2021; Penttinen *et al.*, 2022). In other words, consumer purchase intentions will increase when influencers can develop a good emotional bond (Kim, 2022; McLaughlin and Wohn, 2021; Sokolova and Perez, 2021).

Cartwright *et al.* (2022; Leung *et al.*, 2022) mentioned that an increased sense of connectedness can result in consumers being motivated to purchase products endorsed by influencers. Emotional ties based on the audience's need for inspiration, connection, enjoyment, and competence can provide trust in the communicated message, so that it attracts buying interest (Koay, Cheah, *et al.*, 2023; Koay, Lim, *et al.*, 2023). To explain this relationship, we use the S-O-R conceptual framework pioneered by (Hovland and Weiss, 1951a), where the stimulus received can have an influence on consumer attitudes and behavior. This study contributes to the marketing literature, particularly in social media marketing, by investigating the impact of parasocial interactions while also identifying the role and characteristics of the host or streamer in direct parasocial interactions. Furthermore,

the insights gained may extend to other markets and industries, highlighting the relevance of these findings in a broader context, as life streaming has transcended geographical boundaries and is increasingly being integrated into various sectors, including e-commerce, entertainment, and education, thereby influencing consumer behavior and engagement on a global scale.

2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

2.1. S-O-R Framework

There have been many concepts and theoretical approaches which explain parasocial involvement in the context of digital marketing. For example, the influencer media approach (Bushman, 1998), S-O-R framework (Hovland and Weiss, 1951; Mehrabian and Russell, 1974), similarity-attraction (Kamins, 1990) and self-congruence (Aaker, 1999). By definition, parasocial relationships refers to the relationships built with media figures such as artists or influencers in a face-to-face manner that is used as a promotional tool (Horton and Wohl, 1956; Hartmann and Goldhoorn, 2011). McLaughlin and Wohn (2021) stated that this relationship can establish a bond of intimacy with the audience. The parasocial approach can be described as an interaction for mutual exchange of information. In the context of online commerce, interactions built through influencers or streamers can stimulate reactions in the behaviour of consumers who watch them (Vazquez *et al.*, 2020). When consumers receive stimulation from the interactions they watch via live streaming, this can lead to engagement responses and a tendency towards intention. We adopt the S-O-R framework approach with the assumption that using narrative involvement and stimulation from influencers during live streaming can become a stimulus that shapes consumers' attitudes when watching.

2.2. Parasocial interaction, source credibility, product attribute, and emotional engagement

In studying the effectiveness of influencer endorsements, marketing scholars have developed a model based on four attributes, namely source credibility, emotional attachment, product attributes and meaning transfer models (Schimmelpfennig and Hunt, 2020). Chung and Cho (2017) suggested the importance of parasocial interaction in the context of online commerce which can have an impact on consumer behaviour. Parasocial interaction is a condition where consumers gain experience when interacting with influencers as if they were present and involved in a reciprocal relationship (Yuksel & Labrecque, 2016). The concept of parasocial itself was pioneered by Horton and Wohl (1956) which refers to the emotional connection that arises through interactions in the media. The aim of building parasocial relationship is to bring influencers, including celebrities, closer to consumers, which is built and strengthened through interaction on social media (Breves *et al.*, 2021). According to Koay, Lim, *et al.* (2023; Rueangmanee & Wannamakok, 2024), the role of social media today has made it possible for consumers to engage with their favourite influencers such as following, liking, commenting, and sharing posts; thereby facilitating the impression of two-sided interaction. Previous research found that parasocial interaction is identified as a communication approach that provides opportunities to comment and express their feelings using emotion, thus making parasocial interaction a two-way communication (Lee and Lee, 2022). Previous research conducted by (Lee and Watkins, 2016; Lee and Lee, 2022) have also validated that parasocial interactions serve as an antecedent to purchase intention. Therefore, increasing parasocial interactions can have an impact on increased consumer purchase intentions. Thus, the first hypothesis of this research is proposed as follows:

H₁. Parasocial interaction has a positive effect on purchase intention

2.3. Mediating role of source credibility, product attitude, and emotional engagement

Many marketing practitioners and advertising experts believe that the attributes of influencers, endorsers, or streamers play an important role in building the effectiveness of a message. Penttinen *et al.* (2022) found that consumers may also consider messages to gauge the reviewer's characteristics before he or she makes a purchase. It is thus very important for marketers to be careful when selecting a suitable spokesperson to endorse their brand, as this can have an impact on the product or service being promoted. The term source credibility is often used to indicate the good qualities of a communicator that influence the willingness of the recipient of the message (Yuan and Lou, 2020). As stated by Lo *et al.* (2022), a streamer often has realized that they have little knowledge about their audience, while the audience has access to a lot of information about the streamer so that the interaction they build must contain a good element of credibility.

Source credibility refers to the extent to which the intended audience perceives a source as having the experience and knowledge necessary to increase their understanding of a particular product or service (Garg and Bakshi, 2024). Reinikainen *et al.* (2020) stated that consumers will not have full attention when streamers do live streaming if the information conveyed does not have credibility. The study from Lee and Watkins (2016) indicated that if a product is reviewed by an interesting source and has good credibility, the consumer's purchase intention will be greater. Thus, endorsers or streamers who have a high level of trust will be more effective in influencing consumer attitudes than endorsers or streamers who cannot be trusted. Banerjee *et al.* (2017) also mentioned that source credibility has a positive effect on consumer intentions because they are more likely to use credible reviews to support their decisions. This positive influence arises from a better understanding of the extent to which consumers can rely on the information shared by reviewers. Thus, the second hypothesis is proposed as follows:

H₂: Source credibility mediates the relationship between parasocial interaction and purchase intention

Hsu (2022) stated that each consumer has a different attitude in assessing a product promoted by an influencer during live streaming. The nature of experience with a product can basically form a pattern in determining choices (Lu *et al.*, 2023). According to Abu-Alsondos *et al.* (2023), in general, products can be categorized into informational and experiential. For example, books are informational products while clothing is experiential products. Furthermore, based on the level of uncertainty faced by consumers during the shopping process, products can be divided into high-risk products and low risk products so that they can determine consumer attitudes towards the product (Langan *et al.*, 2017; Yuan and Lou, 2020). Bi and Zhang (2023) suggested that consumer behaviours experts have extensively researched the relationship between parasocial interactions and product attitudes. The findings indicate that product attitude is an important predictor in explaining parasocial interactions on consumer purchase intentions on live streaming features. Thus, the findings state that attitude can mediate the relationship between parasocial interactions regarding a product being promoted thereby increasing consumer purchase intentions. Pereira *et al.* (2023) stated that product attitude can refer to various characteristics or features used to describe or evaluate an attitude towards a product. Therefore, the next hypothesis is proposed as follows:

H₃. Product attitude mediates the relationship between parasocial interaction and purchase intention

It is predicted that a person's emotional involvement can mediate the relationship between parasocial interactions and purchase intentions. Shen *et al.* (2022) stated that

parasocial interactions during live streaming can influence their emotions in various ways. According to Davis *et al.* (2020), a person's emotions can determine behaviour and purchase intentions. As stated by Yuksel and Labrecque (2016), parasocial interactions can be a powerful determinant of emotional engagement. Research result from Chen *et al.* (2022) suggested that emotional attachment refers to a person's response when he gets information. In live streaming programs, emotional involvement is stimulated through consumer observation of interactive chats with the host, thus it can eventually form an emotional connection. In the decision-making process regarding sharing information that occurs during live streaming, this emotional connection with the information is considered a basic element that can influence purchasing intentions (Kang *et al.*, 2020). As a mediator, this variable can regulate changes in purchasing intentions. For example, when the emotion is felt to be positive, it will further strengthen consumers' buying intentions. In addition, the role of parasocial interactions can also reflect the friendship between followers and influencers, thereby leading to purchase intentions (Chen *et al.*, 2022). Thus, the fourth hypothesis is proposed as follows:

H₄. Emotion engagement mediates parasocial relationships and purchase intention.

2.4. Consumer confidence as moderating variable

When consumers browse video reviews on social media platforms, they tend to have varying beliefs that influence their behaviour (Penttinen *et al.*, 2022). The information obtained can influence consumer confidence so that it forms an attitude towards intentions before the purchase is made. As stated by Mitchell and Berger (1989), beliefs are closely related to the attitudes inherent in a person. Consumers can believe or be less confident in their intentions according to the information received (Aw *et al.*, 2023; Vazquez *et al.*, 2020). Therefore, they tend to look at reviews on live streaming videos to confirm their choices or reduce uncertainty that hinders purchasing decisions (Langan *et al.*, 2017). According to Penttinen *et al.* (2022), consumer confidence can be influenced by factors such as rating, number of reviews, and trustworthiness of the platforms. Apart from that, the role of influencers when conveying information during live streaming is important in increasing consumer trust. Previous research found that parasocial interactions only focused on communication with celebrities and online influencers (Tsai and Men, 2017). However, it is important for marketers to pay attention to the element of consumer trust in supporting their decisions. The need for consumers who have a low level of self-confidence to obtain additional information from trusted sources tends to be greater than the need for consumers with a high level of self-confidence (Hsieh and Li, 2020; Özbölük and Akdoğan, 2022). Thus, parasocial interactions help convince consumers to follow recommendations and thus influence their purchase intentions. This shows that the influence of parasocial interactions on purchase intention can be strengthened if consumers have high trust. The final hypothesis is proposed as follows:

H₅. Consumer confidence moderates the relationship between parasocial interaction and purchase intention. The higher the consumer's trust in the content delivered, the higher their purchase intention.

Based on the previous literature that has been presented, the conceptual framework is displayed in Figure 1.

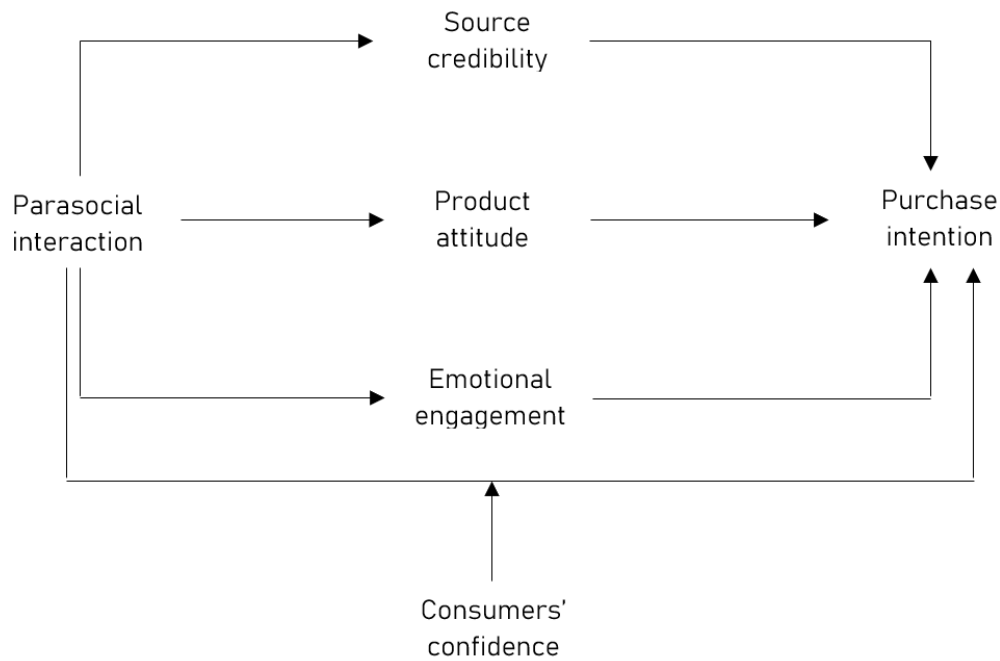


Figure 1. Conceptual Framework

3. RESEARCH METHOD

This study is carried out using a quantitative approach through survey. It adopts a cross-sectional data to examine the proposed research model. To find out about the purchase intention of influencer followers on social media, the respondents chosen in this study were active social media users who met certain criteria, namely: (1) respondents must have active social media accounts, which in this study is focused on two frequent platforms (Instagram and TikTok) with live streaming; (2) respondents are frequently watching live streaming shopping shows in these platforms. As is known, these two accounts are platforms that are often used as a means of obtaining information when making a purchase. The criteria are to assure that respondents have the knowledge necessary to answer the questions in the questionnaire.

3.1. Sampling

We created an online survey form using Google Forms and distributed the link to 250 respondents selected using purposive sampling technique. The data was analysed using partial least squares with structural equation modeling (PLS-SEM). According to Hair *et al.* (2011), this approach is known to provide significant advantages when dealing with complex models and exploratory research. Then, descriptive analysis was carried out to produce a demographic profile of respondents (Table 1).

Table 1. Respondent Profiles (N= 250)

Variable	Category	Frequency (%)
Gender	Male	35.20%
	Female	64.80%
Age	18 – 23 years	35.20%
	24 – 29 years	28.30%
	30 – 35 years	17.50%
	> 35 years	19.00%
Education	High school	21.60%

	Diploma	29.20%
	Bachelor's	33.60%
	Master's degree	15.60%
Income/month	2 – 3 million	12.40%
	3 – 4 million	26.80%
	4 – 5 million	38.40%
	>5 million	22.40%
Occupation	Student	11.20%
	Entrepreneurs	46.80%
	Freelancer	42.00%
Intensity of using social media	Often	90.80%
	Sometimes	8.40%
	Never	0.80%

Source: Data processed, 2024

Table 1 shows a summary of the demographics of the respondents involved in this research. The proportion of women is greater than men with a percentage of 64.80%, while the proportion of men is 35.20%. Respondents in the age range 18 – 23 years and 24 – 29 years had the largest proportion with a total percentage of 63.50%. As stated by Kim (2022), currently social media users are dominated by the younger generation. In terms of educational background, respondents with a bachelor's degree (33.60%) were dominated by respondents (29.20%). For the income of respondents, most individuals are in the income range of 4 – 5 million (38.40%) followed by 3 – 4 million (26.80%). In the employment category, respondents were dominated by entrepreneurs (46.80%) and freelancers (42.00%). In the intensity category of using social media, almost all respondents often open social media with a percentage of 90.80%, while the intensity occasionally is 8.40% and the intensity of never opening social media is 0.80%. The level of intensity of social media use "sometimes" and "never" was found in respondents aged over 50 years with a high school education background.

3.2. Variable measurement

This study uses nine items to measure parasocial interactions adopted from Kim and Kim (2017) and Fariver *et al.* (2021). Source credibility was measured by four items adopted from Belanche *et al.* (2021). Product attributes are measured by three items adopted from Bi and Zhang (2023). Emotional engagement was measured by four items adopted from (Shen *et al.*, 2022). Consumer confidence is measured by four items adopted from research by McCroskey & Richmond (2006) and Penttinen *et al.* (2022). Lastly, purchase intention was measured by three items adopted from Penttinen *et al.* (2022; Shen *et al.*, 2022).

4. RESULT

Table 2. Validity and Reliability

Items	Statements	Mean	SD	FL	AVE	CR
Parasocial interaction (PI)						
PI.1	I look forward to watching influencers broadcast live	4.00	0.838	0.719	0.615	0.935
PI.2	If the influencer is live streaming live on another channel, then I will watch it	3.92	0.834	0.729		

PI.3	When I watch an influencer's live posts, it's as if I'm part of the group	4.16	0.761	0.738		
PI.4	I think influencers are like friends	4.30	0.782	0.790		
PI.5	Influencers make me feel comfortable as if I were with friends	4.26	0.782	0.815		
PI.6	When an influencer shows me how they feel about a product or service, it helps me decide	4.23	0.792	0.821		
PI.7	I feel comfortable when I'm with influencers during live streaming	4.26	0.755	0.853		
PI.8	If there's a story about an influencer in the media, I'll watch it	4.10	0.864	0.804		
PI.9	When influencers show me how they feel about a product or service, it really helps me in making decisions	4.26	0.796	0.782		

Source: Kim and Kim (2017), Fariver *et al.* (2021)

Source credibility (SC)

SC.1	The influencer's level of competence in delivering content is quite good	4.16	0.865	0.859	0.624	0.868
SC.2	I feel confident in the information conveyed by influencers	4.36	0.715	0.766		
SC.3	I feel that influencers convey credible content related to the products being conveyed	4.32	0.812	0.822		
SC.4	Influencers have knowledge related to the products conveyed on live streaming	3.94	1.018	0.703		

Source: Belanche *et al.* (2021)

Product attribute (PA)

PA. 1	I have a positive attitude towards products conveyed by influencers through live streaming content	4.03	0.889	0.814	0.659	0.853
PA. 2	I have a better impression of products promoted by influencers	3.88	0.868	0.794		
PA. 3	Other people having the same interests as me will have a positive effect on the products advertised by the influencer	4.26	0.845	0.826		

Source: Bi and Zhang (2023)

Emotional engagement (EE)

EE.1	I have an emotional connection when the live streaming host conveys information about the product	4.11	0.892	0.810	0.750	0.923
EE. 2	I express my feelings about the product conveyed in live streaming	3.91	0.857	0.896		

	content using either emotion or text in the comment's column					
EE. 3	I engage from live chat via text field directly	3.77	1.011	0.906		
EE. 4	Influencers responded quickly during live streaming to answer the information I needed	3.63	1.105	0.850		

Source: Shen *et al.* (2022)

Consumer Confidence (CC)

	I feel confident when buying products recommended by influencers during live streaming	3.74	0.960	0.892	0.794	0.939
	I have confidence that influencers have credibility in conveying the products promoted on live streaming	3.93	0.920	0.899		
	I believe that the more participants are involved in live streaming, the better the product being promoted	3.77	0.931	0.918		
	I feel that the information provided by influencers is very helpful	3.90	0.868	0.853		

Source: Langan *et al.* (2017; Mitchell and Berger, 1989)

Purchase Intention (PIN)

PIN. 1	I will buy products recommended by influencers on live streaming	4.11	0.787	0.861	0.741	0.920
PIN. 2	I will buy products endorsed by my favourite influencers	4.12	0.796	0.895		
PIN. 3	I will buy products advertised by influencers	4.13	0.741	0.873		
PIN. 4	In the future I will try one of the products endorsed by the influencer	4.24	0.811	0.813		

Source: Penttinen *et al.* (2022; Shen *et al.*, 2022).

Note. PI: Parasocial Interaction, SC: Source Credibility, PA: Product Attribute, EE: Emotional Engagement, CC: Consumers' Confidence, PIN: Purchase Intention.

Table 2 is a summary of the average scores given by respondents on the questionnaire distributed. It shows the factor loading (FL), average variance extracted (AVE) and composite reliability (CR) values for each latent variable studied. In the parasocial interaction variable, the highest average is found in the statement "I think influencers are like friends" with a score of 4.30, so it is known that respondents in this case feel that the influencers they see are like their own friends. In the source credibility variable, the highest score is found in the statement "I feel confident in the information conveyed by the influencer" with a score of 4.36. So, it is known that respondents have high trust in the product information presented by influencers. In the product attribute variable, the statement "Other people who have the same interests as me will have a positive impression of the product advertised by the influencer" has the highest score, namely 4.26.

In the emotional engagement variable, the statement "I have an emotional attachment when the live streaming presenter conveys information about the product" has the highest score of 4.11. In the consumer confidence variable, the statement "I have confidence that the

influencer has credibility in conveying the product being promoted on live streaming" has the highest score of 3.93. In the purchase intention variable, the statement "In the future I will try one of the products supported by the influencer" has the highest score of 4.24. From this information, it can be interpreted that respondents who have a level of trust and confidence in credible influencers in explaining the advertised product will have the intention to buy the product.

Table 2 also shows factor loading values that are greater than 0.7 (Chin, 1998) with a value range of 0.703 – 0.918. Furthermore, regarding the composite reliability value, the overall test results have a value greater than 0.8 with a value range of 0.853 – 0.939. For the AVE value, all test results show a value greater than 0.5 (Fornell and Larcker, 1981) with a value range of 0.615 – 0.794.

Table 3. Latent Variable Correlation Coefficients

	CC	EE	PI	PA	PIN	SC
CC	0.891					
EE	0.631	0.866				
PI	0.338	0.323	0.784			
PA	0.449	0.441	0.529	0.812		
PIN	0.574	0.536	0.344	0.434	0.861	
SC	0.451	0.326	0.712	0.640	0.403	0.790

Note. PI: Parasocial Interaction, SC: Source Credibility, PA: Product Attribute, EE: Emotional Engagement, CC: Consumers' Confidence, PIN: Purchase Intention.

Table 4. Heterotrait-Monotrait Ratio of Correlations (HTMT) Analysis

	CC	EE	PI	PA	PIN	SC
CC						
EE	0.719					
PI	0.348	0.345				
PA	0.544	0.553	0.597			
PIN	0.628	0.597	0.366	0.534		
SC	0.522	0.392	0.795	0.832	0.479	

Note. PI: Parasocial Interaction, SC: Source Credibility, PA: Product Attribute, EE: Emotional Engagement, CC: Consumers' Confidence, PIN: Purchase Intention.

Table 5. Path Coefficients in the Structural Model

Path	Original Sample	Standard Deviation	T Statistics	P Values	Support
PI → PIN	0.255	0.080	3.176	0.005	Yes
PI → SC → PIN	0.164	0.063	2.607	0.024	Yes
PI → PA → PIN	0.153	0.040	3.792	0.001	Yes
PI → EE → PIN	0.177	0.031	5.637	0.000	Yes
PI x CC → PIN	0.195	0.053	3.660	0.000	Yes

Note. PI: Parasocial Interaction, SC: Source Credibility, PA: Product Attribute, EE: Emotional Engagement, CC: Consumers' Confidence, PIN: Purchase Intention.

The discriminant validity of the model was evaluated using two methods, namely Fornell-Larcker criterion analysis and heterotrait-monotrait (HTMT) correlation ratio. From Table 3, it can be seen that the square root value of the AVE (Average Variance Extracted) for each construct is greater than the correlation between constructs (Fornell and Larcker,

1981). Meanwhile, Table 4 shows that all HTMT ratio values are lower than 0.85 (Henseler *et al.*, 2015). The results of these two approaches show that the model has satisfactory discriminant validity and indicates good convergent validity. When assessing model fit in PLS-SEM, special attention is paid to SRMR (Standardized Root Mean Square Residual) and NFI (Normed Fit Index) (Hair *et al.*, 2016). Specifically, a good fit was considered achieved if the NFI value was > 0.7 (Wang *et al.*, 2022) and $SRMR < 0.08$. In this study, SRMR has a value of 0.071 and NFI has a value of 0.729, which indicates that this model can be considered a model that has a good fit.

According to Hair *et al.* (2016), four evaluations were carried out to assess the model structure: (i) collinearity check, (ii) path coefficient significance test, (iii) analysis of the coefficient of determination (R^2), and (iv) application of variance inflation factor (VIF) to test collinearity. Findings showed that all VIF values ranged from 1,000 to 3,760. With these values below five, there is no multicollinearity problem in this study (Hair *et al.*, 2011).

Table 5 shows the path coefficient values for each relationship between latent variables. Parasocial interaction ($\beta = 0.255$, $p = 0.005$) has a positive and significant influence on purchase intention. Source credibility ($\beta = 0.164$, $p = 0.024$) as a variable that mediates the relationship between parasocial interaction and purchase intention has a positive and significant influence. Product attribute ($\beta = 0.153$, $p = 0.001$) as a variable that mediates the relationship between parasocial interaction and purchase intention has a positive and significant influence. Emotion engagement ($\beta = 0.177$, $p = 0.000$) as a variable that mediates the relationship between parasocial interaction and purchase intention has a positive and significant influence. Furthermore, consumer confidence ($\beta = 0.195$, $p = 0.000$), which is a moderator variable for the relationship between parasocial interaction and purchase intention, has a positive and significant influence. From these results it is known that H1, H2, H3, H4 and H5 can be accepted.

The coefficient of determination (R^2) is used to measure the accuracy of model predictions and evaluate the overall impact of all external variables on the internal dependent variable. According to Hair *et al.* (2011) and Henseler *et al.* (2009), R^2 values of 0.75, 0.50, and 0.25 reflect significant, moderate, and weak levels of explanatory power, respectively. All R^2 values in the model are in the range 0.507 to 0.680 (R^2 of emotional engagement = 0.605, R^2 of product attribute = 0.680, R^2 of purchase intention = 0.518, and R^2 of source credibility = 0.507). These findings indicate that the research model has satisfactory prediction accuracy.

5. DISCUSSION

This study aims to determine the influence of parasocial interactions on purchase intentions by looking at the mediating role of source credibility, product attributes, and emotional involvement as well as the moderating role of consumer trust. The findings obtained provide support for all the hypotheses proposed. The research results show that stronger parasocial interaction when doing live streaming has an influence on purchase intention. These results confirm previous research conducted by (Kim, 2022). In the S-O-R approach, Hovland and Weiss (1951) and Mehrabian and Russell (1974) stated that people can be interested and stimulated when they get interactions built in the external environment. As stated by Aw *et al.* (2023), currently, advertising has penetrated every aspect of consumers' lives. Promotions carried out on social media via live streaming can trigger consumer responses that can be seen in their attitudes. In developing countries, with digital infrastructure that may be in its infancy, individuals may have different patterns from media figures, especially cultural figures in Indonesia. Koay, Cheah *et al.* (2023b; Yuan *et al.*, 2021) stated that platforms such as Instagram, TikTok, or YouTube have become effective means of conveying messages to their

audiences and building bonds, thereby influencing consumer purchasing intentions. An influencer establishes a friendly camaraderie with their audience by regularly engaging in parasocial interactions. These findings show that parasocial interactions play an important role in building relationships, thereby helping to increase purchase intentions.

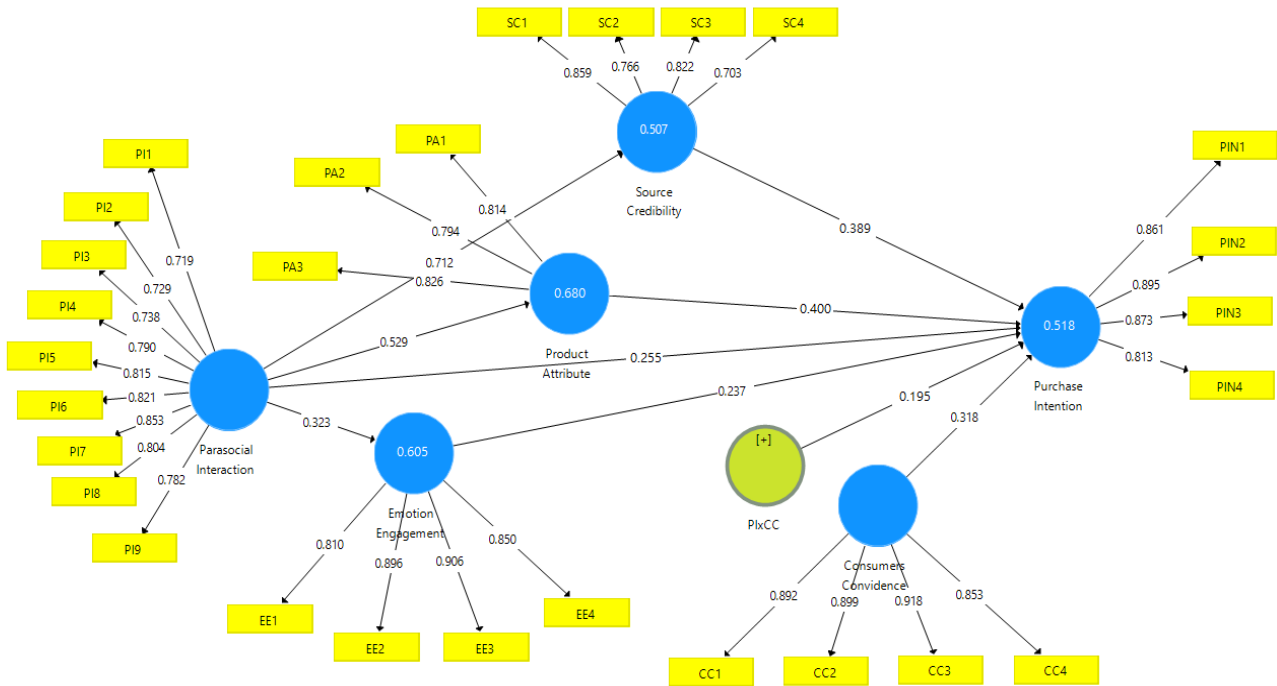


Figure 2. Structural model with standardized path coefficients

Note. PI: Parasocial Interaction, SC: Source Credibility, PA: Product Attribute, EE: Emotional Engagement, CC: Consumers' Confidence, PIN: Purchase Intention.

The findings also found that the attractiveness of an influencer can increase from the perspective of advertising, communication or marketing delivered. The findings show that parasocial interactions on purchase intentions will increase when through source credibility. Thus, the role of source credibility dominates the role of interaction, especially in the generation from the 18 to 23 year group. These findings also illustrate that apart from source credibility, product attitude plays an important role in increasing purchase intentions. The findings also show that consumers sometimes tend to buy products regardless of the influencer's attitude. This shows that there are different attitudes in responding to the products being promoted. The impact of product attitudes on individuals varies with different personalities. Therefore, marketers must be able to identify each consumer's wants and needs before the product is advertised. These findings are in line with research (Pereira *et al.*, 2023; Singh & Banerjee, 2018) that the consumer's overall assessment or feelings are influenced by attitudes towards the product, where this attitude is formed by personal preferences, experience and social influence.

Furthermore, the findings demonstrated that emotional engagement mediates the relationship between parasocial interactions and purchase intention. Respondents considered that parasocial interactions and purchase intentions would be stronger when the relationship resulted in an emotional bond. As stated by Ye *et al.* (2021), personality traits and individual values are important factors in increasing purchase intentions. As the frequency of such interactions increases, the emotions associated with those interactions will gradually accumulate and enrich over time. Emotional engagement mediates the relationship between viewers' parasocial interactions and purchase intentions. This happens because emotional

involvement and parasocial interactions with influencers can lead to a good impression of the products offered. Thus, their purchase intention will increase. In general, developing feelings of intimacy will increase positive emotions and motivate consumers to become emotionally involved in live streaming programs. These findings contribute to the literature by explaining the relationship between parasocial interactions and purchase intentions through the mediating role of emotional involvement and by providing empirical evidence for this relationship.

Finally, the findings demonstrate that consumer confidence strengthens the relationship between parasocial interactions and purchase intention. Consumers tend to have different perceptions of confidence regarding a review that involves parasocial interactions. If consumer confidence in the product and the influencer's credibility are strong, this can strengthen the influence of parasocial interactions on purchase intention. On the other hand, if consumers' confidence in the influencer's credibility is weak, this can reduce the influence of parasocial interactions on purchase intention.

6. CONCLUSION

This study provides several important contributions related to live streaming trading on social media. First, the use of influencers in live streaming to attract consumer buying interest depends on the communication style delivered. Previous research only explained communication styles without relating how communication produces interactions that can be accepted by the audience. This research expands the perspective of communication that produces interaction in the context of live streaming on social media. This research also analyses the influence of parasocial interactions on purchase intentions in the context of live streaming commerce by looking at the mediating role of source credibility, product attitude, emotional involvement and consumer trust as moderating variables. Second, according to research results, communication oriented towards streamer interaction can influence consumer purchasing intentions when live streaming takes place. These findings can expand the role of parasocial interactions and theories of consumer behaviour thereby creating a new theoretical basis for studying the effectiveness of effective marketing communications.

This study also analyses the influence of parasocial interactions on purchase intentions in the context of live streaming commerce by looking at the mediating role of source credibility, product attitude, emotional involvement and consumer trust as moderating variables. Second, according to research results, communication oriented towards streamer interaction can influence consumer purchasing intentions when live streaming takes place. These findings can expand the role of parasocial interactions and theories of consumer behaviours thereby creating a new theoretical basis for studying the effectiveness of effective marketing communications.

Third, another contribution of this study is the conceptual model between the relationships proposed in explaining purchase intention. Although several previous studies have found empirical evidence that the impact of marketing content influences purchase intentions (Masuda *et al.*, 2022; Koay *et al.*, (2023), these studies only focused on textual reviews and did not look at reviews directly. This fills the gap in the literature by paying attention to the role of source credibility, product attitude, emotional engagement as mediation and consumer confidence as moderation. This conceptual model shows that the influence of parasocial interactions on purchase intentions is a dynamic process that can change so that other aspects are needed that can strengthen these interactions.

Finally, the implications of this study extend beyond the immediate context of live streaming in developing countries. The insights gained can be applied to other markets and industries, as the phenomenon of live streaming continues to grow and transform consumer

engagement strategies globally. This broader relevance underscores the importance of understanding how parasocial interactions can drive purchasing behavior across diverse contexts, ultimately offering a foundation for future research and practical applications in social media marketing.

7. PRACTICAL IMPLICATION

The increase in consumers using social media channels has required companies to work with influencers as a tool in promoting new products or services. In practical terms, when companies use influencers as a means of communicating products or services on live streaming features, the influencer must convey messages in an interaction-oriented manner so as to enable higher viewing and purchasing intentions. Streamers should also increase their engagement by focusing on feedback and asking viewers to leave comments, like, follow and retweet. When delivering messages, streamers should use words that are easy to understand and show images, movements or demonstrations in an acceptable way. Apart from that, sponsor selection is also an important factor in maintaining the credibility of information. Because, no matter how much interaction is built, when the sponsor is chosen incorrectly it will produce scepticism in consumers, thereby reducing their intention to watch and buy. Then, the company can strengthen emotional involvement by conducting live streaming such as a host who directly answers questions that arise from the comment's column. Sellers can sell higher quality products and ensure transparent product prices, so that viewers feel trust and are more willing to make recommended purchases. Influencers can also plan and announce their broadcast times in advance to give subscribers enough time to organize their time.

8. LIMITATION AND FUTURE RESEARCH DIRECTION

As with any research, this study has limitations that may provide avenues for future research. Firstly, the data obtained were collected in Indonesia by selecting three large provinces (West Java, Central Java, and East Java) which were cross-sectional in nature. Respondents fill out the questionnaire by considering one influencer they know, so that it can represent a parasocial relationship. We recommend that future researchers use cross-country data analysis with larger sample collections so that they can provide a comprehensive understanding of the impact of parasocial interactions on purchase intentions, especially in the current millennial generation. Our findings show that the relationship between parasocial interactions and purchase intention is diverse so that further research can use moderating effects such as product diversity, e-WOM or influencer characteristics in the context of live streaming.

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