

The More Familiar You Are, the Less You Will Buy: The Moderating Effect of Relationship Strength

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Abstract

With the rapid expansion of internet technology, the user base of live broadcast platforms has been steadily increasing. This surge in online activity has led to a growing trend of consumers turning to live broadcasts for product information before making purchasing decisions. Key Opinion Leaders (KOLs) who livestream have become central figures in this virtual landscape, prompting extensive research into the dynamics of relationship strength within these platforms. In light of this, our study centers on KOL live broadcasts and explores the moderating effect of relationship strength on the continuity of viewer engagement and its impact on audience purchase intention.

We collected data from 251 respondents and employed questionnaire surveys along with structural equation modeling for analysis. Our findings reveal a positive correlation between the suitability of KOLs and live broadcast products and viewers' sustained engagement. Additionally, continuity of viewership positively influences purchase intentions. Furthermore, varying levels of relationship positively strengthen and significantly moderate the impact of sustained viewership, with audiences potentially being swayed by different relationship dynamics in the information presented during live broadcasts.

Keywords: Suitability, Key Opinion Leader, Continuance of Watching, Relationship Strength, Purchase Intent

Introduction

Since the emergence of the COVID-19 pandemic, live commerce has evolved into a distinct consumption trend in Thailand, attracting significant attention from international media. Key Opinion Leaders (KOLs), celebrities, influencers, and businesses are desperate to attract customers through persuasive product presentations on camera. The emergence of the live commerce model has not only showcased the dynamism of the Thai market but is also expediting the transformation of traditional brick-and-mortar businesses into the digital realm.

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In an era where online shopping is synonymous with convenience and speed, the proliferation of social media has revolutionized modern lifestyles. The accessibility of Internet Technology has transcended the confines of scheduled television programming, enabling viewers to watch content anytime and anywhere using the Internet or mobile devices.

This wave of live broadcasts has initiated a media revolution, compelling brands to reconfigure their marketing strategies. The phrase “No live streaming, no marketing” succinctly captures the essence of this transformation (Wongkitrungrueng et al., 2020). The live-streaming phenomenon, unrestricted by temporal or spatial constraints, is characterized by immediacy, authenticity, focus, and interactivity. Unlike traditional TV programming, it allows targeted audiences without interference from preset schedules. Platforms such as Facebook, YouTube, Instagram, TikTok, and others have heralded the era of live broadcasting, fostering the growth of numerous live-streaming platforms. Combined with the rise of the KOL economy, e-commerce live streaming has ushered in a new era of live streaming economy (Yang, 2021).

The live streaming economy has achieved unprecedented scale due to the pervasive use of smartphones and seamless connectivity. This study aims to examine how live streaming platforms leverage the strength of relationships to navigate intense market competition. It also delves into the factors influencing sustained viewership of live streams featuring KOLs and whether this impacts purchasing intent.

The contemporary landscape features a multitude of live-streaming platforms, each contributing to the rise of KOLs who owe their fame to live broadcasting. Manufacturers have also joined the trend, collaborating with renowned KOLs to showcase their products through live streams. This movement has given rise to a burgeoning economic trend. This study aims to investigate whether the compatibility between KOLs and products influences sustained viewership and purchasing intent.

Research Objectives

1. Building on the aforementioned motivations, this study seeks to achieve the following objectives:

a. Examining the moderating effect of strong and weak social bonds and their influence on continued viewership and purchasing intent among live-stream audiences.

b. Investigate the impact of social relationships on viewers’ purchasing intent.

2. Examine the influence of strong and weak social ties on users’ purchasing intent: Building on prior research, which highlights the significance of recommendations from friends and family. This study employs the concepts of strong and weak social ties to explore their impact on purchasing intent. The moderator variable aims to uncover whether familiarity in relationships between viewers and anchors influences purchasing behavior or if an excessively intimate connection negates purchasing intent.

3. Explore the positive correlation between KOL-product compatibility and sustained live stream viewing. This aspect of the study aims to ascertain whether the suitability of the KOL anchor and the endorsed product fosters continued viewership. Furthermore, it investigates whether viewers’ interest extends to purchasing the products recommended by the KOL anchor.

Literature Review

Social Tie

A Social tie denotes the close connection between a Key Opinion Leader (KOL) and their audience. This connection encompasses the audience's familiarity with the KOL, indicating that the audience perceives the KOL as someone with whom they have a social connection. Additionally, it involves interpersonal relationships within the social network, encompassing factors like duration, frequency of contact, relationship type, social significance, and other related elements. The degree of closeness in the audience-KOL relationship categorizes these ties into Strong Ties and Weak Ties. For instance, a strong tie represents a close relationship between friends or family members. In contrast, a weak tie signifies a more distant association, such as with strangers, KOLs, and netizens (Y. Li & Peng, 2021).

Researchers have identified four dimensions-intimacy, familiarity, support, and partnership as pivotal indicators of relationship strength. Scholars argue that these dimensions must be collectively assessed to provide an accurate gauge of relationship strength (Yang, 2021). Of these dimensions, intimacy is widely regarded as the most crucial measure of relationship strength, given its positive correlation with factors like relationship reciprocity, actions, interaction time, and emotional intensity (Yao et al., 2021). Consequently, the strength of the bond between live broadcast audiences and hosts influences their attitudes and behaviors toward continuing viewership, subsequently affecting information sharing (Horng & Wu, 2020; Wongkitrungrueng et al., 2020; Yuan & Lou, 2020).

In this study, we define a social tie as the close association between a KOL and its audience, encompassing the audience's perception of familiarity with the KOL. For instance, individuals tend to recommend or share live broadcasts from acquaintances they are very familiar with; however, this may not necessarily translate into prolonged viewership or proactive consumption. As such, we explore how the source of moderator influence-continuance of watching-affects the purchase intent within the context of social relationships.

KOL

KOL (Key Opinion Leader) occupies a position between mass media and the general public. Information from mass media, such as newspapers, advertisements, or broadcasts, first reaches KOLs for assimilation and organization before being relayed to the public. This intermediary role shapes public attitudes and behaviors (Jiménez-Castillo & Sánchez-Fernández, 2019). Some scholars propose that KOLs are instrumental in changing attitudes and behaviors in the two-step communication theory. Additionally, those who receive messages last in the dissemination process are known as Key Opinion Followers (Chen & Chang, 2021).

With advancements in technologies like networking, big data, and cloud computing, the landscape of media has transcended the confines of traditional single-format media. Social networks have become channels through which to maintain interpersonal relationships and express individuality. Correspondingly, research on KOLs has shifted from the physical realm to the online sphere (Winter & Neubaum, 2016). The definition of KOL varies among scholars. Scholars point out that KOL can inadvertently influence the attitudes of others in the way and frequency expected by others to some extent so that their behavior becomes what KOL wants (Hu, 2022).

Essentially, KOLs are individuals deeply engrossed in a specific subject with specialized knowledge, often at the center of social networks, making them relatable figures. These KOL roles are contingent upon factors such as background, theme, field, culture, and social environment (Chen & Chang, 2021). KOLs, often experts in their respective fields, leverage their charisma and expertise to foster heightened trust among followers (Jiménez-Castillo & Sánchez-Fernández, 2019). They use their proficiency to provide product insights, personal recommendations, and feedback, thereby assisting companies in product promotion (Jain & Katarya, 2019). Notably, the suitability of a KOL to live broadcast products extends beyond expertise to encompass critical thinking and unique perspectives formed through research and experimentation, effectively establishing them as influential figures on social media platforms (Hu, 2022).

This study elucidates the identification of KOLs through the lens of the compatibility between KOLs and live broadcast products. Specifically, KOLs are experts in specific fields with rich life experiences, industry influence, and a network. These characteristics position them as trusted advisors sought out by opinion followers. Their influence leads to the emergence of social hotspots and trends, filtering information and elevating trust levels among their followers. Essentially, KOLs exert significant influence on the opinions, attitudes, values, motivations, and decision-making behavior of others, including such figures as sports stars, entertainment figures, industry luminaries, bloggers, entrepreneurs, authors, pundits, beauty experts, and more.

Continuance Watching

Continuance describes consumers' intention to persistently engage with a product or service (Li et al., 2021). While previous research predominantly focused on consumers' purchasing behavior, our study examines the extent to which viewers are inclined to continue watching online live broadcasts following interaction with live hosts.

Given the rapid evolution of information technology, marketers are increasingly concerned with how information systems can be used and applied to the marketing field. Some scholars propose that users maintain relationships with live broadcast platforms when satisfied with the quality of service (Singh et al., 2021). Others have suggested, however, that an increase in the use of social media platforms will affect the transmission of information and opinion sharing (Winter & Neubaum, 2016). Some scholars hold that the long-term survival and success of an information system depend on continued viewership. This behavior is influenced by user experience, and the intent to continue watching stands as a key determinant of system success (Gupta et al., 2020). Notably, the integration of the Expectation Confirmation Theory (ECT) and Information Systems (IS) during the adaptation phase has led to the development of the IS (Continuance Model).

Building upon the aforementioned concepts, this study adopts scholars' definitions of continuous viewing. We explore the audience's sustained engagement with online live broadcast platforms, defining continuance watching as the audience's intent to consistently engage with live broadcast platforms in the future.

Purchase Intention

The audience's support for the live broadcast host is particularly interesting within the context of live broadcasts. This support extends beyond forms of engagement, such as watching and chatting, to financial contributions, including payments, subscriptions, and sponsorships, which represent a source of income for the live broadcast hosts.

Preceding actual purchases, individuals exhibit behaviors characterized by preferences towards specific venues, products, and services, denoting a certain predisposition. Such behavioral inclinations can be interpreted as an intention to purchase (Brand et al., 2020). Therefore, the concept of purchase intention refers to an intention to consume during the purchasing decision-making process. It encompasses consumer behavior aimed at fulfilling personal needs (Praphruetmon, 2022). Similarly, some scholars have proposed that purchase intention is defined as various behaviors consumers show when they search, evaluate, purchase, and use a product or service.

Furthermore, scholars have asserted that consumers' favorable attitudes and cognitive appraisals towards products or services subsequently form an intention to purchase (Liu et al., 2019). Consumers make purchasing decisions based on their trust in products or services (Bansal & Voyer, 2000). Alternately, some academics believe that purchase intention refers to the behavioral intention of consumers to purchase a particular product or service, including repurchase intention and the willingness to advocate the product or service to others (Wang et al., 2019). The overall assessment of consumer satisfaction with a product or service influences will trigger emotional responses that generate purchase intentions (Elmashhara & Soares, 2020). In line with the above, this study defines purchase intention in the context of live broadcasts as viewers' willingness to take actions such as payments, sponsorships, and subscriptions to support their favored live broadcast hosts while concurrently engaging with the live broadcast platform.

Research Hypothesis

In line with the structural framework of the literature review and the hypotheses to be examined, this research formulates three hypotheses, delineated as follows.

1. Impact Of Suitability on the Continuation of Watching

Live Key Opinion Leaders (KOLs) have effectively penetrated public discourse through social media platforms, creating a perception of virtual face-to-face communication with their audience. They are easily influenced by KOLs' suggestions and behaviors (Jain & Katarya, 2019). According to trust theory, situational factors emphasize the contextual characteristics intrinsic to trust relationships, while relationship attributes refer to the state and degree of the relationship (Luo et al, 2019; Sun et al., 2020).

KOLs function as pivotal intermediaries between brands and consumers. The effectiveness of KOL-driven live commerce hinges on three key factors: individual attributes, situational factors, and relationship dynamics (Jiménez-Castillo & Sánchez-Fernández, 2019).

Social media marketing theory places drainage and conversion at the center of marketing communication. The latter is achieved through the alignment of word-of-mouth communicators with products. In this context, Suitability signifies the degree of correspondence in interests, hobbies, lifestyles, or group affiliations between individuals. Some scholars hold that a KOL's image should match the brand's identity (Jain & Katarya, 2019; Tang & Lai, 2020). Suitability will affect interpersonal trust and positively influence the evaluation of Internet Word-of-Mouth (IWOM) value (Winter & Neubaum, 2016). Users are more receptive to recommendations from friends who share common interests (Wongkitrungrueng et al., 2020). When there's a high degree of correspondence between word-of-mouth senders and receivers, users are inclined to continue engaging with content created or recommended by the sender (Xiao & Mou, 2019).

In light of this, the suitability of KOL live commerce can be assessed using three criteria: the alignment of KOL personal characteristics with fan group attributes, the congruence between KOL identity and brand image, and the suitability of the KOL live broadcast content with the platform characteristics. As a situational factor, the suitability of KOL-driven live commerce can impact the continuation of viewer engagement.

H1: The suitability of KOL live commerce has a positive influence on the persistence of consumer viewing.

2. The Relationship Between Continuance of Watching and Purchase Intention

Numerous studies have established that KOLs wield more significant influence over consumers' purchasing decisions than traditional celebrities. This phenomenon can be attributed to consumers' perception of KOLs as more relatable figures, thus facilitating trust-building (Jiménez-Castillo & Sánchez-Fernández, 2019). Concurrently, research reveals that higher consumer perceptions of service quality and satisfaction correlate with heightened purchase intentions (Kim & Heo, 2021). Consequently, online live broadcast platforms enhance user satisfaction with the information and services they provide, leading users to recommend the platform to others or increase purchase intentions (Zhang, et al., 2022).

Moreover, behaviors that provide users with tangible benefits or valuable assistance tend to persist and are unaffected by temporal variations (Zhang et al., 2022). Some scholars argue that the user interface of an online store significantly shapes consumers' experiences with goods or services. An intuitive and efficient user interface leads consumers to perceive online shopping as enjoyable and satisfying, thereby boosting purchase intentions (Kim & Heo, 2021).

Reference Group Theory: The Reference Group Theory is a foundational concept in social psychology and explores how individuals' attitudes and behaviors are shaped by the influence of the groups to which they belong or aspire to join (Li et al., 2021). When individuals share numerous commonalities in terms of personal characteristics and social experiences with others, their consumption patterns and brand preferences tend to converge. Consequently, consumers who share common interests or exhibit higher suitability are more likely to influence each other's purchase intentions (Jain & Katarya, 2019; Tang & Lai, 2020). This line of thought provides the basis for the hypothesis that follows.

H2: The Continued Viewership of Live Broadcasts Positively Impacts Purchase Intentions.

3. The Moderating Effect of Relationship Strength

Relationship strength refers to the degree of closeness between individuals in a social network (Kim et al. 2018). The reliability of information sources can affect consumers' beliefs and attitudes. In online communication, people are often more willing to trust information delivered by familiar and close contacts, who are generally perceived as more reliable (Zhang et al., 2022). Strong relationships are conducive to the development of sustained consumer attitudes. Some scholars argue that consumers must consider relationship strength and social cues when evaluating word-of-mouth information on social media (Fu, et al. 2022).

According to the Relationship Strength Theory, interpersonal relationships can be categorized into strong and weak ties. Strong ties typically exist within socially homogeneous personal networks, such as friendships and family bonds. In contrast, weak ties span socially heterogeneous personal networks and may include interactions with online acquaintances or strangers engaging in temporary online communications and comments (Li & Peng, 2021).

Researchers have analyzed relationship strength based on two main approaches: one draws on the three-dimensional model of social capital, treating relationship strength as the structural dimension of social capital, while the other delves into the two dimensions of strong and weak ties within ego-centric networks to examine the factors influencing relationship strength (Yao et al., 2021).

This study focuses on analyzing the latter dimension, exploring the impact of strong and weak ties. The research findings regarding the effect of relationship strength have so far been inconclusive. For instance, some scholars argue that individuals with weak ties are more likely to acquire shared knowledge than those with strong ties (Horng & Wu, 2020). Other scholars contend that strong ties are more conducive to accepting new and individualized information, while weak ties facilitate connecting users to new groups, fostering creativity, and stimulating fresh insights (Korzynski et al. 2019). Additionally, weak ties can facilitate acquiring new external information more effectively than strong ties (Islami, Wahyuni, & Tiara, 2020).

As a result, information shared within strong relationships typically exhibits a higher degree of similarity (Yuan & Lou, 2020). However, weak ties can serve as information bridges for consumers and promote the sharing of factual knowledge because they span a wider array of relationships (Horng & Wu, 2020). Specifically, live broadcast e-commerce has further enhanced the breadth of relationships between networks and gradually extended real interpersonal communication into the online world. Individuals have weaker ties, making the role of weak ties in the transfer and expansion of explicit knowledge more prominent. The advantage of the weak ties over strong ties lies in the often less repetitive information they provide, and the cost of maintaining weak ties is lower than that of strong ties. For instance, if people know each other too well, there may be a lack of freshness or excitement akin to the happy but ambiguous phases of a romantic relationship.

While scholars have studied the influence of relationship strength on individual behavior, in the context of social networks, the mechanism of relationship strength's influence on individual behavior requires further exploration. Previous studies have affirmed that the level of relationship strength can, to a certain extent, affect the credibility of information, thereby influencing consumers' purchase intentions (Islami et al., 2020). In strong relationships, since the information sender comprehensively understands consumers' personal preferences and needs, this relationship tends to reduce the impact of consumer involvement on word-of-mouth communication (Li & Peng, 2021). Moreover, scholars have found that, under equal levels of involvement, weak ties can yield a more substantial word-of-mouth influence (Bansal & Voyer, 2000; Horng & Wu, 2020). This study posits that recommenders comprehend consumers' preferences and needs in a strong relationship, thereby diminishing consumer involvement to some extent. Building on the aforementioned analysis, this paper presents the following hypotheses:

Based on the above, this paper contends that the strength of the relationship in KOL live commerce may influence consumer satisfaction among those who continue to view content. Therefore, the following assumptions are formulated:

H3: The strength of the relationship between the anchor and the audience moderates the relationship between the continued viewing and purchase intention.

Based on the relationship strength theory, this research delves into the design of e-commerce live streaming’s viewership continuity and proposes a research architecture diagram. Measured by the aspects of KOL live commerce, audience personality, continuance watching, and purchase intention, explore the influence among variables, summarize the above research hypotheses, and organize them as shown in Figure 1.

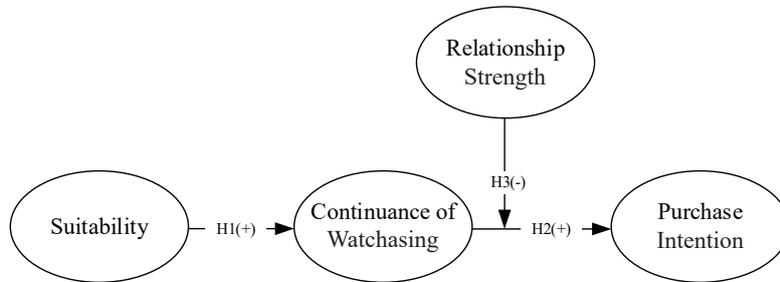


Figure 1 The Theoretical Framework of the Research

Methodology

Questionnaire and Measures

In order to test the research hypothesis mentioned above, this study operationalizes the conceptual framework and constructs related questions. Within the research framework, this research primarily discusses the following items: suitability, continuance watching, and purchase intent, and describes the operational definition and measurement tools of each construct. According to Yang (2021), the scale of suitability is modified according to the research purpose of this paper, and the four items of suitability are, respectively; the continuance watching is based on the viewpoint of Gupta et al. (2020), and the scale is modified according to the research purpose of this paper, with a total of 4 items to measure; purchase intention is based on the viewpoint of Pornsrimate and Khamwon (2020), and the scale is modified to match the research purpose of this paper, with a total of 3 items to measure; relationship strength is based on the viewpoint of Yang (2021), in line with the research of this paper. Objective to revise the scale and measure the items with a total of 4 items. All items are measured with a five-point Likert scale, ranging from “1 strongly disagree” to “5 strongly agree”.

Materials and Methods

An overview of Key Opinion Leader (KOL) groups in Thailand’s social network landscape categorizes them into three distinct segments:

- **Celebrity:** Renowned individuals such as A-list singers and actors boasting substantial fan base and considerable societal influence. For example, Superstar Online by Yui Chinranan.
- **Influencers:** These figures wield influence across diverse domains on social media. Not limited to entrepreneurs, they span singers, bloggers, comedians, and any online user capable of exerting influence. For instance, Pimrypie Sell everything.
- **Micro-Influencers:** Exerting influence within niche customer groups, micro-influencers actively share content from celebrities and influencers to promote brands. For instance, Makeeshop, Fashion clothes by Polyyclothes.

Research Results

After collecting questionnaires in this study, invalid questionnaires were removed after reviewing the responses. Data analysis was conducted using AMOS, and the research hypotheses were validated through empirical data analysis.

Samples and Sampling

This study utilized data from questionnaire surveys conducted in Thailand. The research sample included respondents who had previously watched live webcasts. The questionnaires were distributed through an Internet-based Google Form using convenience sampling, with respondents who hadn't watched webcasts excluded. A total of 38 respondents were included, resulting in 251 valid questionnaires.

This study will examine and discuss the primary data of the returned samples. In order to understand the structure of the sample of respondents, frequency distribution and percentage frequency distribution are used to analyze gender, age, and income, as well as to watch a live video recently, play in the broadcast, or have a live broadcast. The results of the platform that you often follow are shown in Table 1.

In this survey, there were 42 males, comprising 16.7% of the respondents, and 209 females, accounting for 83.3%. The majority of respondents were female. Regarding age, the largest group, 222 respondents, fell within the 20-30-year-old category, representing 88.4%. The age group over 40 constituted the smallest segment, with 16 respondents, or 6.4%. In terms of monthly income, 195 respondents earned between 30,001-50,000 yuan, constituting 77.7% of the sample, while 42 respondents earned less than 15,000 yuan, representing 16.7%. The category with incomes ranging between 15,001 and 30,000 yuan had the lowest representation, at 5.6%. There was minimal variation in the regency of live video viewing, with the highest number of respondents, 85, having watched approximately three days ago, accounting for 33.9%. The second-largest group, 56 respondents, had watched about a year ago, representing 22.3%.

Table 1 Demographic Characteristics of Respondents (N=251)

Demographic Profile	Number	Percentage (%)
Gender		
Male	209	83.3
Female	42	16.7
Age		
<20	16	6.4
20-30	222	88.4
31-40	8	3.2
41>	5	2
Incomes(B)		
<15,000	42	16.7
15,001-30,000	14	5.6
30,001-50,000	195	77.7

Table 1 Demographic Characteristics of Respondents (N=251) (Con.)

Demographic Profile	Number	Percentage (%)
When did you watch the live video recently?		
About 1 week ago	24	9.6
About 1 year ago	56	22.3
About 3 days ago	85	33.9
About half a month ago	48	19.1
About half a year ago	38	15.1
What role do you play in the broadcast?		
Audience	162	64.5
Consumers	91	35.5
Do you have a live broadcast platform that you often follow?		
Yes	103	41
Non	148	59

Measurement Model

Validity refers to the correctness and accuracy of the measurement results obtained from the questionnaire. A validity analysis helps us determine whether the scale can accurately measure the characteristic attributes of the object being measured. Higher validity indicates that the measurement results more accurately represent the fundamental nature of the object being studied.

For this study, the content of each aspect of the questionnaire was derived from relevant papers and literature, and a prediction-independent sample T identification was conducted. The questionnaire used in this study was translated from English to Thai. After language modification and discussions with five professors, the questionnaire's wording was refined to enhance clarity and specificity. It was then further modified based on suggestions from English experts and scholars to create the final formal questionnaire. As a result, the questionnaire is valid in terms of both content and form.

The reliability and validity of the 45 valid questionnaires collected during the pre-test were assessed using factor analysis. As shown in Table 2, each item has a factor loading above 0.5, and the explained variation is reasonably distributed. Additionally, the Cronbach's α value for each aspect is above the 0.7 standard. This indicates that the questionnaire, consisting of 58 items covering the demand for tourist information, word-of-mouth communication, image information, and behavioral intent, meets the required reliability levels. Questions PT1 and PT3 were removed, ensuring consistency and stability in each aspect (refer to Table 2). This questionnaire can be employed as the official survey instrument in subsequent research.

Table2 Item Analysis and Scale Reliability

Independent Variables	RS	ST	CW	PT
Number of Item(s)	4	4	4	3
Cronbach's Alpha if item deleted	.787	.892	.855	.878
Number of Item(s)	4	4	4	3
Cronbach's Alpha	.787	.892	.855	.878

Source: RS=Relationship; ST=Suitability; CW=Continuance of purchasing; PT=Purchase intention.

* $p < .05$; ** $p < .01$; *** $p < .001$.

The measurement model was estimated by calculating individual loadings, composite reliability scores, Cronbach's alpha, and average variance extracted (Luo et al., 2019) (as summarized in Table 1). Individual item loadings were assessed against the recommended threshold of 0.7 to evaluate the reliability of each item. Following this assessment, three items were excluded from the analysis. Table 3 displays the individual item loadings for the final set of measurement items, all of which exceed 0.7, indicating satisfactory internal reliability (Chin, 1998).

Cronbach's α reliability coefficient was utilized in this study to test the questionnaire's reliability. Table 7 demonstrates that Cronbach's α reliability coefficient for KOL and live product suitability, continuity of watching, and purchase intention dimensions surpass 0.7, indicating strong reliability for these three constructs. The face-to-face reliability is deemed acceptable, confirming that this study's questionnaire exhibits sufficient reliability and strong internal consistency (Bagozzi & Yi, 1988).

Factor analysis was performed on the suitability, continuity of watching, and purchase intention regarding KOL and live broadcast products. Before conducting further analysis, it is crucial to confirm a certain level of correlation between the variables. The results indicate a good cohesive effect among the factor facets, making them representative of the constructs.

All constructs underwent a reliability analysis using Cronbach's alpha to assess the consistency of items within each construct. According to Ledesma et al. (2002), higher values of Cronbach's alpha indicate greater internal consistency and reliability. As per Khalid et al. (2012) reliabilities in the range of 0.70 are acceptable, while values over 0.80 are considered good. The analysis involved 5 independent variables (ST, RS, PT) and 2 dependent variables (CW and PT).

Reliability tests using Cronbach's Alpha for all seven variables were conducted in SPSS. For the variable RS, the reliability coefficient was found to be 0.787, indicating reliability. ST showed a coefficient of 0.892, signifying very high reliability. The subsequent variable, CW, demonstrated a coefficient of 0.855, representing a high level of reliability, and PT exhibited a coefficient of 0.878, indicating good reliability as well. Overall, the reliability assessment for all seven variables was valid and holds promise for subsequent statistical tests.

The Average Variance Extracted (AVE) was computed to evaluate convergent validity. AVE values for all factors exceeded 0.6, indicating that more than 60% of the variance in the indicators could be attributed to the latent variables. This level of validity is considered acceptable, aligning with the recommended AVE threshold of greater than 0.5 (Fornell & Larcker, 1981).

AVE was also employed to assess discriminant validity, testing whether each construct is distinct from others. According to Fornell and Larcker (1981) criteria, for satisfactory discriminant validity, each construct should have higher correlations within its own construct than others. The results (as shown in Table 3) reveal that the diagonal elements (representing the square root of AVE extracted between constructs and their measures) are greater than the off-diagonal elements (correlations among constructs), indicating a reasonable level of discriminant validity.

Structural Model and Hypothesis Testing

The purpose of confirmatory factor analysis (CFA) is to assess the correlations among research variables within the theoretical framework and the applicability and validity of the factor structure, and to examine the reliability and convergence of measurement items within each dimension: test validity and discriminant validity. For each hypothesis in this study, we employed CFA to examine the factor loadings of each variable and assess the hypothesized correlations among variables.

Structural equation modeling (SEM), also known as linear structural relationship modeling or covariate structural analysis, is a statistical technique designed to analyze patterns of causal relationships. SEM's primary goal is to test relationships between latent and observed variables and the causal links between multiple latent variables, taking error variables into account. SEM integrates latent and observed variables, measurement and structural models, factor analysis, and path analysis. The measurement model's primary aim is to establish the relationship between latent and observed variables.

We primarily assessed the measurement model's validity through CFA. The structural model, on the other hand, examines causal pathways among latent variables and conducts path analysis to evaluate the suitability of the structural model (as depicted in Figure 2). This study performed factor analysis as part of the verification process to test discriminant validity among factors, testing four-factor models (as displayed in Table 4). The results indicate that the first model among the assumed four-factor models provides the best fit to the data (i.e., $\chi^2 = 162.92$, $\chi^2/df = 1.94$, CFI = 0.96, AGFI = 0.88, RMSEA = 0.06, SRMR = 0.06).

Furthermore, SEM can simultaneously analyze a series of interconnected dependencies and is a statistical model that presents relationships between analytical variables in multiple linear models. In this study, SEM was used for data analysis to explore causal relationships between variables and to test the validity of our hypotheses. Using AMOS for analysis, the conceptual model was assessed via SEM, resulting in two models (as illustrated in Figure 3).

All two comparative indices (CFI and AGFI) in the SEM model exhibited values exceeding 0.90, indicating a good fit for the model (Fan & Sivo, 2007). RMSEA and SRMR displayed values greater than 0.08 and less than 0.08, respectively, reflecting a superior fit compared to the conceptual model. Consequently, considering each index's assessment, model 1 demonstrated a superior overall fit (i.e., $\chi^2 = 93.96$, $\chi^2/df = 2.24$, CFI = 0.97, AGFI = 0.90, RMSEA = 0.07, SRMR = 0.05). The model's overall fit, as indicated by these indexes, was considered satisfactory, providing a solid foundation for evaluating individual hypotheses (as shown in Table 5).

Moderating Effect

Jones and Reynolds (2006) employed hierarchical moderating regression analysis to assess the moderating impact of relationship strength on the link between the continuation of watching and purchase intention.

As presented in Table 6, this study initially estimated a regression equation, Model 1, incorporating gender and age as control variables. In Model 3, purchase intent served as the dependent variable, and continuance of watching was the independent variable. Additionally, the control variable encompassed relationship strength. In Model 3, an assumed interaction was introduced: the continuance of watching × relationship strength interaction yielded a positive and statistically significant result ($\beta = -0.928, t = -2.287, p = 0.023$). These findings suggest that the influence of relationship strength on the continuance of watching intensifies with an increase in relationship strength. These results provide partial support for H3.

As is evident from Table 7, in H1, the suitability of KOL live broadcast products is indicated by a β value of 0.676 in relation to continuance watching, indicating a significant positive impact. This suggests that the suitability of KOLs and products in live broadcasts positively affects continuance watching.

Regarding H2, the β value for audience continuance watching of live broadcasts in relation to continuance watching is 0.628, displaying a significant positive effect (as seen in Figure 4).

Table 3 Discriminant Validity and the Factor Loading Cronbach’s α , CR, and AVE for Convergent Validity (CFA Model)

Constructs / Indicators	Mean	Std.	1	2	3	4	α	CR	AVE
Relationship (RS)	3.79	.66	.86				.74	.90	.74
Suitability (ST)	2.79	1.00	.32**	.77			.85	.86	.60
Continuance of purchasing (CW)	3.22	.90	.40**	.59**	.75		.84	.84	.57
Purchase intent	3.39	1.03	.35**	.37**	.57**	.88	.91	.91	.77

Source: * is significant at the 0.05 level (2-tailed).
 ** is significant at the 0.01 level (2-tailed).
 *** is significant at the 0.001 level (2-tailed).

Table 4 Confirmatory Factor Analysis Results of Discriminant Validity of Each Variable (Hu & Bentler, 1999)

Goodness of Fit Index	χ^2	df	$\Delta\chi^2$	Δdf	χ^2/df	CFI	AGFI	RMSEA	SRMR
Level of acceptable fit	< 3					> .90	> .90	< .08	< .08
Model 1 Four factors	162.92	84			1.94	.96	.88	.06	.06
Model 2 Three factors	314.88	87	151.96***	3	3.62	.88	.77	.10	.07
Model 3 Two factors	628.53	89	465.61***	5	7.06	.71	.60	.16	.10
Model 4 One factors	766.89	90	603.97***	6	8.52	.63	.54	.17	.12

Source: * is significant at the 0.05 level (2-tailed).
 ** is significant at the 0.01 level (2-tailed).
 *** is significant at the 0.001 level (2-tailed).

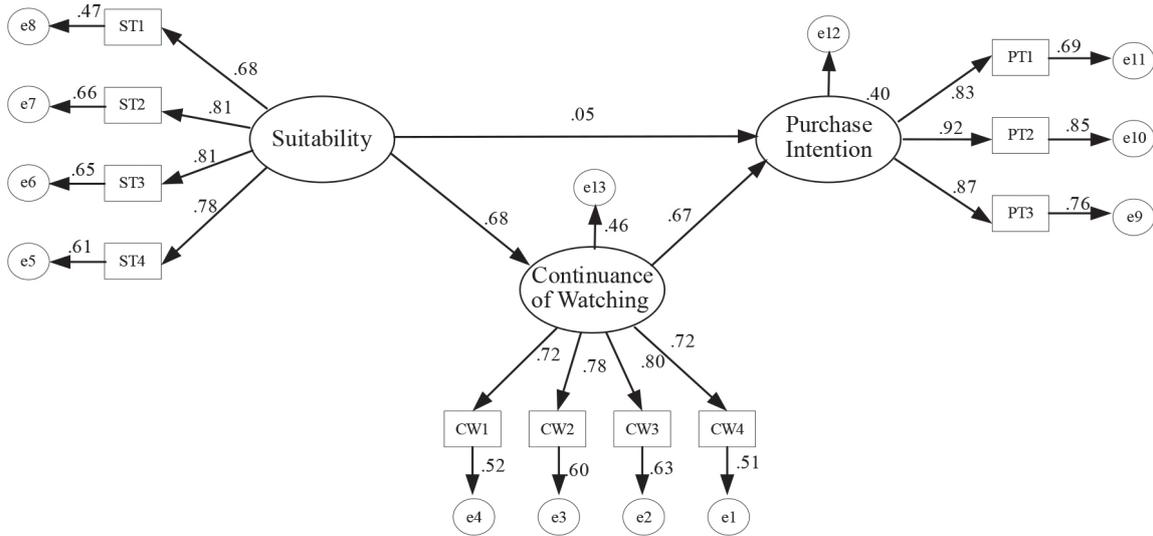


Figure 2 Structural Equation Model Analysis

Table 5 Structural Equation Model Analysis Results of Each Variable Distinguishing Fit (Hu & Bentler, 1999)

Goodness of Fit Index	χ^2	<i>df</i>	$\Delta\chi^2$	Δdf	χ^2/df	CFI	AGFI	RMSEA	SRMR
Level of acceptable fit	< 3					> .90	> .90	< .08	< .08
Model1	93.96	42			2.24	.97	.90	.07	.05
Model2	93.72	41	.24	1	2.29	.97	.89	.07	.05

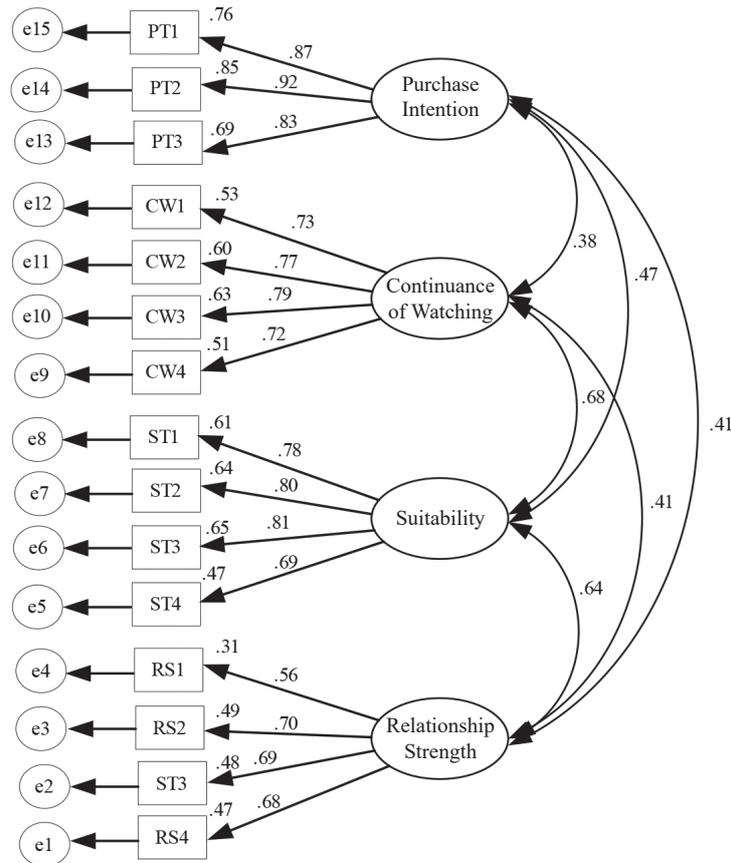


Figure 3 Confirmatory Factor Analysis (CFA) Framework

In the context of H3, which examines how relationship strength affects purchase intent when audiences continue watching KCOL live broadcasts, the regression analysis yields a β value of -0.928 for audience purchase intent and continuance watching \times relationship strength. This outcome signifies a significant positive impact, indicating that relationship strength moderates the influence of continuance watching on purchase intention (as depicted in Figure 5).

Conclusions

This study formulated hypotheses to investigate the influence of KOL live broadcasts on viewer suitability, continuance watching, and purchase intent. The findings are as follows:

Hypothesis 1 (H1): KOL live broadcast suitability has a positive and significant impact on continuance watching. This confirms the existence of an influential relationship.

Hypothesis 2 (H2): Continuance watching positively influences purchase intent, with a significant impact, indicating an influential relationship.

Hypothesis 3 (H3): Relationship strength exerts a strengthening effect on the connection between continuance watching and purchase intent, with a significant impact. Thus, a significant impact relationship exists for Hypothesis 3.

Online live broadcasting is experiencing tremendous growth, with the rising prominence of KOLs, who have made their mark through live broadcasts. Even manufacturers are seeking partnerships with well-known KOLs to leverage live broadcasting as a means to reach a wider

audience for their products. This trend is gaining traction in emerging economies. Consequently, this study aims to explore the suitability of KOL live broadcasts on live streaming platforms and its impact on continuance watching and purchase intent. Additionally, it delves into whether the strength of the relationship between KOLs and their audience affects continuance watching and purchase intent during live broadcasts. The results of this study reveal the following:

Positive Impact of KOL Live Broadcast Suitability on Continuance Watching: When KOLs are deemed suitable for the products they promote, consumers develop confidence in the information, products, and purchasing decisions. As the suitability factor strengthens, viewers are more inclined to continue watching. When consumers perceive a high degree of suitability in KOL live broadcasts, they often discover products they like, leading to continued viewing. Higher suitability between KOLs and products correlates with increased continuance watching. For instance, consider the case of an anchor known for makeup expertise and a sophisticated appearance who primarily sells second-hand luxury accessories. The audience tends to trust her vision and product recommendations. Similarly, a fashion clothing review anchor, known for her beauty, engaging communication style, and humorous and friendly demeanor, predominantly sells daily wear clothing.

Positive Impact of Continuance Watching on Purchase Intent: The research results demonstrate a positive correlation between continuance watching and purchase intent. In other words, higher continuance watching scores are associated with greater purchase intent. As viewers continue watching live broadcasts, this further drives payments, sponsorships, and subscriptions as viewers seek to support their favorite KOLs.

These findings highlight that KOLs are an effective means to retain viewers and increase purchase intent, especially when the suitability of KOLs and products aligns with viewers' preferences. The more suitable and engaging the live broadcast, the more likely viewers are to stay engaged and invest in their favorite KOLs on the current live streaming platform.

Affected by Relationship Strength Adjustment

The results indicate that varying levels of relationship strength influence the source credibility of the moderator on purchase intention, demonstrating significant distinctions. These findings align with previous research (Yang, 2021; Yao et al., 2021), which found that source credibility, whether in a strong or weak relationship, significantly affects purchase intention. Notably, the impact of a strong relationship is more pronounced than that of a weak one, corroborating earlier studies (Korzynski et al., 2019).

Regarding information usefulness, it's observed that different relationship strengths do not yield significant moderator differences. Nevertheless, information usefulness in strong relationships exerts a significant impact. This result diverges from previous literature (Fu et al., 2022).

Table 6 Results for Mediated Regression Analysis

The Moderating Effect of Relationship Strength Between Continuance of Purchasing and Purchase Intent			
Item	Model 1	Model 2	Model 3
Age	-1.232	-.061	-.078
Gender	-.768	-.058	-.062
Continuance of purchasing		.506***	1.196***
Relationship strength		.151**	.545**
Continuance of purchasing x Relationship strength			-.928*
R^2	-1.089	.589	.601
ΔR^2	-1.008***	.347	.361
F -value	1.001	32.676***	27.637***

Source: * is significant at the 0.05 level (2-tailed)

** is significant at the 0.01 level (2-tailed)

*** is significant at the 0.001 level (2-tailed)

Table 7 Hypothesis Testing

Hypothesis	Relationship	Estimate	t	P-Value	Results
H1	Continuance of watching ← Suability	.676	8.391	***	Supported
H2	Purchase intention ← Continuance of watching	.628	8.030	***	Supported

Source: * is significant at the 0.05 level (2-tailed).

** is significant at the 0.01 level (2-tailed).

*** is significant at the 0.001 level (2-tailed).

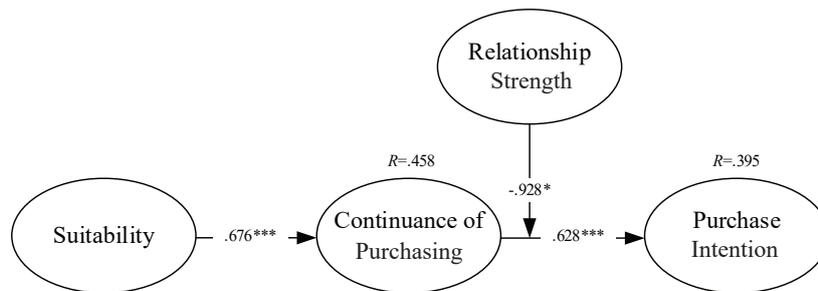


Figure 4 Analysis Results

Source: * is significant at the 0.05 level (2-tailed)

** is significant at the 0.01 level (2-tailed)

*** is significant at the 0.001 level (2-tailed)

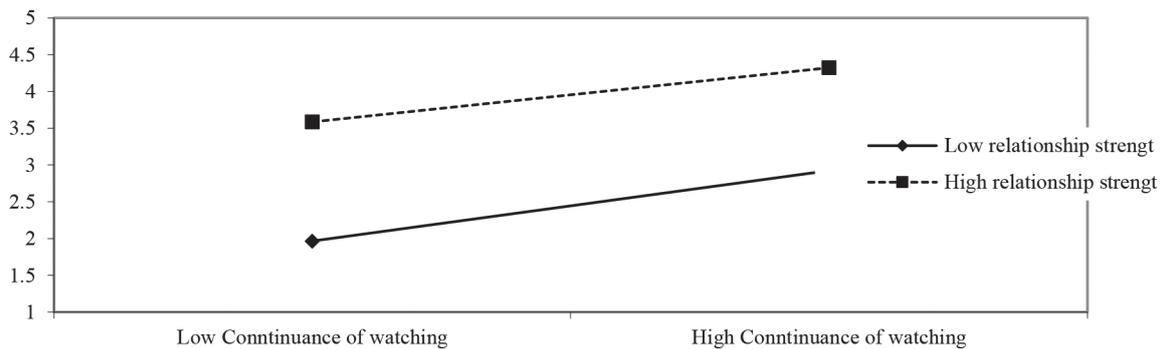


Figure 5 Interactive Effects of Continuance Watching and Relationship Strength on Employee Purchase Intent

It is posited that information recipients often find value in the information offered by strangers but may not be swayed towards consumption or abstention.

The results concerning attitudes toward comments also reveal significant moderator differences related to different relationship strengths. Notably, weak social relations significantly influence outcomes, whereas strong social relations lack a significant effect. This study suggests that source credibility is the primary factor influencing purchase intent, rendering it less impactful concerning attitudes toward reviews.

The research findings herein validate the theory of weak ties, which posits that compared to strong ties, weak ties exhibit extremely rapid, potentially cost-effective, and highly efficient propagation efficiency (Granovetter, 1973).

As per the research results, the strength of the relationship between the anchor and the audience exerts a strengthening effect on purchase intention. This implies that regardless of whether the anchor and the audience share a strong or weak relationship, their support, such as watching, active buying, and reposting during live broadcasts, may not waver. Familiarity with the host of the live broadcast strengthens this bond.

Theoretical Implications

This study integrates factors influencing purchase intention with the continuity of watching within the comprehensive framework of KOL live broadcasting influence. While past research has emphasized the significant impact of continuity of watching on purchase intention, our findings introduce a moderating factor in the form of relationship strength. This relationship strength moderator, however, may have adverse effects. Beyond the factors discussed, other influences may affect audience decision-making, thereby highlighting the need for further exploration.

In line with previous studies, we conclude that the relationship strength moderator indeed influences the continuity of watching. Importantly, we find that under the weak social relationship moderator, unfamiliar KOLs may exert a more significant impact on live broadcast recommendation purchases than familiar KOLs, including friends and family.

Practical Implications

Based on the study’s comprehensive results, it is evident that audiences with “weak” relationship strength exert a more substantial influence on continuity of watching compared to audiences with “strong” relationship strength. In the realm of live marketing, solid social relations among audiences enhance the effectiveness of live broadcasts. This suggests that leveraging

social media for live marketing, capitalizing on interpersonal connections, not only augments influence but also reduces costs. This strategy can attract users who share common interests and seek familiarity but are yet to discover the information, drawing them to watch live broadcasts.

Managerial Implications

Merchants are advised to bolster consumer relationship marketing efforts, leveraging strong relationship recommendations to alleviate consumer risk perception and increase willingness to purchase. Third-party online shopping platforms should provide specific foundational platforms and guarantees, such as creating relationship-based shopping channels, to enhance their marketing strategies. Merchants could offer exclusive discounts when viewers with strong relationships shop through KOL live broadcast recommendation channels. This approach reduces the time costs associated with online searches, mitigates choice anxiety, and ultimately results in increased orders and additional profits. Merchants should enhance their website construction and product information descriptions for more efficient consumer engagement. Furthermore, tailored marketing activities for different products to boost purchase intentions are recommended. For the suitability of KOL live broadcasting:

- The host should possess unique characteristics. In a fiercely competitive live broadcast market, standing out necessitates enthusiasm during broadcasts and active audience interaction. By creating an immersive experience for viewers, the host can differentiate themselves, make a lasting impression, and pique audience interest to prolong viewership.

- Creating a sense of presence for viewers is crucial. Live broadcasts thrive on their proximity to the audience, which involves expressing concern and empathy. Establishing trust and satisfaction through audience engagement enhances the live broadcast experience. As viewers participate and support their favorite live broadcasters, they are more likely to engage in various forms of support, such as payments, sponsorships, and subscriptions.

Limitations and Further Study

Due to practical limitations, this study may only partially align with the assumptions of statistical analysis. Limitations include:

1. Age Limitation of Research Subjects: The research was designed for consumers who have watched live broadcasts, with the majority of subjects falling within the 21 to 30 age range. Consequently, the study only covers specific age groups.

2. Research Tool Limitations: This study employed online questionnaires for data collection, offering advantages such as flexibility in timing and location. However, it also has limitations, as the online platform user pool is confined to a specific demographic, rendering random sampling inadequate for reflecting all consumers' opinions.

3. Questionnaire Vulnerability: The respondents' questionnaire responses may be influenced by various external factors, including environmental conditions and personal emotions, leading to discrepancies between test results and real-world situations, thus introducing errors.

4. Singular Data Collection Method: The reliance on a single data collection method and the sample size constraints suggest that future research should employ multiple data collection approaches.

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