

Tourism live streamers as brand ambassadors: investigating their impact on destination brand value through social exchange theory

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Abstract

Purpose – This study aims to identify the key characteristics of tourism live streamers (TlSers) that influence target consumers and examine how these characteristics enhance destination brand value by stimulating consumer emotional engagement and value co-creation behaviors.

Design/methodology/approach – A questionnaire survey was conducted with 552 respondents who had viewed tourism live streaming in China. The data were analyzed using structural equation modeling.

Findings – The results revealed that TlSers' expertise had the strongest influence on consumers and positively affected their attachment, trust, participation and citizenship behaviors and perceived destination brand value. Attractiveness and trustworthiness exerted positive but weaker effects on these variables.

Originality/value – This study contributes to the theoretical development of live-streaming research by demonstrating the distinct impacts of TlSer characteristics. Furthermore, this study expands the application of the social exchange theory and value co-creation in tourism research.

Keywords Value co-creation, Social exchange theory, Tourism live streaming, Destination brand value, Live streamer characteristics

Paper type Research paper



旅游直播主作为品牌大使：通过社会交换理论调查其对目的地品牌价值的影响

摘要

研究目的 – 本研究旨在确定影响目标消费者的旅游直播主 (TlSers) 的关键特征, 并检验这些特征如何通过激发消费者情感参与和价值共创行为来增强目的地品牌价值。

研究方法 – 对在中国观看过旅游直播的552名受访者进行了问卷调查, 采用结构方程建模分析数据。

研究发现 – 研究显示, TLSers的专业知识对消费者影响最大, 并积极影响他们的情感依恋、信任、参与和公民行为, 以及感知的目的地品牌价值。吸引力和可信度对这些变量的影响较弱但也是积极的。

研究创新 – 本研究通过展示TLSer特征的独特影响, 对直播研究的理论发展做出了贡献。此外, 本研究扩展了社会交换理论和价值共创在旅游研究中的应用。

关键词 目的地品牌价值, 旅游直播, 直播主特征, 社会交换理论, 价值共创

文章类型 研究型论文

1. Introduction

Live streaming is a transformative force in modern communication and has reshaped consumer engagement in real time (Hua *et al.*, 2023; Zhang *et al.*, 2020). Tourism live streamers (TLSers) are leading the interactive wave and significantly influencing the decision-making of potential tourists (Liu *et al.*, 2024; Lv *et al.*, 2022; Zhang *et al.*, 2024). Despite their growing influence, the tourism live streaming (TLS) domain faces a pronounced “Matthew effect,” in which most new or lesser-known TLSers are overshadowed (Guo *et al.*, 2022). This issue is exacerbated by the high homogeneity among live streamers because of the lack of understanding of distinctive live streamer characteristics in TLS (Liu *et al.*, 2021; Zhang *et al.*, 2022a). The absence of distinctive TLSer characteristics hinders the effective differentiation and promotion of unique destination brands, negatively impacting destination brand value (Xie *et al.*, 2022). If TLSers fail to showcase a destination’s unique aspects because of a lack of distinctive presentation style, consumers may perceive the destination as generic or unappealing, diminishing its brand value. In contrast, TLSers with distinctive characteristics, who have broad influence and transformative potential, can significantly enhance a destination’s appeal (Liu *et al.*, 2021).

Previous research has demonstrated that unique perceived live streamer characteristics induce consumer emotions and promote engagement behaviors. For instance, perceived attractiveness cultivates emotional attachment (Li and Peng, 2021) perceived trustworthiness fosters consumption (Park and Lin, 2020) and perceived expertise promotes viewing (Guo *et al.*, 2022). TLSer characteristics can transform consumers from passive information recipients into active participants (Diaz *et al.*, 2023; Lee *et al.*, 2021), thereby enhancing live content and generating visit intentions (Hua *et al.*, 2023; Lee *et al.*, 2023). For example, Mark, an Irish host who conducts TLS on Airbnb, has received numerous positive reviews from consumers who were captivated by his engaging storytelling and unique presentation of Ireland’s history, culture and attractions. One reviewer commented, “Mark was a terrific host for our company’s virtual tour of Ireland. He showcased the country’s remarkable history, culture, and sites. I was personally inspired to plan a visit to Ireland in the coming years” (Airbnb, 2022). This example illustrates the potential of TLSers with distinctive characteristics to enhance a destination’s appeal and stimulate travel intentions.

Although previous studies investigated the impact of live streamer characteristics on consumer perceptions and behaviors, they have primarily focused on the retail and entertainment domains (Kim and Kim, 2021; Park and Lin, 2020). The TLS environment differs from these domains in several key aspects. First, as tourism is an experiential product, the manner in which TLSers present and engage with destination-related content can significantly shape viewers’ perceptions and expectations of the destination experience (Hua *et al.*, 2023). In contrast, retail and entertainment live streaming often focuses on tangible products or short-term gratification. Second, TLSers often require comprehensive knowledge and expertise about the destinations they showcase, as they are responsible for presenting and interpreting the cultural, historical and experiential aspects of the

destination to their consumers (Deng *et al.*, 2022; Xie *et al.*, 2022). This level of expertise may be less critical in retail or entertainment live streaming, where the focus is typically on product features or instant entertainment value (Wongkitrungrueng and Assarut, 2020). Finally, the emotional attachment and perceived value that consumers develop toward a destination through TLS can have long-lasting effects on their travel intentions and behaviors, whereas the impact of retail or entertainment live streaming may be more transient (Lin *et al.*, 2022). Thus, directly applying findings from other live streaming domains to TLS may not adequately capture the unique dynamics and impact of TLSer characteristics on destination brand value, necessitating an investigation in the tourism context. This study aims to address this research gap by answering the following questions:

RQ1. What key TLSer characteristics influence target consumers in the TLS context?

RQ2. Through what mechanisms do these characteristics enhance destination brand value?

To answer these questions, this study used the social exchange theory (SET) and value co-creation concept as the theoretical framework. The SET emphasizes that individuals build and maintain relationships through the reciprocal exchange of resources (Kim and Kim, 2021), whereas value co-creation suggests that reciprocal interaction creates new value for stakeholders (Zhang, 2019). This study posited that favorable TLSer characteristics resonate with consumer needs and prompt reciprocal emotional and behavioral commitment (Hua *et al.*, 2023). This symbiotic dynamic prompts a value co-creation process, where live streaming platforms become collaborative forums and consumers transform from passive to active supporters of the destination brand narrative. This enhanced sense of participation and belonging can continuously expand consumers' awareness of the destination brand value (Junaid *et al.*, 2020), thereby consolidating the destination's position in the competitive tourism industry landscape (Stojanovic *et al.*, 2022).

This study offers several significant contributions to the existing literature. First, it addresses the research gap on essential TLSer characteristics. Second, by introducing the SET and the concept of value co-creation, this study broadens the theoretical foundation of this emerging field. Third, this study distinguishes value co-creation behaviors into two second-order constructs: participation and citizenship behaviors. This provides nuanced insights into the types of consumer behaviors that can augment brand value, thereby deepening our understanding of value co-creation. Fourth, this study offers destination marketing organizations (DMOs) actionable guidelines for selecting suitable TLSers, thereby aiding in attracting target consumer groups.

2. Literature review

2.1 *Tourism live streamer characteristics*

TLSers, from celebrities to ordinary individuals, create and share destination-related experiences on live-stream platforms (Deng *et al.*, 2021; Xie *et al.*, 2022). This study categorized the TLSer characteristics into three key dimensions: attractiveness, trustworthiness and expertise. This categorization was informed by the source credibility model, which refers to the listeners' impression of the speaker (Kim and Kim, 2021) and is widely applied to scrutinize the qualities of endorsers (Chen *et al.*, 2022a).

Attractiveness is related to physical appeal, which refers to the extent of the viewers' likeability toward the TLSer (Heo *et al.*, 2020; Park and Lin, 2020). Trustworthiness encapsulates the viewers' perceptions of a TLSer's honesty and objectivity (Heo *et al.*, 2020; Li and Peng, 2021), which is crucial for maintaining a lasting viewer relationship. Expertise,

symbolizing a TLSer's domain knowledge, including insights into tourist locations and cultures, significantly affects their persuasiveness (Guo *et al.*, 2022). These characteristics mold viewers' perceptions of TLSers (Heo *et al.*, 2020) and influence their engagement with live content (Hua *et al.*, 2023).

Prior studies have underscored the critical role of TLSer characteristics in value co-creation (Liu *et al.*, 2021; Xie *et al.*, 2022); however, existing studies have not explicitly identified which personal characteristics of TLSers are the most important drivers of consumer value co-creation behavior.

2.2 Co-created value with tourism live streamers: a social exchange perspective

2.2.1 Social exchange theory. Cropanzano and Mitchell (2005) introduced the SET as a framework for understanding social behavior and interpersonal relationships. The SET focuses on the principle of reciprocity, which suggests that actions depend on others' responses, leading to long-term interaction and relationships (Homans, 1958). The SET posits that social interactions are driven by resources that participants desire (Gouldner, 1960). These resources can range from tangible economic benefits (Cropanzano and Mitchell, 2005) to intangible and symbolic support, such as social recognition, emotional support and self-esteem (Kim and Kim, 2021).

However, previous research on the SET in live-streaming contexts has focused primarily on tangible exchanges, such as live streamers providing information and interaction in exchange for consumers' purchase intentions (Zhang *et al.*, 2021). This discourse omits a detailed examination of consumers' intangible and symbolic support, which is integral to live streamers' sustenance. Such non-monetary support is pivotal in the interactive environment of live streaming, as consumer participation not only garners viewership but can also precipitate a virtuous cycle of increased platform traffic, thereby yielding economic advantages for both live streamers and brands (Lv *et al.*, 2022).

Drawing on the SET, this study posited that TLSers offer specific characteristics as intangible resources that meet target consumer needs. For instance, TLSers' attractiveness provides a pleasant viewing experience (Dang-Van *et al.*, 2023), trustworthiness helps reduce decision-making risks (Xu *et al.*, 2022) and expertise improves knowledge acquisition and time-saving in decision-making (Ma, 2021).

In exchange, TLSers receive emotional support, including attachment and trust, and value co-creation behaviors from consumers (Hua *et al.*, 2023). This reciprocal exchange of resources between TLSers and consumers fosters an enduring and mutually beneficial relationship. This process aligns with Homans's (1958) postulation that social behavior among individuals is fundamentally an exchange of (non-)material goods, wherein actors endeavor to achieve a state of equilibrium between their contributions and the ensuing reciprocations.

Therefore, the SET provides a suitable theoretical lens to investigate the role of intangible consumer contributions in the TLS context. It highlights the significance of non-monetary exchanges in shaping consumer engagement, which has been under-explored in previous live-streaming research. This study used the SET to obtain a comprehensive understanding of the reciprocal relationship between TLSers and consumers and how it creates value for destination brands.

2.2.2 Value co-creation. Value co-creation, introduced by Prahalad and Ramaswamy (2004), emphasizes dynamic interactions between firms and consumers. Value co-creation behavior describes consumers' positive actions, which can be divided into participation and citizenship behaviors (Yi and Gong, 2013). Participation refers to responsible actions geared toward successful service delivery (Ennew and Binks, 1999), including information seeking, information sharing, responsible behavior and personal interaction (Yi and Gong, 2013). Information seeking involves consumers' search for information to clarify service requirements

and satisfy their own interests, whereas information sharing denotes providing essential information for successful service delivery. Responsible behavior relates to consumers' recognition of their duties and responsibilities in the value co-creation process. Personal interaction refers to interpersonal relationships between consumers and service providers (Yi and Gong, 2013). Conversely, citizenship behavior comprises voluntary actions that enrich the interaction, although not necessary for service delivery (Ahn *et al.*, 2019). Consumer citizenship behavior includes feedback, advocacy, helping and tolerance (Yi and Gong, 2013). Feedback pertains to solicited and unsolicited information provided by consumers to the firm to facilitate service improvements. Advocacy involves recommending the firm or employee to others. Helping refers to assisting other consumers, whereas tolerance reflects consumers' willingness to be patient when service delivery does not meet expectations (Yi and Gong, 2013). These behaviors can be considered individual resources, with helpfulness, friendliness and supportiveness construed as social-emotional resources (Tu and Ma, 2022).

In this reciprocal relationship, value is co-created as both TLSErs and consumers contribute beneficial elements to the exchange. TLSEr characteristics are forms of social capital that facilitate exchanges with consumers. In turn, consumers reciprocate by actively participating in the TLS, including information sharing, feedback and financial contributions. These active participation and citizenship behaviors enrich live content and increase the overall brand value of the destination. Consequently, the interplay between TLSEr characteristics and consumer behaviors manifests as value co-creation, which aligns seamlessly with the SET.

Therefore, this study aimed to identify how TLSEr characteristics function as resources to stimulate consumers' emotional and behavioral engagement in value co-creation, thereby affecting destination brand value. This understanding could foster a mutually beneficial triad among TLSErs, consumers and destination brands.

2.3 Hypothesis development

2.3.1 Tourism live streamers characteristics and attachment. TLSEr characteristics refer to consumers' perceptions of TLSEr attractiveness, trustworthiness and expertise. Attachment refers to the emotional bond or connection between consumers and TLSErs (Bowlby, 1977), which is a byproduct of positive interactions. Although consumers may not consciously consider this byproduct a resource for exchange, TLSErs perceive consumer attachment as an ideal socio-emotional resource, as this type of emotional support suggests that consumers engage in behaviors beneficial to the TLSEr (Teng and Tsai, 2020). Consequently, TLSErs strategically showcase their positive characteristics to cultivate emotional bonds with consumers.

Consumers tend to form strong emotional attachments to attractive live streamers (Kim, 2022), who provide consumers with a pleasurable viewing experience (Liu *et al.*, 2021; Zhang *et al.*, 2024), thereby fostering a sense of closeness. Dang-Van *et al.* (2023) discovered that consumers appreciate live streamers' beauty and tend to focus on attractive live streamers, resulting in the formation of strong emotional attachments and more time and energy investments in engaging with live streamers. Live streamer trustworthiness positively influences consumer attachment (Li and Peng, 2021). According to the findings of Kim *et al.* (2018), consumers' emotional attachment is enhanced by a celebrity's expertise. As information and knowledge are common tourist needs, including in TLS environments (Xie *et al.*, 2022), consumers may develop emotional attachments to professional TLSErs who meet their educational needs. Thus, the following hypotheses were proposed:

- H1a.* Consumers' perceived TLSEr attractiveness positively influences their attachment to the TLSErs.

H1b. Consumers' perceived TLSer trustworthiness positively influences their attachment to the TLSers.

H1c. Consumers' perceived TLSer expertise positively influences their attachment to the TLSers.

2.3.2 Tourism live streamers' characteristics and trust. Trust is an instinctive, intuitive or a feeling of reliance on an individual based on performance (Punyatoya, 2019). Trust in TLSers manifests as an emotional investment and can be considered a valuable byproduct of positive interactions between TLSers and consumers. According to the SET, individuals who provide information or resources gain respect, recognition and trust from the recipients (Homans, 1958). The costs and rewards involved in the exchange process eventually reach an equilibrium (Homans, 1958).

Attractiveness is a cost invested by influencers that enhances endorsement efficiency (Park and Lin, 2020), as it is the most easily and rapidly perceived characteristic by consumers (Guo *et al.*, 2022). The "halo effect," a cognitive bias that leads to stereotypical judgments (Wilson and Eckel, 2006), causes individuals with appealing appearances to be readily associated with desirable traits such as popularity and success (Wilson and Eckel, 2006). Consequently, consumers tend to regard attractive individuals as logical, kind and trustworthy (Kim and Kim, 2021), fostering a sense of trust. Ideally, individuals trust others because they appear trustworthy (Flores and Solomon, 1998). Heyns and Rothmann (2015) observed that followers in a business context trust leaders perceived as trustworthy. Alarcon *et al.* (2017) argued that trustworthiness is an antecedent of trust. Kim and Kim (2021) demonstrated that trust is a crucial mediator in the relationship between the characteristics of online influencers and followers' behavioral outcomes. When TLSers consistently provide content that demonstrates their expertise to consumers, they establish a feeling of trust that motivates consumers to reciprocate with loyalty and engagement (Kim and Kim, 2021). This trust-building process aligns with the reciprocity principle of the SET, which suggests that when one party provides valuable resources, the other party feels obligated to reciprocate (Cropanzano and Mitchell, 2005). In the field of tourism, Chen *et al.* (2022a) reported that the trustworthiness and expertise of online influencers engendered trust among online travelers toward information sources. Thus, the following hypotheses were proposed:

H2a. Consumers' perceived TLSer attractiveness positively influences their trust in the TLSers.

H2b. Consumers' perceived TLSer trustworthiness positively influences their trust in the TLSers.

H2c. Consumers' perceived TLSer expertise positively influences their trust in the TLSers.

2.3.3 Attachment and value co-creation behaviors. Attachment can drive user cognition, affection and behavior (Hua *et al.*, 2023). Prior research has emphasized the influence of emotional attachment in shaping value co-creation (Ge and Gretzel, 2018). This premise is rooted in the concept that consumers with a high emotional attachment to a service provider are more motivated to support them, as supportive behavior helps maintain their current relationship with the service provider (Teng and Tsai, 2020). Chiu *et al.* (2019) found that member attachment in a virtual community significantly impacted value co-creation behaviors from a common-bond perspective. Teng and Tsai (2020) demonstrated that tourists' emotional attachment to tour guides significantly influenced subsequent value

co-creation behaviors, namely, participation and citizenship. Thus, the following hypotheses were proposed:

H3a. Consumer attachment to TLSers positively influences their participation behavior.

H3b. Consumer attachment to TLSers positively influences their citizenship behavior.

2.3.4 Trust and value co-creation behaviors. Consumer trust in TLSers allows them to accept the risks involved in the live-streaming context and fosters long-term relationships, playing a crucial role in establishing value co-creation between consumers and TLSers (Liu *et al.*, 2022). When consumers trust a TLSer, they are likely to engage in value co-creation behaviors that support the TLSer, such as actively participating in the live-streaming content and providing constructive feedback (Lin *et al.*, 2022; Xie *et al.*, 2022).

Prior research has demonstrated the positive impact of trust on value co-creation behaviors in various contexts. In online communities, users who trust other members are likely to share information, develop social relationships and join discussions (Shen *et al.*, 2020). Roy *et al.* (2020) found that trust among hotel consumers boosts their participation and citizenship behaviors. This is in line with this study's framework on value co-creation, which draws from Yi and Gong (2013). Therefore, the following hypotheses were proposed:

H4a. Consumer trust in TLSers positively influences their participation behavior.

H4b. Consumer trust in TLSers positively influences their citizenship behavior.

2.3.5 Value co-creation behaviors and perceived destination brand value. Current branding research underscores the importance of understanding brand value through consumer perception (Luo *et al.*, 2020). In this study, perceived destination brand value denotes consumer perception of the destination's quality as presented by TLSers.

The perspective of trust transfer suggests that consumers' trust in TLSers may be transferred to the destination brands they recommend (Chen *et al.*, 2022b). As consumers engage in value co-creation behaviors with trusted TLSers, their trust may extend to the featured destination brands, enhancing their perceived value of those brands.

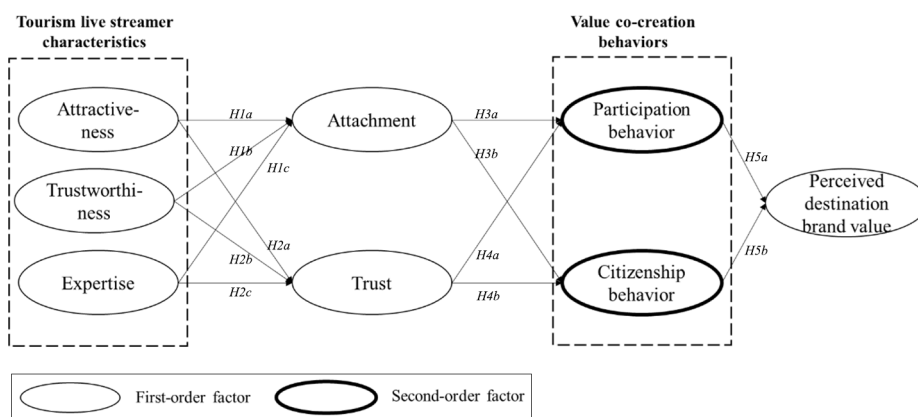
Furthermore, the emotional attachment fostered between consumers and TLSers through their interactions can lead to increased value co-creation behaviors, such as information seeking and feedback (Deng *et al.*, 2022; Zhang *et al.*, 2024). These behaviors increase perceived destination brand value and travel intention (Zhang *et al.*, 2022b; Zhang *et al.*, 2024).

Carvalho and Alves (2023) demonstrated that tourism consumers' perceived value is an outcome of active value co-creation behaviors. In the TLS setting, this can be extrapolated to the level of active participation in discussions, sharing content and contributing to the storytelling surrounding a destination. Such value co-creation activities personalize the experience, fostering a profound connection with the destination brand (Deng *et al.*, 2022), analogous to the heightened sense of value attributed to self-created products (Junaid *et al.*, 2020). Thus, the following hypotheses were proposed:

H5a. Consumers' participation behavior toward TLSers positively influences their perceived destination brand value.

H5b. Consumers' citizenship behavior toward TLSers positively influences their perceived destination brand value.

We developed a research model based on these hypotheses (Figure 1).



Source: Authors' own creation

Figure 1. Research model

3. Methodology

3.1 Measurements

The scales used in the questionnaire were derived from previous studies, with some items modified to fit this study. Four items each to measure attractiveness, trustworthiness and expertise were adopted from Li and Peng (2021); four items to measure attachment were adopted from Teng and Tsai (2020); and three items to measure trust were adopted from Wongkitrungrueng and Assarut (2020). Participation and citizenship behaviors, conceptualized as second-order reflective constructs, were measured following the methodologies of Bu et al. (2022) and Yi and Gong (2013). Both participation and citizenship behavior scales comprised 12 items in 4 dimensions (3 items each): information seeking, information sharing, responsible behavior and personal interaction for the former; and advocacy, help, tolerance and feedback for the latter. Reflective modeling is appropriate, as each dimension represents a manifestation of the underlying construct, thereby providing a comprehensive view of participation and citizenship behaviors. Perceived destination brand value was assessed using four items from Jiménez-Castillo and Sánchez-Fernández (2019). All items were scored on a seven-point Likert scale (1 = strongly disagree, 7 = strongly agree).

The original scales were translated from English into Chinese and subsequently back-translated by two PhD students in tourism studies proficient in English and Chinese. A researcher reviewed the translation results. The back-translated version closely matched the original, confirming content validity. In addition, a pretest was conducted with 82 participants who had viewed TLS in the previous month to ensure a full understanding of the questionnaire. Based on this pretest, ambiguous items were modified for optimal clarity.

3.2 Data collection and analysis

Data were collected using Wenjuanxing (www.wjx.cn), a widely used online survey company in China with a panel of 6.2 million respondents. Wenjuanxing records IP addresses to ensure that each respondent submits only one questionnaire. Respondents were required to complete real-name authentication before receiving survey completion rewards. We commissioned Wenjuanxing to collect 550 valid samples of individuals who had watched TLS in the past month, focusing on TLS conducted at destinations. Respondents received 13 CNY

(approximately 1.83 USD) worth of points in the Wenjuanxing system for participation as an incentive to encourage thoughtful and sincere responses to the questionnaire.

For the sampling process, 4,810 respondents were randomly selected to respond to a screening question (“Have you watched any TLS in the last month?”). This approach ensured the relevance of the sample to the study’s objectives. Furthermore, participants were required to provide names of the online platforms and tourist attractions featured in the live streams that they watched to validate the authenticity of their TLS viewing experiences. These details were checked to substantiate their claims, ultimately ensuring the reliability and credibility of the collected data.

In total, 600 respondents answered the screening questions and completed the questionnaires. After removing 48 responses with random selection, abnormal information or unreasonable response times, 552 valid questionnaires were retained for final analysis.

The demographic information and common method bias (CMB) were analyzed using SPSS 26.0. Normality test, confirmatory factor analysis (CFA) and structural equation modeling (SEM) were conducted by using AMOS 24.0.

4. Results

4.1 Demographic characteristics

The proportion of women (52.9%) was slightly higher than that of men (47.1%). A majority (85.7%) of the participants were between 20 and 39 years of age. Most (97.1%) participants held a bachelor’s degree or higher, and 60.3% had monthly incomes ranging from 6,001 to 12,000 CNY (US\$1 = CNY 7.29).

4.2 Normality and common method bias tests

According to the results presented in Table 3, none of the absolute skewness and kurtosis values exceeded the suggested thresholds of 2 and 7 (Curran *et al.*, 1996). This implies that there were no non-normality issues in this study. Furthermore, this study examined the CMB by applying Harman’s single-factor test. The result revealed that a single factor (28.65%) accounted for less than 50% of the variance (Podsakoff *et al.*, 2003), suggesting that the CMB was not a significant issue in this research.

4.3 Second-order analysis

This study used participation and citizenship behavior as second-order constructs for parsimony and interpretability of the results and to compare the influences of these behaviors (Gustafsson and Balke, 1993; Lee *et al.*, 2020).

As shown in Table 1, the second-order construct for participation behavior fits the model well ($\chi^2 = 78.954$, $df = 48$, $\chi^2/df = 1.645$, NFI = 0.971, TLI = 0.984, CFI = 0.988, RMSEA = 0.034; Hair *et al.*, 2010), with standardized factor loadings ranging between 0.689 and 0.803. The average variance extracted (AVE) and composite reliability (CR) values for all four factors exceeded 0.5 and 0.7, respectively, confirming convergent validity (Hair *et al.*, 2010).

As shown in Table 2, the citizenship behavior second-order construct fits the model ($\chi^2 = 71.738$, $df = 48$, $\chi^2/df = 1.495$, NFI = 0.976, TLI = 0.989, CFI = 0.992 and RMSEA = 0.030; Hair *et al.*, 2010), with standardized factor loadings ranging between 0.682 and 0.802. The AVE and CR values of all four factors exceeded 0.5 and 0.7, respectively, confirming convergent validity (Hair *et al.*, 2010).

Table 1.
CFA results for participation behavior

Constructs and items	λ	M	AVE	CR
<i>Information seeking (ISE)</i>				
I inquired from others about destination information based on the TLSer's social media posts	0.718	4.716	0.531	0.772
I conducted searches for destination information to learn more about what the TLSer presented	0.692	4.728		
I observed the behaviors of others who used the TLSer's information	0.773	4.806		
<i>Information sharing (ISH)</i>				
I clearly communicated my expectations to the TLSer	0.748	4.759	0.546	0.783
I shared accurate information with the TLSer	0.734	4.699		
I supplied the required information to enable the TLSer to fulfill their responsibilities	0.734	4.754		
<i>Responsible behavior (RB)</i>				
I performed tasks expected by the TLSer	0.723	4.620	0.510	0.757
I conformed to the expected conduct	0.729	4.726		
I followed the TLSer's suggestions and comments	0.689	4.703		
<i>Personal interaction (PI)</i>				
I was friendly toward the TLSer	0.800	4.964	0.643	0.844
I displayed kindness toward the TLSer	0.803	4.906		
I maintained politeness in my interactions with the TLSer	0.803	4.964		

Note: TLSer = tourism live streamer

Source: Authors' own creation

Constructs and items	λ	M	AVE	CR
<i>Advocacy (AD)</i>				
I spoke positively about the TLSer	0.793	4.895	0.600	0.818
I tried to recommend the TLSer to others	0.799	4.958		
I encouraged others to follow the TLSer	0.729	4.897		
<i>Help (HE)</i>				
I provided assistance to the TLSer whenever they required my support	0.758	4.966	0.605	0.821
I assisted other viewers who appeared to face challenges	0.773	5.042		
I offered guidance to fellow viewers	0.802	5.130		
<i>Tolerance (TO)</i>				
If the service did not meet my expectations, I was prepared to tolerate it	0.754	4.707	0.542	0.780
If the TLSer made an error during the live stream, I was patient	0.769	4.793		
If the waiting time for service exceeded my initial expectations, I was flexible	0.682	4.770		
<i>Feedback (FE)</i>				
I conveyed any valuable ideas to the TLSer	0.798	5.051	0.537	0.776
I provided feedback to the TLSer when I had a positive experience following their recommendation	0.698	4.935		
I notified the TLSer if I encountered an issue due to their recommendation	0.697	4.692		

Note: TLSer = tourism live streamer

Source: Authors' own creation

Table 2.
CFA results for citizenship behavior

4.4 Overall measurement model

The overall measurement model's reliability and validity were assessed using the CFA. As shown in Table 3, the model fit with the data was satisfactory ($\chi^2 = 1239.846$, $df = 998$, $\chi^2/df = 1.242$, NFI = 0.919, TLI = 0.981, CFI = 0.983, RMSEA = 0.021; Hair *et al.*, 2010), with standardized factor loadings ranging between 0.746 and 0.884. AVE values ranged between 0.595 and 0.733, exceeding the suggested criterion of 0.5 (Hair *et al.*, 2010). CR values ranged between 0.854 and 0.916, exceeding the suggested criterion of 0.7 (Hair *et al.*, 2010). These results confirmed adequate convergent validity (Fornell and Larcker, 1981). The AVE value's square root is greater than the corresponding correlation (Table 4), confirming discriminant validity (Fornell and Larcker, 1981).

4.5 Structural equation modeling and hypothesis testing

As shown in Figure 2, the SEM results reflected a good model fit ($\chi^2 = 1298.525$, $df = 1011$, $\chi^2/df = 1.284$, NFI = 0.915, TLI = 0.978, CFI = 0.980 and RMSEA = 0.023; Hair *et al.*, 2010).

Attractiveness ($\gamma_{AT \rightarrow ATT} = 0.327$, $p < 0.001$), trustworthiness ($\gamma_{TR \rightarrow ATT} = 0.165$, $p < 0.001$) and expertise ($\gamma_{EX \rightarrow ATT} = 0.320$, $p < 0.001$) positively affected attachment, supporting H1a, H1b and H1c. Moreover, attractiveness ($\gamma_{AT \rightarrow TRU} = 0.198$, $p < 0.001$), trustworthiness ($\gamma_{TR \rightarrow TRU} = 0.233$, $p < 0.001$) and expertise ($\gamma_{EX \rightarrow TRU} = 0.287$, $p < 0.001$) positively affected trust, supporting H2a, H2b and H2c. Attachment positively affected participation ($\beta_{ATT \rightarrow PB} = 0.459$, $p < 0.001$) and citizenship behaviors ($\beta_{ATT \rightarrow CB} = 0.562$, $p < 0.001$), supporting H3a and H3b. Trust positively affected participation ($\beta_{TRU \rightarrow PB} = 0.135$, $p < 0.01$) and citizenship behaviors ($\beta_{TRU \rightarrow CB} = 0.331$, $p < 0.001$), supporting H4a and H4b. Perceived destination brand value was significantly affected by participation behavior ($\beta_{PB \rightarrow PDBV} = 0.338$, $p < 0.001$) and citizenship behavior ($\beta_{CB \rightarrow PDBV} = 0.373$, $p < 0.001$), supporting H5a and H5b.

4.6 Mediating effects [1]

We conducted a bias-corrected bootstrap method with 5,000 samples to examine the indirect effects of TLSer characteristics on value co-creation behaviors and perceived destination brand value (Bollen and Stine, 1990; MacKinnon *et al.*, 2004; Song *et al.*, 2012). The results revealed that attractiveness, trustworthiness and expertise significantly influenced value co-creation behaviors and destination brand value through the mediators of attachment and trust (Table 5). Comparing the magnitudes of the indirect effects, expertise had the strongest impact on participation behavior ($\gamma_{EX \rightarrow PB} = 0.113$, $p < 0.01$), citizenship behavior ($\gamma_{EX \rightarrow CB} = 0.216$, $p < 0.01$) and perceived destination brand value ($\gamma_{EX \rightarrow PDBV} = 0.182$, $p < 0.01$) through attachment and trust. The indirect effects of attractiveness and trustworthiness, although significant, were weaker than those of expertise.

5. Discussion and conclusions

This study addressed the issue of high homogeneity among live streamers by identifying the key TLSer characteristics that effectively engage target consumers and enhance destination brand value. The results revealed that TLsers' expertise had the strongest influence on consumers, followed by attractiveness and trustworthiness. These characteristics positively affected consumers' emotional engagement and value co-creation behaviors, which subsequently enhanced perceived destination brand value. Our findings offer valuable insights for destination marketers seeking to effectively leverage TLsers in their branding strategies.

Constructs and items	λ	M	SD	SK	KU
<i>Attractiveness (AT)</i> (CR = 0.854)					
I feel that the TLSer is classy	0.795	5.056	1.473	-0.610	-0.125
I feel that the TLSer is handsome/beautiful	0.755	4.933	1.505	-0.552	-0.296
I feel that the TLSer is elegant	0.746	5.034	1.531	-0.688	-0.121
I feel that the TLSer is sexy	0.787	5.203	1.492	-0.837	0.259
<i>Trustworthiness (TR)</i> (CR = 0.909)					
I feel that the TLSer is dependable	0.849	5.009	1.545	-0.635	-0.015
I feel that the TLSer is honest	0.820	4.978	1.559	-0.696	0.115
I feel that the TLSer is reliable	0.829	4.886	1.535	-0.615	0.019
I feel that the TLSer is sincere	0.881	4.888	1.544	-0.578	-0.077
<i>Expertise (EX)</i> (CR = 0.876)					
I feel that the TLSer is an expert	0.803	5.080	1.324	-0.443	-0.313
I feel that the TLSer has experience in TLS	0.756	5.000	1.369	-0.478	-0.318
I feel that the TLSer is knowledgeable in the field of TLS	0.792	4.973	1.349	-0.409	-0.415
I feel that the TLSer is qualified to broadcast live streams	0.843	5.069	1.308	-0.381	-0.422
<i>Attachment (ATT)</i> (CR = 0.896)					
I hold a fondness for the TLSer	0.852	5.150	1.394	-0.823	0.556
I feel attached to the TLSer	0.830	5.159	1.403	-0.808	0.481
I feel attracted to the TLSer	0.788	5.147	1.393	-0.810	0.483
Thinking about the TLSer brings me a lot of joy and pleasure	0.836	5.152	1.361	-0.788	0.494
<i>Trust (TRU)</i> (CR = 0.870)					
I believe the information provided by the TLSer through live streaming	0.841	5.315	1.206	-0.668	0.750
I can trust the TLSer during live streaming	0.808	5.368	1.199	-0.687	0.727
I do not think that the TLSer would take advantage of me during live streaming	0.844	5.415	1.142	-0.502	0.073
<i>Participation behavior (PB)*</i> (CR = 0.878)					
Information seeking (ISE)	0.763				
Information sharing (ISH)	0.793				
Responsible behavior (RB)	0.790				
Personal interaction (PI)	0.857				
<i>Citizenship behavior (CB)*</i> (CR = 0.900)					
Advocacy (AD)	0.884				
Help (HE)	0.846				
Tolerance (TO)	0.771				
Feedback (FE)	0.826				
<i>Perceived destination brand value (PDBV)</i> (CR = 0.916)					
I believe that the destinations recommended by the TLSer that I follow meet an acceptable standard of quality	0.881	5.013	1.393	-0.670	0.185
In my opinion, the products at destinations recommended by the TLSer that I follow are high quality	0.853	5.069	1.364	-0.758	0.407
The destinations suggested by the TLSer that I follow are appealing to me	0.814	5.071	1.378	-0.746	0.330
I hold a positive valuation of the destinations recommended by the TLSer that I follow	0.874	5.013	1.406	-0.648	0.049

Notes: *2nd order; TLSer = tourism live streamer
Source: Authors' own creation

Table 3.
CFA results for the overall measurement model

Table 4.
Correlations and
discriminant validity

	AT	TR	EX	ATT	TRU	PB	CB	PDBV
AT	0.771							
TR	0.507***	<i>0.845</i>						
EX	0.464***	0.270***	<i>0.799</i>					
ATT	0.553***	0.413***	0.503***	<i>0.827</i>				
TRU	0.444***	0.408***	0.431***	0.437***	<i>0.831</i>			
PB	0.470***	0.319***	0.406***	0.492***	0.308***	<i>0.801</i>		
CB	0.391***	0.343***	0.447***	0.696***	0.564***	0.472***	<i>0.833</i>	
PDBV	0.352***	0.244***	0.348***	0.387***	0.304***	0.507***	0.533***	<i>0.856</i>
AVE	0.595	0.714	0.639	0.684	0.691	0.642	0.694	0.733

Notes: Diagonal values in *Italic* are square roots of AVE; *** $p < 0.001$
Source: Authors' own creation

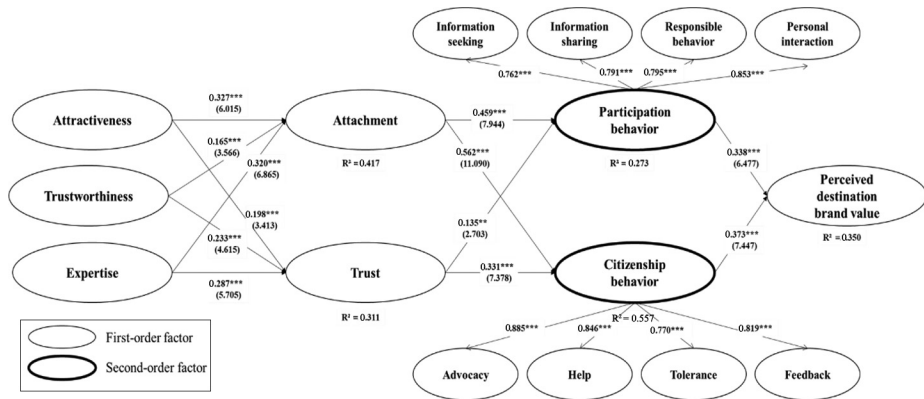


Figure 2.
Estimation of the
structural model

Note: ** $p < 0.01$, *** $p < 0.001$
Source: Authors' own creation

5.1 Theoretical implications

This study contributes to the theoretical advancement of the SET by extending its application to the nascent TLS domain. This study proposes a novel conceptualization of TLSer characteristics as a form of social capital, which is reciprocally exchanged for consumers' emotional and behavioral support. This conceptualization expands the boundaries of the SET, traditionally focused on tangible resources, by highlighting the crucial role of intangible, social-emotional assets in the exchange process. Moreover, this study deepens our understanding of the complex dynamics of social exchange by elucidating the dual nature of emotional bond and trust as both fundamental components and byproducts of the reciprocal relationship between TLSeers and consumers (Cropanzano and Mitchell, 2005; Homans, 1958). This nuanced perspective underscores the cyclical, self-reinforcing nature of these socio-emotional resources in the TLS context. By emphasizing the paramount significance of often-overlooked social-emotional assets, such as trust, attachment and participatory behaviors, this study shifts the focus from conventional, quantitative metrics of success, such as follower count and revenue, to experiential aspects of consumer engagement. This paradigm shift is particularly pertinent in the tourism

	AT	TR	EX	ATT	TRU	PB	CB
<i>Total effect</i>							
ATT	0.332*	0.144*	0.344**	–	–	–	–
TRU	0.162**	0.165**	0.249*	–	–	–	–
PB	0.102**	0.053**	0.113**	0.260**	0.095*	–	–
CB	0.185**	0.109*	0.216**	0.412*	0.300**	–	–
PDBV	0.159**	0.089**	0.182**	0.374**	0.214*	0.612**	0.521*
<i>Direct effect</i>							
ATT	0.332*	0.144*	0.344**	–	–	–	–
TRU	0.162**	0.165**	0.249*	–	–	–	–
PB	–	–	–	0.260**	0.095*	–	–
CB	–	–	–	0.412*	0.300**	–	–
PDBV	–	–	–	–	–	0.612**	0.521*
<i>Indirect effect</i>							
ATT	–	–	–	–	–	–	–
TRU	–	–	–	–	–	–	–
PB	0.102**	0.053**	0.113**	–	–	–	–
CB	0.185**	0.109*	0.216**	–	–	–	–
PDBV	0.159**	0.089**	0.182**	0.374**	0.214*	–	–

Notes: * $p < 0.05$; ** $p < 0.01$

Source: Authors' own creation

Table 5.
Test results for indirect, direct and total effects

industry, where experiential consumption takes precedence over transactional outcomes. Considering the limitations of the existing literature (Lin *et al.*, 2022), this study contributes to the theoretical development of the live-stream field.

In addition, this study contributes to the theoretical development of the live-streaming domain by identifying the key characteristics of TLSers that influence consumer engagement and destination brand value. The mediation analysis results reveal that TLSer expertise has the strongest impact on target consumer groups, followed by attractiveness and trustworthiness. These findings contrast with previous research on other live-streaming domains. For instance, Li and Peng (2021) found that the expertise of entertainment live streamers did not significantly impact consumer emotional attachment or behavioral intention, as entertainment live streams focus more on entertainment value. Furthermore, in live stream shopping, trustworthiness may be more crucial, as consumers need to trust live streamers' product recommendations and authenticity to make purchase decisions (Park and Lin, 2020). However, the present study emphasizes the unique nature of TLS, revealing the significant influence of TLSer expertise on consumers' emotional and behavioral engagement. This highlights the importance of TLSers' mastery in areas such as travel advice and destination storytelling, indicating that the depth of knowledge and authentic presentation of a location's cultural and historical heritage are key drivers of value creation. This finding aligns with the results of Deng *et al.* (2022), who proposed that TLS consumers' pursuit of information and knowledge dominates the relationship between TLSers and their consumers. Consequently, this study extends the source credibility model to the TLS context, revealing the unique dynamics of TLSer characteristics compared to other live-streaming domains.

Finally, this study contributes to the theoretical understanding of value co-creation in destination branding research by investigating the antecedents and consequences of value co-creation behavior, particularly in the context of TLS. Although previous studies have explored the individual effects of attachment (Chiu *et al.*, 2019) and trust (Shen *et al.*, 2020) on

value co-creation behavior, this was the first study to integrate these psychological states and examine their relative importance in TLS. The results demonstrated that attachment had a more significant impact on value co-creation behavior than trust, suggesting that the emotional bond between consumers and TLSers was more critical in fostering value co-creation than consumers' belief in TLSers' reliability and honesty. Furthermore, this study examined the differential effects of participation and citizenship behavior on perceived destination brand value. Previous studies have established a positive link between consumer engagement and perceived value (Guo *et al.*, 2020; Youssef *et al.*, 2018); conversely, this study distinguished the effects of participation and citizenship behavior in TLS. Citizenship behavior had a stronger impact on perceived destination brand value than participation behavior, suggesting that viewers' voluntary and extra-role engagement strengthened their psychological ownership and value perception of the destination brand. This highlights the need to cultivate and leverage citizenship behavior in TLS.

5.2 *Practical implications*

This study highlighted the significant impact of TLSer expertise on consumers, suggesting that tourist destinations should prioritize TLSers with strong expertise, such as professional guides familiar with the local culture and attractions. Systematic training, including information on attractions, cultural customs and optimal touring routes, should be provided to TLSers, enabling them to present detailed information to consumers. Furthermore, TLSer attractiveness is significant; thus, DMOs could invite attractive online celebrities or influencers for live-stream marketing to effectively capture target consumer groups effectively.

Choosing suitable TLSers who can establish emotional connections with the target consumer group is vital. TLSers with strong consumer identification are likely to build attachment and trust. Consumers whose emotional needs are met engage actively in the live-stream content. Consumers' behavioral engagement directly enhances their perceived destination brand value, which is crucial for tourist destinations. Therefore, interactive sessions should be designed to encourage consumer participation, such as reward-based questions and voting sessions. User questions, sharing and feedback should also be encouraged to boost consumer enthusiasm. DMOs could regularly incorporate high-quality feedback to provide users with a sense of involvement.

Moreover, considering the importance of information regarding the destination for potential tourists, establishing high-quality, content-rich live-stream channels could augment destination brand value. This is particularly important in the modern intensely competitive tourism landscape, where consumers are confronted with many choices.

In addition, our findings revealed that most TLS consumers were women in their 20s to 40s, representing a sample structure similar to the demographic profile of most Chinese live-stream platform users (O'Ratings, 2020). Therefore, DMOs could use celebrities or influencers popular with young and middle-aged women and conduct monthly in-depth interviews to identify popular TLSers and the reasons for their popularity, attractiveness and credibility with current and potential travelers.

5.3 *Limitations and future research*

This study had several limitations. First, participants were exclusively sourced from China, potentially constraining the generalizability of the outcomes. Subsequent investigations should consider recruiting participants from different countries to confirm our findings. Second, future research should investigate the impacts of consumer personality traits, such as the Big Five personality traits, on value co-creation behaviors. Third, future research could consider factors that may mediate live streamers' characteristics and consumers' behavioral intentions, such as flow experiences and parasocial relationships. Finally, this study focused

on consumer perceptions of TLSer characteristics rather than objective metrics. Although consumer perceptions significantly influence behavior and brand value, future research should examine the relationship between objective TLSer qualities and consumer behavior.

Note

1. For further information, we added an additional table in [Appendix](#).

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Independent variable	Dependent variable	Indirect effect test			Direct effect test			Type of mediation
		2.5% Lower bound	97.5% Upper bound	Zero included?	2.5% Lower bound	97.5% Upper bound	Zero included?	
AT	PB	0.021	0.105	No	0.016	0.238	No	Partial mediation
	CB	0.108	0.293	No	-0.167	0.027	Yes	Full mediation
	PDBV	0.062	0.268	No	-0.079	0.206	Yes	Full mediation
TR	PB	0.001	0.059	No	-0.036	0.087	Yes	Full mediation
	CB	0.062	0.178	No	-0.066	0.068	Yes	Full mediation
	PDBV	0.029	0.151	No	-0.114	0.082	Yes	Full mediation
EX	PB	0.022	0.103	No	0.003	0.183	No	Partial mediation
	CB	0.147	0.310	No	-0.040	0.138	Yes	Full mediation
	PDBV	0.124	0.319	No	-0.076	0.170	Yes	Full mediation

Notes: AT = attractiveness; TR = trustworthiness; EX = expertise; PB = participation behavior; CB = citizenship behavior; PDBV = perceived destination brand value
Source: Authors' own creation

Table A1.
Mediation test

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