

THE EFFECTS OF LIVE-STREAMING CHARACTERISTICS ON CUSTOMER LOYALTY AMONG STREET-FOOD VENDORS IN LAGOS, NIGERIA: AN EMPIRICAL ANALYSIS

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ABSTRACT

Live streaming has become an important promotional strategy for street food sellers looking to reach out to customers and establish loyalty over the internet. The goal of this study was to evaluate how live streaming features and patronage of street food sellers in Lagos, Nigeria, relate to one another. This study examined in depth how consumer loyalty is impacted by entertainment, engagement, informativeness, and customer trust. It also examined the moderating role of education and the mediating role of customer trust. the survey conducted among 400 participants, the findings reveal that the major population comprised young individuals and females who actively regularly use the live streaming service. Multiple regression analysis revealed that entertainment ($\beta = .182, p = .001$), interactivity ($\beta = .145, p = .007$), customer trust ($\beta = .241, p < .001$), and informativeness ($\beta = .101, p = .044$) significantly predict customer loyalty, with the model explaining 23.2% of the variance. The mediation analysis estimated an indirect relationship between interactivity and customer loyalty through customer trust; however, the statistical significance of the indirect effect requires confirmation using bootstrapped confidence intervals.” While the result of the moderation analysis shows that the level of education moderates the process of entertainment and loyalty. The study highlights the need for trust, interaction, and customized content while utilizing the live streaming service to achieve customer loyalty.

Keywords: Customer Loyalty, Entertainment, Interactivity, Informativeness, Live Streaming, Loyalty, Street Vendors, Trust

INTRODUCTION

The fourth industrial revolution has spurred the rise of live commerce, a live e-commerce experience that integrates video communication services, such as live chat and postcast, to deliver interactive product knowledge (Merritt & Zhao, 2020; Xin et al., 2024). Over a decade, live streaming has evolved from a niche phenomenon to a mainstream success, enabling small businesses, including street vendors in informal economies such as the Lagos markets of Nigeria, to transcend geographical boundaries through low-cost smartphones (Tao et al., 2024; Lee & Chen, 2021). Street vending plays a significant role in providing affordable meals, creating employment opportunities, and contributing to urban economic development in many developing countries, including Nigeria. Street Vendors have traditionally relied on word-of-mouth referrals and local customer networks. Empirical evidence suggests that the rapid adoption of live-streaming commerce has transformed how these vendors interact with customers, promote their products, and build long-term customer relationships (Wongkitrungrueng et al., 2020; Luo et al., 2023; Afzal et al., 2024). The COVID-19 outbreak further increased their adoption and helped live streams become life-savers during lockdowns (Liu et al., 2022). Such qualities as endorsement by viewers for their own products, viewing product demos, and viewers interacting with each other promote building a sense of community and creating loyal customers as well as self-branding. Previous studies have shown that they share their stories about the origins of their products, the principles that govern their business, and their uniqueness. Individuals increasingly look for such storytelling connections as they crave deeper connections with brands (Zhou & Baskaran, 2025; Guo et al., 2021; Addo et al., 2021).

Live streaming commerce also creates new relationships between live streaming platforms, influencers, and content creators who have big, active social media followings. Such collaborations create ample brand visibility, given that these online personalities offer credibility and expanded marketing channels for vendors (Rungruangjit, 2022; Chen & Yang, 2023). By utilizing live interaction, story-spinning, and social networks, street vendors will create success for themselves while changing the face of the future of business online. The adoption of Technologies like live streaming, Augmented Reality (AR), virtual trials, and even profits directly integrated into these live streaming services will continue to improve consumer shopping experiences and the associated relationship with a particular brand. Experiential fit, emotional ties, and a consistent approach all play key roles in this relationship. (Dong et al., 2023; Afzal et al., 2024). Although live-streaming commerce has received increasing scholarly attention, most previous studies have focused on established e-commerce platforms and formal retail settings, with limited empirical evidence from informal retail businesses such as street vendors in developing economies. The study is based on Mehrabian and Russell's (1974) Stimulus-Organism-Response (S-O-R) Theory. "According to the theory, external environmental cues influence individuals' internal states through cognitive and emotional processes, which may subsequently be associated with behavioral responses." Within the context of live-streaming commerce, entertainment, interactivity, and informativeness represent environmental cues that are associated with customers' psychological appraisals. Customer trust represents the organism, while customer loyalty represents the behavioral response.

Accordingly, this study examines the associations of entertainment, interactivity, informativeness, and customer trust with customer loyalty among customers of street vendors in Lagos, Nigeria. Specifically, the study investigates the relationships between these live-

streaming characteristics and customer loyalty and examines the mediating role of customer trust in the relationship between interactivity and customer loyalty. Guided by the Stimulus–Organism–Response (S–O–R) theory, the study extends live-streaming commerce research to the informal street food sector in an emerging market context and provides practical insights for strengthening customer loyalty through live-streaming engagement. This study offers several novel contributions to the live-streaming commerce literature. First, it extends existing research by examining the combined effects of entertainment, interactivity, and informativeness on customer loyalty within the informal street food sector, a context that has received limited scholarly attention compared with established e-commerce and retail platforms. Second, the study advances understanding of the psychological mechanism underlying these relationships by investigating the mediating role of customer trust, thereby explaining how live-streaming features are translated into customer loyalty.

LITERATURE REVIEW

Live stream selling is a form of user-generated content where a seller-broadcaster streams real-time video to promote a product sold online by the seller-broadcaster (Mikael et al., 2024). During a live stream sale, the broadcaster can engage with viewers and comment in a shared chat room (Zhang et al., 2024). This study aims to examine live-stream selling and customer loyalty in the context of street vendors. The unique feature of live-stream selling is that it prompts buyers to directly engage with sellers in real time, which enhances the experiential shopping experience and builds interpersonal relations (Jiao et al., 2023). Live-streaming retail is a rapidly growing form of e-commerce in which retailers present merchandise through live video streams to engage with customers in real time and provide instant purchasing options. From its origins in markets like China, where it has grown to an enormous scale, live-streaming retail enables an interactive shopping experience that combines entertainment, education, and instant purchasing options. Sellers or influencers present products in real time, address questions, and offer exclusive deals, so it is an interactive session and not a premeditated online shopping session.

The practice has gained popularity around the world as street vendors make use of social media platforms such as Instagram Live, YouTube Live, Amazon Live, and third-party live commerce apps to market scores of street vendors who had lost hope in their ventures (Pan et al., 2022; Zhang et al., 2023). The streams can include live chat, product tagging, and express checkout capabilities, which allow viewers to shop as they watch the broadcast. Sellers enjoy enhanced interaction, reduced sales cycles, and exposure to a larger audience than physical or virtual stores. Street vendors, who have previously been linked with physical public spaces and informal economies, are now adopting live-stream selling to scale up and mainstream their business culture (Li et al., 2023; Ji et al., 2023). Through live streaming, street vendors break geographical and physical market constraints, interacting with customers outside the immediate area of their stalls or carts. The online transition enables street vendors to better demonstrate product usage and quality, while reaching new customers who purchase online but feel personally connected as they would with an offline purchase. As deduced from the explanation above, a trader in handmade products, foodstuffs, or even clothes can stream live the uses and benefits of merchandise and respond to viewer questions on the spot. This earns him customer loyalty and trust, which is crucial for those who sell their products in competitive or informal markets. Live-stream selling, however, offers the seller customer choice and purchase behavior information in the form of data, enabling them to tailor their product and marketing strategy accurately (Chen et al., 2023; Sawmong, 2022; Zhou & Baskaran, 2025;

Gong et al., 2022). As stated in the discussion above, live-streaming selling brings about an element of fun and storytelling in street vending, making it an experience-oriented purchase rather than a habitual purchase. This enhances customer relations, makes repeat purchases possible, and also generates brand loyalty even with petty dealers. The era of digitalization, live streaming business with street retailing, is the finest illustration of technology democratizing business through the provision of the historically disadvantaged or local retailers with the potential to interact with worldwide digital markets (Bicheng et al., 2025). It helps to enable creativity and the sustainability of street vendors through new revenue streams and marketing channels (Dande, 2025; Xiao, 2024; Ji et al., 2024). With the growing demand for authenticity and personal connection to the product, street vendors, where the required experience is close and trustworthy, live-stream e-commerce is poised to connect perfectly to this needed experience. Live-stream e-commerce is transforming the world of e-commerce through more dynamic, immediate, and engaging forms of online shopping. To street vendors, live-stream e-commerce enables them to experience a new form of growing their businesses from offline market environments to others through more personalized forms of one-to-one marketing or live e-commerce. The features of live e-commerce are entertainment, interactivity, credibility, and informativeness (Tao et al., 2024).

Entertainment

Entertainment has consistently been identified as a key determinant of customer responses in live-streaming commerce because it enhances enjoyment, captures viewers' attention, and encourages prolonged interaction with vendors (Tedjakusuma et al., 2025). Empirical evidence suggests that most existing studies have focused on formal e-commerce platforms in developed or Asian markets, with limited attention given to informal retail settings such as Street Vendors in emerging economies (Devi et al., 2025). It remains unclear whether entertainment exerts a similar influence on customer loyalty in the context of Street Vendors in Lagos, Nigeria.

Empirical evidence has shown that live-streaming features such as entertainment, interactivity, and informativeness positively influence customer responses in online retail settings (Han & Zhao, 2026). However, most evidence is derived from formal e-commerce platforms in developed and Asian markets, leaving informal retail sectors in emerging economies largely unexplored. Hsu and Hu (2024) found that few studies have simultaneously examined customer trust as a mediating mechanism and gender as a moderating factor in explaining customer loyalty among street vendors. Empirical evidence has shown that entertainment, interactivity, informativeness, and customer trust positively influence customer outcomes in live-streaming commerce (Kao & Liu, 2025), and most evidence has been generated from formal e-commerce platforms in developed and Asian markets. Consequently, little is known about whether these relationships hold in informal retail settings such as Street Vendors in emerging economies (Bussolo et al., 2025). Furthermore, limited studies have examined customer trust as a mediating mechanism and gender as a moderating factor in explaining customer loyalty in this context.

H₁: Entertainment is significantly associated with customer loyalty.

Interactivity

Interactivity is one of the primary variables that exist in live streaming and play a vital role in enhancing street vendors' Customer Loyalty. It provides two-way immediate communication between the vendors and customers, whereby customers can ask questions, comment, provide feedback, and receive immediate responses on the same issue. Various

studies have demonstrated this, including (Joo & Yang, 2023; Zheng et al., 2023). Live interaction provides a feeling of social presence, which links the consumers together, making them feel important and thus creating loyalty and trust for the street vendor's brand. Through interactive livestreaming, retailers can elaborately demonstrate products, eliminate consumer doubts, and emphasize the value of their products in a personalized manner. In this way, all kinds of doubts are dispelled, and consumers are able to be more assured of their purchases. Besides, interactivity enables consumer conformity and social interaction because viewers can see the reactions and purchases of other people, which compels them to participate. This is variously (Xin et al., 2024; Wu & Huang, 2023). Interactive experience is both about communication and the creation of an immersive social context to mimic the experience of face-to-face communication. This is what raises the level of consumer satisfaction and emotional engagement, leading to increased shopper engagement and sales (Huang et al., 2022; Addo et al., 2021). For the street vendor, the use of interactivity through live streaming presents the unique benefit of converting the act of selling into an engaging and interactive experience that is well-held by the clients within the market.

H₂: Interactivity is significantly associated with customer trust.

Customer Trust

Customer trust in live street vendor streaming is the faith the customer places in the seller and the products while buying directly. Live streaming enables sellers to reveal identity, display products openly, and provide real-time responses to customer questions, reducing uncertainty and enhancing authenticity (Jiang et al., 2024; Crisafulli et al., 2022). Trust is established when consumers sense the seller is warm and genuine, and sellers present functional representations of items and authentic feedback (Prajapati & Sharma, 2025; Qin et al., 2023). Live streaming also offers a social environment where customers can view the interaction and comments of other consumers, again trusting the company through social proof (Addo et al., 2021). It reduces perceived risk, boosts purchase intention, and encourages long-term buyer loyalty, thus making it a key element of street vendor brand interaction through the use of live streaming as a marketplace, as documented by (Mai et al., 2023; Bawack et al., 2023).

H₃: Customer trust has a direct influence on Customer Loyalty among vendors

Informativeness

Informationness is among the major live streaming factors that directly affect the interaction between street vendors and brands. The word informationness refers to tangible, physical, and complete information related to the products/services being promoted by vendors during live streaming (Busalim et al., 2021; Zhang et al., 2025). Here, vendors can eliminate customers' doubts and curiosity by explaining elaborate information on the usage and benefits, thereby raising awareness among customers. The openness shown by vendors helps gain customer trust and enables them to take informed decisions on what to buy. Educative content related to live streaming can lure as well as retain customers since they receive direct answers related to queries and problems at once (Sun et al., 2024; Li et al., 2020; Mokobombang & Kusumawati, 2023). The major advantage of informativeness is customer engagement as it offers an invaluable and credible purchasing experience.

H₄: Informative is associated with Customer Loyalty among street vendors

Customer Trust as A Mediating Variable

The mediation analysis examined whether customer trust mediates the relationship between interactivity and customer loyalty. The results showed that interactivity significantly

predicted customer trust ($B = 0.128$, $SE = 0.048$, $t = 2.65$, $p = .008$), while customer trust significantly predicted customer loyalty ($B = 0.142$, $SE = 0.056$, $t = 2.54$, $p = .012$). The estimated indirect effect of interactivity on customer loyalty through customer trust was $B = 0.018$ ($SE = 0.009$). However, the available results do not provide a bootstrap confidence interval or a corresponding significance test for the indirect effect. Therefore, the mediation effect cannot be conclusively established from the reported results. The direct effect of interactivity on customer loyalty was also not statistically significant ($B = 0.046$, $SE = 0.055$, $t = 0.83$, $p = .406$). Further analysis using bootstrapping is required to determine whether customer trust significantly mediates the relationship.

Gender as a Moderating Variables

Gender has frequently been identified as an important demographic variable influencing consumer behaviour in digital marketing and live-streaming commerce. Male and female consumers often process marketing information differently because of variations in shopping motivations, emotional responses, risk perceptions, and communication preferences. These differences may influence the extent to which live-streaming characteristics affect customer loyalty. Female consumers generally place greater emphasis on emotional engagement, interpersonal communication, and trust-building interactions during online shopping. Conversely, male consumers tend to focus more on functional information and efficiency. As a result, the effects of entertainment, interactivity, and informativeness on customer loyalty may differ across gender groups. Examining gender as a moderator therefore provides a deeper understanding of whether the effectiveness of live-streaming strategies varies between male and female customers.

Although previous studies have investigated gender differences in online shopping behaviour, limited research has examined gender as a moderator in the relationship between live-streaming characteristics and customer loyalty among customers of street Vendors in emerging markets. Accordingly, this study proposes the following hypotheses: Gender significantly moderates the relationship between live-streaming characteristics (entertainment, interactivity, and informativeness) and customer loyalty among customers of street Street Vendors in Lagos, Nigeria.

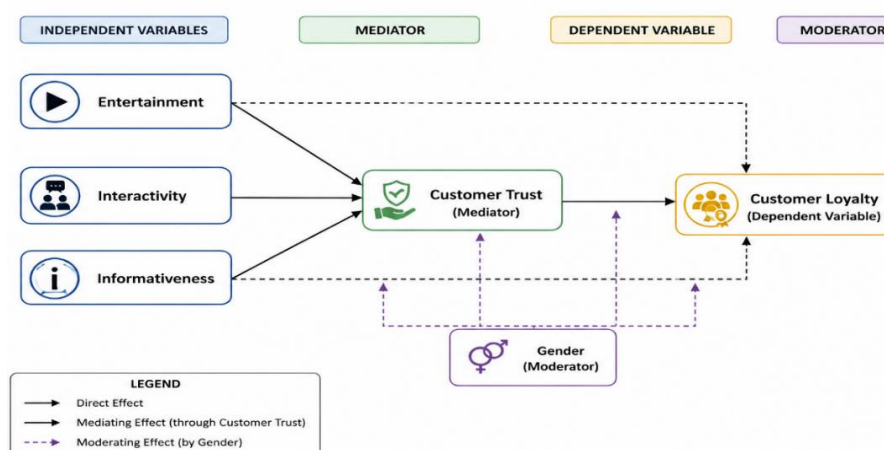


Figure 1. Conceptual Framework of the Study
Source: Author's Conceptual Framework, 2026

The Conceptual Framework illustrates how streaming influences Customer Loyalty among street vendors by offering entertainment, interactivity, customer trust, and useful

content; all of which contribute to building consumer loyalty. This conceptual framework shows that great branding is a matter of establishing long-lasting, rich relationships that sustain loyalty.

RESEARCH METHOD

Research Design

This study used a cross-section survey design that enabled the effective verification of empirical relationships in a point in time, which is ideal in exploratory research characterized by new markets, such as the online platform. The survey aimed at examining the impact of live streaming attributes (entertainment, interactivity, consumer trust, and information) on the consumer loyalty of the target population of street vendors.

Population and Sample

The study population comprised customers in Lagos, Nigeria, who had experience viewing or interacting with street-food vendors through TikTok Live. TikTok was selected because its live-streaming functionality enables street-food vendors to present their products, interact with viewers in real time and promote customer engagement and purchasing activities. Respondents were required to have watched or interacted with at least one street-food vendor through TikTok Live to ensure that they had relevant experience with the phenomenon under investigation. A convenience sampling technique was employed because a comprehensive sampling frame of customers participating in live-streaming activities within the informal street food sector was not available. A total of 400 usable questionnaires were obtained from respondents who met the study's eligibility criteria. Because convenience sampling was employed, a conventional response rate was not calculated. Instead, the analysis was based on the 400 completed and usable responses obtained during the data collection period and eligible participants during the data-collection period rather than a probability-based sampling frame or predetermined population count. The convenience sampling approach facilitated access to this hard-to-reach population within the informal sector, particularly during peak live-streaming periods. However, the non-probability sampling approach may have introduced selection bias because respondents were selected based on accessibility.

Instrumentation

A structured questionnaire was used to measure five constructs: entertainment, interactivity, customer trust, informativeness, and customer loyalty. Each construct was measured using five items adapted from previously validated measurement scales. Items for entertainment and interactivity were adapted from Tao et al. (2024), customer trust from Jiang et al. (2024), informativeness from Busalim et al. (2021), and customer loyalty (Kim et al., 2024). All measurement items were assessed using a five-point Likert scale, ranging from 1 = strongly disagreement to 5 = strongly agree. A pilot test involving 30 respondents was conducted to assess the clarity and reliability of the measurement items before the main survey.

Table 1. Measurement Scale and Sources

Construct	No. of items	Scale	Source
Entertainment	5	5-point Likert	Tao et al. (2024)
Interactivity	5	5-point Likert	Tao et al. (2024)
Customer Trust	5	5-point Likert	Jiang et al. (2024)
Informativeness	5	5-point Likert	Busalim et al. (2021)

Customer Loyalty	5	5-point Likert	Kim et al. (2024)
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Data Collection

Data were collected using a structured questionnaire administered through Google Forms. The survey link was distributed through vendor live-stream chat sessions and WhatsApp groups, while printed questionnaires were also administered at selected markets in Lagos State. Of the 488 questionnaires administered, 400 were fully completed and retained for analysis, representing a completion rate of 82.0%. Participation in the study was voluntary, and respondents were informed about the purpose of the study before completing the questionnaire.

Data Analysis

Data were analyzed using descriptive and inferential statistics. Descriptive statistics summarized respondents' demographic characteristics and the frequency of live streaming usage. Pearson's product-moment correlation was conducted to examine the relationships among the constructs.

The multiple regression model was specified as:

$$CL_i = \beta_0 + \beta_1 ENT_i + \beta_2 INT_i + \beta_3 CT_i + \beta_4 INF_i + \epsilon_i$$

Where CL_i represents customer loyalty, ENT_i entertainment, INT_i interactivity, CT_i customer trust, INF_i informativeness, and ϵ_i the error term. To examine the mediating role of customer trust, the mediation model was specified as:

$$\begin{aligned} CT_i &= \alpha_0 + \alpha_1 INT_i + v_i \\ CL_i &= \beta_0' + \beta_1' INT_i + \beta_2' CT_i + \epsilon_i \end{aligned}$$

Where v_i is the error term for the mediator model? Partial mediation was tested using the indirect effect ($\alpha_1 \times \beta_2'$). For moderation, the level of education was employed as a moderating variable for entertainment and customer loyalty:

$$CL_i = \beta_0 + \beta_1 ENT_i + \beta_2 EDU_i + \beta_3 (ENT_i \times EDU_i) + \epsilon_i$$

The significant interaction effects were analyzed to clarify the effects of education on the influence of entertaining live-streaming content on customer loyalty.

RESULTS AND DISCUSSION

Reliability of the Instrument

To establish the consistency and reliability of these measures, the internal reliability of each of these scales has been tested using Cronbach's Alpha. As provided by recent literature, an Alpha greater than 0.70 shows satisfactory reliability, an Alpha greater than 0.80 shows good reliability, and an Alpha greater than 0.90 shows excellent reliability (Robertson & Evans, 2020).

Table 2. Reliability Statistics for Constructs

Construct	No. of Items	Cronbach's Alpha
Entertainment	5	0.82
Interactivity	5	0.79
Customer Trust	5	0.85
Informativeness	5	0.76
Customer Loyalty	5	0.88

Table 1 shows that all constructs exceeded the suggested level for Cronbach's Alpha (α .70). Entertainment measured .82, while Interactivity measured .79. Customer Trust measured .85 and Customer Loyalty measured .88. The two were considered to have a high level of consistency. Informativeness measured .76. The two constructs exceeded the threshold since the value measured .70. According to Robertson and Evans (2020), this proves that the constructs measured what they were supposed to measure.

Data Analysis

Exploratory Data Analysis

The descriptive statistics in this section aimed to analyze the demographic factors of the respondents, as well as their frequency of using live streaming for street vendor products.

Table 3. Frequency Distribution of Respondents' Characteristics (N = 400)

Variable	Category	Frequency	Percent
Gender	Female	219	54.8
	Male	181	45.3
	Total	400	100.0
Age Group	Below 20 yrs	66	16.5
	21–30 yrs	133	33.3
	31–40 yrs.	97	24.3
	41–50 yrs.	59	14.8
	Above 50 yrs.	45	11.3
	Total	400	100.0
	Total	400	100.0
Education Level	Primary	43	10.8
	Secondary	117	29.3
	Tertiary	198	49.5
	Others	42	10.5
	Total	400	100.0
Frequency of Using Live Streaming for Street Vendor Products	Daily	156	39.0
	Weekly	152	38.0
	Monthly	56	14.0
	Rarely	36	9.0
	Total	400	100.0

From Table 2, the total sample consisted of 400 participants. Breaking down the participants by gender, the majority are female (54.8%), compared to 45.2% who were male. From the age group perspective, the largest portion of the participants belonged to the 21-30 age group (33.3%), followed by the 31-40 (24.3%), and the "less than 20" group (16.5%). The 41-50 and more than 50 age groups consisted of 14.8% and 11.3%, respectively.

In addition, based on Table 2, regarding the educational attainments, almost half of the respondents (49.5%) achieved a tertiary degree, while 29.3% achieved secondary and 10.8% achieved a primary level. Finally, regarding the use of the live streaming service for the vendors' commodities, 39.0% use the service daily, while 38.0% use the service weekly. In addition, another 14.0% use the service monthly, and 9.0% rarely use the service.

In general, the finding reveals that the respondents are mainly composed of young adults with higher educational attainment and frequent viewers of live streaming services in viewing products from street vendors.

After this, the Pearson product-moment correlation analysis was used to determine the associations among entertainment, interactivity, customer trust, and informativeness, as shown in Table 3.

Table 4. Correlations among Study Variables

Variable	Entertainment	Interactivity	Customer Trust	Informativeness
Entertainment	-			
Interactivity	0.28**	-		
Customer Trust	0.24**	0.13**	-	
Informativeness	0.21**	0.27**	0.29**	-

Note. $P < .01^{**}$. Effect sizes can be classified into small ($(r = .10)$), Medium ($(r = .30)$), and large ($(r = .50)$), according to Cohen (1988).

As illustrated in Table 3, a positive correlation existed between entertainment and interactivity, $r(398) = 0.28$, $p < 0.001$, and customer trust, $r(398) = 0.24$, $p < 0.001$. The outcomes indicated that when live streaming was entertaining, customer interactions and the building of customer trust benefited.

The relationship between interactivity and trust had a medium positive correlation with customer trust, $r(398) = 0.13$. This indicates the significance of the role of interactivity as a trust-building factor. In addition, informativeness had a positive relation with customer trust, $r(398) = 0.29$. This indicates that as the information provided through live streams is more useful, customers trust the vendors. All the constructs were significantly related to each other, though their effect sizes were small to medium.

The result shows that all the factors are related to the formation of customer trust, which is a justification for incorporating the factors into the regression analysis and mediation models. The correlation analysis indicated a positive but weak relationship between interactivity and customer trust ($r = .13$). Based on Cohen's guidelines, this represents a small association. Although the relationship is statistically relevant within the correlation matrix, its relatively small magnitude suggests that interactivity alone has limited association with customer trust. This finding indicates that other factors, such as informativeness, entertainment value, and the quality of the customer–vendor interaction, may also contribute to the development of trust in live-streaming environments.

The Importance of Live Streaming in Customer Loyalty Among Street Vendors

The role of live streaming with respect to customer loyalty has been analyzed using multiple regression analysis. The independent variables have been introduced simultaneously. The results of the multiple regression analysis have been presented in Table 4.

Table 5. Multiple Regression Predicting Customer Loyalty from Live Streaming Attributes
Multiple Regression Results

Variables	Beta (β)	P-value	Decision
Entertainment	.182	.001	Supported
Interactivity	.145	.007	Supported
Customer Trust	.241	< .001	Supported
Informativeness	.101	.044	Supported

Source: Author's Computation, 2026.

Note. β = standardized regression coefficient. Statistical significance was assessed at $p < .05$.

The multiple regression analysis revealed that entertainment ($\beta = .182$, $p = .001$), interactivity ($\beta = .145$, $p = .007$), customer trust ($\beta = .241$, $p < .001$), and informativeness ($\beta = .101$, $p = .044$) significantly predicted customer loyalty. Therefore, H1, H2, H3, and H4 were supported

Table 6. Mediation Test on the Effect of Interactivity on Customer Loyalty through Trust

Path / Effect	B	SE	t	p
Path a: Interactivity $\rightarrow$ Trust	0.128	0.048	2.65	.008
Path b: Trust $\rightarrow$ Loyalty	0.142	0.056	2.54	.012
Path c: Interactivity $\rightarrow$ Loyalty	0.046	0.055	0.83	.406
Indirect effect ($a \times b$)	0.018	0.009	-	-

Table 5 shows that interactivity significantly predicted customer trust (path a: $B = 0.128$, $SE = 0.048$, $t = 2.65$, $p = .008$), while customer trust significantly predicted customer loyalty (path b: $B = 0.142$, $SE = 0.056$, $t = 2.54$, $p = .012$). The indirect effect of interactivity on customer loyalty through customer trust was $B = 0.018$ ($SE = 0.009$), which is consistent with the product of the two constituent paths ($0.128 \times 0.142 \approx 0.018$). However, the direct effect of interactivity on customer loyalty reported in Table 5 was not statistically significant ($B = 0.046$, $SE = 0.055$, $t = 0.83$, $p = .406$). Therefore, the current results do not provide sufficient evidence to classify the relationship as either partial or full mediation without confirming the statistical significance of the indirect effect. The indirect effect should be evaluated using its bootstrap confidence interval or corresponding significance test before concluding the mediation effect. The mediation hypothesis is subject to confirmation of the statistical significance of the indirect effect. Although the indirect effect was estimated at $B = 0.018$, the available results do not report its bootstrap confidence interval or corresponding significance test. Therefore, a definitive conclusion regarding the presence and type of mediation cannot be drawn until the indirect effect is verified using the original mediation output.

The mediation analysis estimated an indirect relationship between interactivity and customer loyalty through customer trust ($B = 0.018$, $SE = 0.009$). However, the statistical significance of the indirect effect requires confirmation using bootstrapped confidence intervals. Therefore, based on the available results, the mediation effect cannot be conclusively established.

Table 7. Regression Model Summary

Model	R ²	F	df	p
Regression model	.281	≈ 51.70	3, 396	$< .001$

Note: $R^2 = .281$, $F(3, 396)$ $p < .001$

The regression model explained 28.1% of the variance in customer loyalty ($R^2 = .281$). The overall regression model was statistically significant, $F(3, 396) \approx 51.70$, $p < .001$, indicating that the predictors collectively accounted for a significant proportion of the variance in customer loyalty

CONCLUSION

This study examined the relationships between live-streaming characteristics and customer loyalty among customers of street-food vendors in Lagos, Nigeria. The findings indicate that Entertainment is significantly associated with customer loyalty. The results further suggest that customer trust may serve as a mechanism linking interactivity with customer loyalty, although the indirect effect requires further verification using bootstrapped confidence intervals. In addition, education level was found to moderate the relationship between entertainment and customer loyalty. These findings suggest that street-food vendors may benefit from developing live-streaming content that is entertaining, interactive, informative and capable of fostering customer trust. However, the findings should be interpreted as associations rather than causal effects because the study employed a cross-sectional research design. The study therefore provides empirical evidence on the relationships among live-streaming characteristics, customer trust and customer loyalty within the Lagos street-food context, while recognizing the need for further research using stronger research designs and more representative samples.

LIMITATION AND FUTURE RESEARCH

This study has several limitations that should be considered when interpreting its findings. First, convenience sampling was used to recruit respondents. Although this approach enabled the researchers to access participants with relevant experience of live-streaming activities, it limits the representativeness of the sample and consequently the generalizability of the findings. Future studies should consider probability-based sampling techniques where feasible.

Second, the study was conducted in Lagos, Nigeria, and focused on customers of street-food vendors. The findings may therefore not be generalizable to other cities, countries or types of vendors because differences in cultural, economic, and technological environments may shape customers' responses to live-streaming activities. Comparative studies across different locations and contexts are recommended.

Third, the cross-sectional design provides information about the relationships among the variables at a particular point in time but does not permit definitive conclusions about causality. Future research could employ longitudinal or experimental designs to examine how changes in live-streaming characteristics are associated with changes in customer loyalty over time.

Fourth, the study relied on self-reported questionnaire data, which may be subject to common method bias, recall bias and social desirability bias. Future studies could combine survey responses with behavioral indicators, such as viewing frequency, purchase records, engagement metrics or repeat-purchase behavior, to provide a more comprehensive assessment of customer loyalty.

Finally, the mediation finding should be interpreted cautiously because the reported indirect effect was not accompanied by bootstrapped confidence intervals. Future research should employ bootstrapping procedures to establish the statistical significance and confidence interval of the indirect effect of interactivity on customer loyalty through customer trust.

RECOMMENDATION

From the findings of this research, it can be proposed that the following recommendations should be considered to enhance engagement with the brand through live streaming among street vendors:

As entertainment and interactivity were strong predictors of customer loyalty, vendors must develop live streaming sessions that incorporate activities such as entertainment, product demonstrations, and other forms of engaging activities that attract customers' attention to improve their level of interactivity.

Since the finding that customer trust has the greatest association with loyalty, vendors must be truthful in their product information and their dealings to build a good, lasting impression among their clients. The results of the moderation analysis show that education level positively offsets the impact of entertainment on loyalty. Suppliers should thus use both entertaining and informative messages targeted at different groups of customers.

Informational content was positively linked to trust and loyalty constructs. Vendors ought to consider offering customers information pertaining to products and usage information in order to enhance trust levels and loyalty. Through the combined emphasis on entertainment, interactivity, informativeness, and trust, street vendors can reap the benefits of live streaming for building lasting loyalty and engagement with customers

THEORETICAL IMPLICATION

The current study expands the Stimulus-Organism-Response (S-O-R) model to the informal street vendor retail business environment of an emerging economy. It reveals that entertainment, interactivity, and informativeness act as the stimuli of live-streaming influencing the psychological responses of consumers whereas consumer trust emerges as one of the key mechanisms related to customer loyalty. Thus, the research work expands the use of the S-O-R model from the formal electronic commerce environment to the informal retail environment of the street food vendors of Lagos, Nigeria.

MANAGERIAL IMPLICATION

Based on the results above, it is clear that it is important for street vendors to utilize live streaming as a way of fostering loyalty among their customers. This will be achieved by creating engaging and interactive sessions through product demonstrations, customer interactions, and quick responses to customers' questions and suggestions. It is also important for them to give the right and useful information about their products to avoid any form of customer uncertainty or confusion. Because of the strong correlation between trust and loyalty, they should always be honest and consistent in their live-streaming sessions.

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