



# Influence of Streamer Characteristics on Trust and Purchase Intention in Live Stream Shopping

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**Abstract.** Live stream shopping is gaining global popularity, notably in China and Austria, with major brands like BIPA, L'Oréal, and IKEA adopting this approach. This new format, featuring interactive product showcases by streamers, addresses traditional online shopping limitations such as insufficient product information and lack of retailer trust. This study investigates how streamer characteristics affect trust and purchase intentions in Austrian live stream shoppers, focusing on two streamer roles: experts and influencers. Based on the SOR model and source models, the research involved a quantitative experiment with 188 participants viewing live stream scenarios. Results indicate streamer attractiveness and expertise significantly boost trust and purchase intent. Attractiveness has a stronger trust correlation with influencers, while expertise is more influential for experts. Trust positively impacts purchase intentions for both roles. However, 63% of Austrians aged 18–59 show reluctance towards buying via live streams. The study also finds experts rate higher in attractiveness and expertise than influencers.

**Keywords:** Live stream shopping · electronic commerce · streamer

## 1 Introduction

Live stream shopping is becoming increasingly prominent on a global scale. Live stream shopping is the sale of products in real time via a live stream on a website. In this live stream, streamers such as experts or influencers present certain products in an interactive way, provide additional information, and demonstrate their functionality [1]. At the same time, viewers can interact with the streamers through written comments or the 'Like' button [2]. All features and functionalities of products can be shown to minimize viewer uncertainty [3].

In China, live stream shopping is already an established part of e-commerce. Its growth was particularly rapid during the Covid 19 pandemic [4]. According to a study by Academy of China Council for the Promotion of International Trade [5], the number of users of live stream shopping platform users in China reached 469 million by June 2022 (204 million in March 2020), accounting for 44.6% of total Internet users. to the report, China's largest short video platform Douyin (comparable to TikTok) hosted more than 9 million live streams every month between May 2021 and April 2022, and sold

at least 10 billion goods [5]. Due to the growing popularity of live stream shopping in China, the number of academic studies on this issue has increased significantly in recent years. Most of the existing studies focus on streamers [6, 7]. In addition, the motivation of Chinese people to participate in live-stream shopping and the purchasing behavior of live-stream shopping have also been studied [8]. Most of the existing studies focus primarily on the Asian region, while there are almost no academic studies on the topic in Europe.

Meanwhile, European companies are also using live stream shopping to sell their products. An Austrian study found that 25% of the respondents had already purchased products presented in live stream shopping events. In addition, another 15% could imagine expanding their shopping experience by participating in such events in future [9]. With the growing importance of online retail, the drawbacks of traditional, digital forms of sales are becoming more apparent. First and foremost, contacting online retailers to obtain additional product information is often very time-consuming and interrupts the buying process. In addition, the product information that users receive before making a purchase is usually limited to product photos and text descriptions. Another problem is the uncertainty about the authenticity of online retailers. Consumers perceive an increased risk when buying online if there is no direct contact with the seller [10]. This is mainly because traditional online stores offer limited opportunities to convey emotions, facial expressions, or gestures. As a result, trust in the retailer is reduced because a personal connection cannot be established [11]. Purchasing decisions are often made based on product photos, which are often edited after the fact, and the appearance of the products shown does not always reflect reality. During a live stream shopping event, consumers' concerns can be reduced, and products can be presented truthfully. Heinemann [12] also believes that live video will continue to grow in importance, and that live videos are more authentic, convey more closeness and make companies seem more tangible. In addition, they can build trust and a more effective retain customers.

Previous research has focused primarily on the characteristics of streamers in live stream shopping and little on the roles that streamers play. There are numerous studies dealing with the attractiveness, expertise and trust of streamers [6, 13–16]. Although the effects of attractiveness and expertise have been confirmed several times in published studies, the results vary depending on the study, the mediators used, and the dependent variables. In general, most studies on live stream shopping have been conducted in Asia, which is a significant difference because the society and culture in Asia is not comparable to that in Europe. Despite extensive research on live stream shopping, the literature review did not identify any study in Austria or German-speaking countries that specifically addresses the effects of streamer characteristics and roles on trust and ultimately purchase intention. Therefore, this study aims to fill this research gap. The study will provide information on which streamer characteristics, according to the Austrian population, can have an effect on mediator trust and ultimately lead to purchase intention. The role of the streamers is also considered.

Subsequently, this paper investigates whether Austrians would build up trust depending on streamer characteristics and roles and whether they would ultimately purchase products in live stream shopping or not. To investigate purchase intention, independent variables such as streamer attractiveness and credibility are linked with the construct of

trust as a mediator. From these problem areas, the authors derive the following research questions:

RQ1: What are the effects of streamer characteristics in live stream shopping on the trust and purchase intention of Austrians?

RQ2: What specific differences in terms of attractiveness and expertise can be identified among streamers depending on their role (expert or influencer)?

RQ3: What is the effect of streamer characteristics in relation to the respective role (expert or influencer) on viewer trust and purchase intention in live stream shopping?

The paper is organized in the following manner: Following this introduction, the theoretical background delves into the subject matter, while the method section synthesizes both our literature review and the survey conducted. Afterwards, the presented and discussed results from the literature review and survey are provided. The paper concludes by summarizing the outcomes and highlighting the implications for the field of HCI, along with identifying potential avenues for future research.

## 2 Theoretical Background

The theoretical background is derived from recent practical studies and an extensive literature review. It includes an overview of live stream shopping in Europe and explores the roles of streamers.

### 2.1 Live Stream Shopping in Europe

Live stream shopping has expanded from China to the European market in recent years. A 2022 German study revealed, that 56% of respondents aged 18–34 were aware of live stream shopping. Similarly, nearly half of those surveyed in the 35+ age group has heard of live stream shopping [17]. Despite this, live stream shopping events are still infrequently used in Germany. To date, only 10% of individuals aged between 18 and 34 have utilized live stream shopping as an alternative to traditional shopping. In comparison, less than 10% of purchasers aged 35 or older have made live stream purchases [17]. The results of the study further demonstrate that 74% of German participants hold a positive attitude towards the ability to ask questions directly during live stream shopping. Additionally, 61% of respondents found a well-detailed product explanation to be appealing. Participants described live stream shopping as an engaging format [9]. A 2021 study conducted by the Austrian Retail Association revealed that 25% of surveyed participants had already made purchases of products showcased during live stream shopping events. In addition, a further 15% can imagine expanding their shopping experience in the future by participating in such events [18]. More than one-third of the top beauty and fashion brands and retailers in Germany offer live stream shopping. Live stream shopping is gaining popularity not only in the three main e-commerce markets in Europe - Germany, the UK, and France - but also in the Nordic countries. Numerous Swedish and Danish brands have already gained expertise in this field. A sector comparison demonstrates that beauty brands frequently hold live stream shopping events, while fashion brands only host them occasionally. The study shows that 70% of European brands favor integrating their own webshops and promoting events via social media. Companies benefit from

using their own channels, as they provide comprehensive control over the live stream shopping environment and stream quality. However, one disadvantage is that existing customers are reached primarily. In order to make the live stream shopping event known to a wider public, additional marketing on other platforms is required, which in turn is associated with costs [19].

## **2.2 Role of Streamers in Live Stream Shopping**

The people who present the products during the live stream are referred to as ‘streamers’ or ‘hosts’ [20, 21]. They include, for example, influencers, well-known personalities, independent salespeople, employees and ordinary people without a specific role assignment. During the live stream, viewers can interact with the streamers and other viewers by sending messages [22]. In Europe, streamers are classified as influencers or product experts. The streamers of a live stream shopping event play a vital role in achieving the goal of increasing brand awareness, launching a new collection, or boosting sales to the audience who already have an interest in your brand and/or webshop. The concept of live stream shopping presents a chance to take advantage of the growing popularity of influencer marketing among select customer segments. It is logical to assume that the incorporation of celebrities or subject matter experts from social media can increase the audience for live stream shopping events. Influencers play a crucial role in the sphere of social media among young customers, while social media is progressively becoming a critical influencer for consumer choices. According to a 2023 survey, 45% of German Generation Z participants stated that influencers should take on the role of streamers at live stream shopping events. In contrast, only ten percent of baby boomers shared this opinion. However, 70% of baby boomers stated that experts for the product being presented should be used as streamers for live stream shopping events. Only 21% of Generation Z agreed with this view [22]. As consumers age, practicality and efficiency become increasingly important factors in their product preferences, overtaking the influence of salespeople or other presenters. Forrester recently conducted a survey on consumer sentiment towards live stream shopping in Europe, specifically asking which type of streamer the participants preferred. Across all age groups, local product experts such as in-store salespeople were favored. Product experts are more popular than social media influencers, even among adults aged 18 to 34. Generally, European brands and retailers maintain a balanced distribution of influencers and/or internal product experts. Beauty companies differ from fashion brands by tending to integrate both influencers and experts during live shopping events [19]. The results of this survey are especially relevant for this paper, because beauty and cosmetic products were also utilized for the research context of the conducted study.

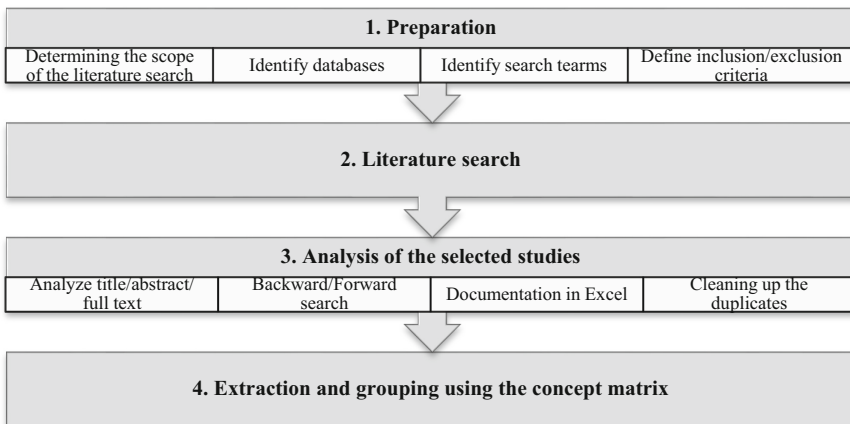
## **2.3 Literature Review**

### **2.4 The Author of This Paper has Developed the Procedure for the Literature Research and Analysis Based on [23–26]**

The objective of this study is to accurately document and present the current findings from existing literature. To achieve this, Cooper’s taxonomy is utilized to determine the scope

of the literature search. The initial phase of preparation involves identifying relevant databases and defining search terms, while also considering synonyms and additional relevant terms. The databases of Web of Science, Scopus, IEEE and ACM were utilized, while search terms like [live shopping, live stream shopping, live commerce, live stream commerce, e-commerce livestream, livestream retail, live video shopping and taobao live] were used in different combinations and synonymous versions (Fig. 1).

Afterwards, inclusion and exclusion criteria are established in order to effectively filter the located literature sources. The content of the sources was evaluated based on how relevant they are to the research questions. The initial phase involves conducting a literature search wherein search criteria are established and search terms are executed in corresponding databases. The content of the sources was evaluated based on how relevant they are to the research questions. After applying the search strategy to titles, abstracts, and keywords, a total of 405 search results were yielded. The content of the sources was evaluated based on how relevant they are to the research questions. The content of the sources was evaluated based on how relevant they are to the research questions. This assessment reduced the number of sources to a total of 55, and duplicates were also eliminated during this phase. The subsequent evaluation step involved thoroughly reviewing the complete texts of each publication, as well as conducting a backward and forward search [26].



**Fig. 1.** Literature review procedure

After completing the analysis, we identified 39 relevant publications. Following [1] recommended conceptual approach, we formed an organizational framework for analyzing the factors that influence live stream shopping. In this situation, various concepts shape these factors. After analyzing the selected sources, a total of eight identified influencing factors for the use of live stream shopping were recorded in the concept matrix created for this thesis. These influencing factors were formed based on very frequently examined variables from previous research on live stream shopping in general as well as regarding trust and purchase intention. Upon analyzing the frequencies of the individual factors, it is evident that the two primary factors that influenced the scientific

papers were ‘host/streamer’ and ‘social aspects’ which include the streamer characteristics of attractiveness, expertise and trust. The remaining factors include ‘information’, ‘entertainment’, ‘interaction’, ‘product and price’, ‘technical aspects’, and other aspects (Table 1).

The authors mainly focused on the factors of attractiveness and expertise as well as trust in streamers [13, 15, 6–10]. The existing literature confirms the positive influence of streamer expertise and the physical attractiveness of streamers. Streamer expertise is often considered more important than attractiveness when researching viewer trust and the dependent variable is purchase intent [27]. In contrast, physical attractiveness repeatedly has positive effects when hedonistic factors or user engagement are examined [27]. The familiarity of the streamers was also examined in the studies, and it was found that the attitude towards live stream shopping is more positive and the interaction higher when it is a well-known person, for example influencers [29]. In addition, the identification of viewers with the streamers was also extensively examined in the studies. Furthermore, many relevant studies focused on social aspects and interpersonal interaction factors. Social presence has been analyzed in detail in numerous studies and its influence has been repeatedly confirmed. However, several studies have not been able to prove a direct and significant influence of interactivity between streamers and viewers on the purchase intention. Instead, the effect is usually indirect via mediators such as trust, immersion, or social presence [10, 31].

### 3 Research Model

The forthcoming section will explicate the specific variables. Attractiveness and expertise, as independent variables, are analyzed in the context of streamers. Purchase intention for live stream shopping serves as the dependent variable. Trustworthiness, serving as the mediator, connects the independent and dependent variables.

#### 3.1 Attractiveness

Attractiveness is defined as the evaluation of the physical aspects, temperament and similarity of a person by another person [16]. Attractiveness does not just mean physical attractiveness but includes a range of positive characteristics that consumers may perceive in a celebrity, for example intellectual ability, personality traits, lifestyle or athletic ability [56]. Physically attractive streamers can provide a sense of security and foster trust [45]. As demonstrated by [30] the physical attractiveness of streamers has a positive impact on viewer engagement during live stream shopping. Consumers tend to place a significant emphasis on physical appearance and consequently direct all their attention and interest towards attractive streamers. Eye-catching streamers capture attention and can induce behavioral responses.

#### 3.2 Expertise

Perceived expertise is the extent to which communicators are viewed as a reliable source of information. The term encompasses the knowledge, experience, and skills that communicators possess. It is not mandatory that they are experts but rather, it is important how

Table 1. Identified influencing factors in live stream shopping

Study	Identified influencing factors							other aspects
	Hosts/Streamers	Social aspects	information	entertainment	interaction	Product and price	Technical aspects	
[28] Cai et al. (2018)	x					x		
[32] Chen/Lin (2018)	x	x		x	x			
[10] Sun et al. (2019)		x		x				
[33] Hu/Chaudhry (2020)			x			x		
[14] Heo/Kim/Yan (2020)	x	x						
[35] Ko/Chen (2020)	x	x			x			
[27] Park/Lin (2020)	x							
[2] Wongkitrungrueng/Assarut (2020)			x					
[13] Chen et al. (2021)	x							
[35] Li X. et al. (2021)		x						
[36] Li/Li/Cai (2021)		x					x	
[7] Li/Peng (2021)	x							
[37] Liu/Kim (2021)			x	x				
[38] Ming et al. (2021)		x						
[39] Zhou et al. (2021)				x				
[40] Zhu et al. (2021)	x							
[41] Ma (2021a)		x						
[42] Ma (2021b)								
[43] Bao/Zhu (2022)					x			x

(continued)

**Table 1.** (continued)

Study	Identified influencing factors									
	Hosts/Streamers	Social aspects	information	entertainment	interaction	Product and price	Technical aspects	other aspects		
[21] Chen et al. (2022)	x			x						
[6] Guo et al. (2022)	x									
[29] Li et al. (2022)	x				x					
[44] Lin et al. (2022)										
[45] Liu et al. (2022)	x			x						
[16] Rungruangji (2022)	x									
[31] Sawmong (2022)	x		x	x						
[15] Wang et al. (2022)	x									
[46] Zeng et al. (2022)										x
[31] Dang-Yan et al. (2023)	x									
[47] Dong/Liu/Xiao (2023)					x					x
[48] Gao et al. (2023)	x	x								
[49] Hwang/Youn (2023)			x			x				
[50] Joo/Yang (2023)				x						
[51] Liao et al. (2023)	x	x			x					
[52] Tian et al. (2023)	x									
[53] Wu et al. (2023)									x	
[54] Yin et al. (2023)		x								
[55] Zhang/Chen/Zamil (2023)	x									x
[52] Zheng et al. (2023)		x								
<b>Sum</b>	<b>20</b>	<b>12</b>	<b>5</b>	<b>8</b>	<b>7</b>	<b>4</b>	<b>3</b>	<b>1</b>		



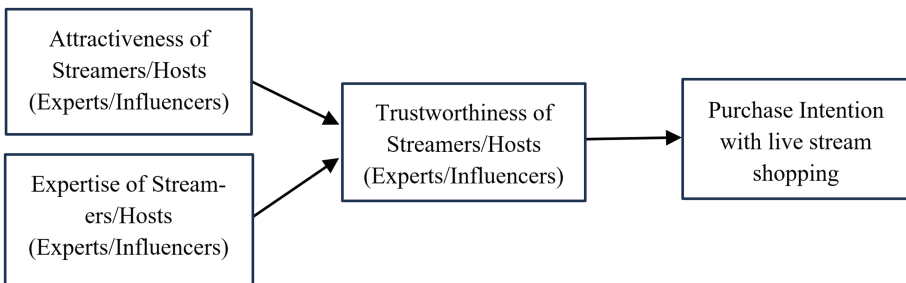
their audience perceives them [56]. Expertise is a crucial factor in enhancing the credibility of communicators [57]. [15] Proving expertise has a positive impact on consumer trust.

### 3.3 Trustworthiness

Trustworthiness pertains to the truthfulness, honorability, and credibility of communicators. As per [27], trustworthiness refers to “the listener’s level of confidence in and acceptance of the speaker and the message”. The perception of communicator’s trustworthiness varies among the target audience. Studies have indicated that acclaimed advertisers with high trustworthiness can significantly sway consumers’ attitudes and intentions to purchase [58]. In their study, [59] confirms the influence of streamers’ trustworthiness on purchase intentions.

### 3.4 Purchase Intention

Purchase intention is described by the willingness of consumers to buy a certain product or service based on their subjective assessment and overall evaluation [60]. As articulated by [61], purchase intention represents an individual’s perception of the likelihood of purchasing a product in a particular time frame. Consumer analyses for tangible goods frequently take into account purchase intentions. However, the reliability of purchase intentions is limited since not all stated intentions are always put into practice. Prior research has explored the impact of celebrities on purchase intentions. Regarding live stream shopping, [27] confirmed that celebrities do influence the purchase intentions of Chinese consumers (Fig. 2).



**Fig. 2.** Research model

## 4 Methodology

Based on the findings of the literature review, an online survey was carried out as an empirical investigation. The outcomes of this study shed light on the three proposed research questions.

#### 4.1 Online Survey

An online survey was conducted in Austria from July 17 to July 31, 2023, to determine the impact of streamer characteristics on trust and purchase intention in live stream shopping among Austrian consumers. Prior to this survey, a pretest was conducted with participants from various fields to ensure its comprehensiveness and clarity. The language used in the survey was kept unambiguous to avoid any confusion. Furthermore, the roles of streamers, including experts and influencers, were taken into account. The online survey was conducted through the use of the Lime Survey tool.

The survey follows a standardized structure with the demographic inquiry appearing at the end. It includes a total of 38 questions or statements, along with the demographic query. Attractiveness, expertise, and trustworthiness are the selected influencing factors of streamers, adapted and queried using the question items of Gupta, Kishor, and Verma [16] and Ohanian [58], as in the study by Rungruangjit [62].

A 5-point Likert scale is utilized for this purpose, with the dependent variable of purchase intention being tested through the question items from Chen et al. [13], also using a 5-point Likert scale. The following table displays the variables alongside the question items, which renders the theoretical construct measurable (Table 2).

**Table 2.** Measured Constructs and Research Questions

Construct	Question Items
Attractiveness [16]	ATT1: The streamer is attractive ATT2: The streamer has a beautiful face ATT3: The streamer has a very convincing voice ATT4: The streamer has a very professional appearance ATT5: The streamer attracts my attention
Expertise [16, 58]	EXP1: The streamer has expertise in his/her field EXP2: The streamer has expertise in his/her field EXP3: The streamer has extensive product knowledge EXP4: The streamer is highly qualified in sales
Trustworthiness [16, 58]	TRU1: The streamer is a sincere person TRU2: The streamer is an honest person TRU3: The streamer is trustworthy TRU4: The streamer is a reliable source of information
Purchase Intention [13]	PUI1: I would like to buy products through live stream shopping PUI2: I would recommend my friends and families to buy products through live stream shopping PUI3: If I want to buy a product, I would like to buy it from live stream shopping

The paper's authors chose their scale based on previous studies examining similar constructs. The items are presented according to variables, with the order of the items being randomly rotated for participants. The online survey begins with a brief general introduction and definition of live stream shopping. General questions about online

shopping behavior are also asked at the beginning. The participants then watched an excerpt from a live stream shopping event featuring both experts and influencers, whereby cosmetic products were presented. The participants then evaluate the two streamer roles they saw in the previous video. At the end, the participants are asked about their socio-demographic data, including age, gender, country and level of education. The statements to be evaluated were randomly organized to prevent any primacy or recency effects, ensuring that each respondent receives a uniquely arranged list of items [63]. The findings of this empirical study, conducted via LimeSurvey, are analyzed with the aid of SPSS.

## 4.2 Survey Sample

In this study, a non-probabilistic sampling method was used, in which the respondents were selected according to their availability or other predefined criteria without a specific system. It is therefore a random selection method [63]. The online survey received 334 responses between July 17 and July 31, 2023, with 202 complete questionnaires. All responses from individuals who did not reside in Austria at the time of survey completion and those over 59 years old who couldn't answer the control question correctly were excluded during data cleaning. After removing invalid cases, 188 valid responses were available for further analysis. The average response time was 6 min and 17 s. Of the 188 participants, 132 identified as female and 56 identified as male, resulting in over 70% of participants being female and close to 30% being male. The average age of the sample was 29 years old, with ages ranging from 18 to 59. A substantial proportion of participants, namely 71.2%, fell between the ages of 18 and 29 years old. 17.6% of participants are aged between 30 and 39. Of all the participants, 39.4% hold a bachelor's degree, while 20.7% have a master's degree and 19.1% possess a baccalaureate. The remaining 20.8% are distributed among other categories, with apprenticeships accounting for the largest portion.

The survey revealed that 42.6% of respondents engage in online shopping two to three times a month, followed by 20.2% who shop online once a month and 9% who shop every two to three months. In addition, 19.1% shop online at least once a week. Following the online shopping survey, respondents were polled about their familiarity and prior experience with live streaming shopping. The survey results indicate that 56.9% of the participants were aware of live stream shopping, 3.2% were unsure, and 39.9% were unfamiliar. Of those surveyed, 9.6% had participated in live stream shopping while 1.6% were unsure, and 88.8% had never watched a live stream shopping event before this survey.

**Reliability Analysis.** The reliability of a test refers to the reliability with which a measurement instrument provides consistent measurement results for a group of items in relation to a specific characteristic. Various methods are available in SPSS, whereby Cronbach's alpha is frequently used as a measure of reliability. For a sufficiently large number of similar indicators, the degree of internal consistency of a scale is measured using Cronbach's alpha. This measure is based on the average correlation between the indicators [64]. In this consistency analysis, the calculated value of Cronbach's alpha ranges from 0 to 1. A value closer to 1 indicates higher reliability and it can be assumed that the items consistently measure the same characteristic [65]. Recommendations tend

towards minimum values of 0.7 or 0.8 [3.]. The results show that all items of the individual variables display a high value of Cronbach's alpha, they are therefore clearly reliable and the items correlate (Table 3).

**Table 3.** Reliability Analysis

Item	Cronbach's Alpha	Number of Items
ATTEX	0,769	5
EXPEX	0,795	4
TRUEX	0,852	4
ATTIN	0,884	5
EXPIN	0,886	4
TRUIN	0,909	4
ATT	0,867	10
EXP	0,873	8
TRU	0,898	8
PUI	0,898	3

## 5 Results

The section below outlines the results obtained from a survey of 188 participants in Austria. First, we present the descriptive findings, followed by the statistical analysis that addresses the research questions.

### 5.1 Descriptive Statistics

The survey findings revealed that 42.6% of participants shop online two to three times monthly, while 20.2% make online purchases once a month, and only 9% shop online bi-monthly. However, 19.1% of those surveyed shop online on a weekly basis. Following the online shopping survey, respondents were queried about their prior familiarity and engagement with live stream shopping. The survey found that 56.9% of respondents were aware of live stream shopping, while 3.2% were not sure and 39.9% were unfamiliar with the concept. The language used in the survey was precise and unambiguous while adhering to proper grammar, metrics, and units. Among the respondents, 9.6% reported participation in live stream shopping, 1.6% were unsure, and 88.8% had never watched a live stream shopping event.

### 5.2 Statistical Tests to Verify the Research Questions

Before exploring any correlation or difference, it is crucial to conduct a normal distribution test. The mathematical test for normal distribution can be performed using

tests like the Kolmogorov-Smirnov or Shapiro-Wilk tests. The variables tested, namely EXP (expertise of both roles), EXPEX (expertise of the experts), EXPIN (expertise of the influencers), ATTEX (Attractiveness of the experts), ATTIN (Attractiveness of the influencers), TRU (Trust of both roles), TRUEX (Trust of the experts), TRUIN (Trust of the influencers), and PUI (Purchase intention during live stream shopping) show significant results ( $p < 0.05$ ) in both Kolmogorov-Smirnov and Shapiro-Wilk tests [65]. These results clearly show that the data are not normally distributed. In contrast, the ATT (attractiveness of both roles) variable clearly shows that it is not significant and is therefore normally distributed (Table 4).

**Table 4.** Descriptive Statistics

Item	MV	SD	K-S/p <sup>a</sup>	S-W/p
ATT	3,63	0,631	0,066	0,055
ATTEX	3,71	0,657	<0,001	0,001
ATTIN	3,54	0,793	<0,001	0,003
EXP	3,21	0,659	<0,001	0,004
EXPEX	3,43	0,673	0,001	<0,001
EXPIN	2,99	0,821	<0,001	0,004
TRU	3,20	0,659	<0,001	0,002
TRUEX	3,15	0,686	<0,001	<0,001
TRUIN	3,25	0,796	<0,001	<0,001
PUI	2,19	0,907	<0,001	<0,001

(Note: Mean Value (MV), Standard Deviation (SD), Kolmogorov-Smirnov test (K-S), Shapiro-Wilk (S-W) test).

**RQ1.** To answer RQ1, we will examine the correlation. The Pearson correlation ( $r = 0.619$ ) and the Spearman correlation ( $r = 0.580$ ) both demonstrate a significant, positive, and medium correlation between attractiveness and trust. We will proceed to test the correlation between expertise and trust. The Spearman correlation results showcase a significant outcome ( $p = < 0.001$ ), with a correlation coefficient of 0.551 ( $r = 0.551$ ). This indicates that there is a substantial, favorable, and average correlation between expertise and confidence level. Additionally, we analyze the correlation between trust and purchase intention in live stream shopping. The Spearman-Rho results demonstrate a significant correlation between trust and purchase intention, as their significance is nearly zero ( $p < 0.001$ ). The correlation coefficient is 0.449 ( $r = 0.476$ ). There is a significant, positive but low correlation between trust and purchase intention (Table 5).

**RQ2.** The following test aims to determine if stream-ers’ characteristics differ based on whether experts or influencers moderate live stream shopping events. To assess differences between two dependent groups, utilize either the Wilcoxon or T-test for dependent samples, depending on the normal distribution and scale level. The Wilcoxon test allows for the immediate comparison of two measured values for the same individuals. The

**Table 5.** Correlations ATT, EXP, TRU and PUI

Item	$r_p$	Sig. (2-tailed)	$r_s$	Sig. (2-tailed)
ATT - TRU	0,619	<0,001	0,580	<0,001
EXP - TRU	-	-	0,551	<0,001
TRU - PUI	-	-	0,449	<0,001

Note: Pearson correlation ( $r_p$ ), Spearman correlation ( $r_s$ ), Significance (Sig.)

Wilcoxon test, a parameter-free method, is used to answer the second research question (RQ2), as the variables are not normally distributed. The mean difference between ATTEX and ATTIN is deemed highly significant ( $Z(n = 188) = -3.248$ ,  $p = 0.001$ ). The test statistic for expertise is  $Z = -7.416$  and the associated significance value is  $p < 0.001$ , indicating a significant difference. The central tendencies of the two variables differ significantly ( $Z(n = 188) = -7.416$ ,  $p < 0.001$ ). Additionally, the linked samples demonstrated a difference in attractiveness and expertise. The respondents rated the expert as more attractive and knowledgeable than the influencer (Table 6).

**Table 6.** Differences ATTEX-ATTIN and EXPEX-EXPIN

Item	MV	SD	Z	Asymp. Sig. (2-tailed)
ATTEX	3,71	0,657	-3,248	0,001
ATTIN	3,54	0,793		
EXPEX	3,43	0,673	<b>-7,416</b>	<0,001
EXPIN	2,99	0,821		

Note: Mean Value (MV), Standard Deviation (SD), Asymptotic Significance (Asymp. Sig.),

**RQ3.** To address the third research question (RQ3), we examined the correlation between variables using Spearman's correlation test due to the non-normal distribution and ordinal data level. First, we present all variables related to the expert. The correlation test reveals a significant, positive, and low correlation ( $r = 0.476$ ) between the expert's attractiveness (ATTEX) and trustworthiness (TRUEX). A significant medium, positive correlation exists between expertise (EXPEX) and trust (TRUEX) variables, as demonstrated by the Spearman correlation analysis. To test the correlation between a veteran's trust (TRUEX) and purchase intention (PUI) during live stream shopping, we conducted another analysis that showed a significant result ( $p < 0.001$ ) with a correlation coefficient of 0.409 ( $r = 0.409$ ). Therefore, there is a significant, positive, but low correlation between trust in the expert (TRUEX) and purchase intention (PUI). The following section outlines the variables related to the influencer and the results of the Spearman correlation analysis. The analysis reveals a significant result ( $p < 0.001$ ) with a correlation coefficient of 0.522 ( $r = 0.522$ ), indicating a significant, positive, medium correlation between the influencer's attractiveness (ATTIN) and trust (TRUIN). The Spearman-Rho analysis indicates a substantial association between influencer expertise

and trust. The correlation coefficient is 0.476 ( $r = 0.476$ ), indicating a positive yet weak connection between EXPIN and TRUIN. It can be presumed that TRUIN and PUI in live stream shopping also display a significant, positive but low correlation (Table 7).

**Table 7.** Correlations among variables

Item	$r_s$	Sig. (2-tailed)
ATTEX - TRUEX	0,476	<0,001
ATTIN- TRUIN	0,522	<0,001
EXPEX - TRUEX	0,522	<0,001
EXPIN - TRUIN	0,476	<0,001
TRUEX - PUI	0,409	<0,001
TRUIN - PUI	0,390	<0,001

Note: Spearman correlation ( $r_s$ ), Significance (Sig.)

In summary, there is a significant, positive correlation between the expertise of experts and the level of trust they inspire, as well as between the attractiveness of influencers and the level of trust they inspire. Additionally, there is a significant, positive but low correlation between the attractiveness of experts and the expertise and trust of influencers, as well as the trust levels towards both experts and influencers, and the purchase intention in live stream shopping. The table above displays the correlation between the variables that were tested.

## 6 Discussion

The statistical tests revealed significant correlations and variations. The overall findings indicate that streamer attractiveness and expertise have a positive and moderate effect on trust. Furthermore, there is a significant yet small positive correlation between trust and purchase intention. A higher level of trust in streamers is positively associated with a greater intention to purchase during live stream shopping. Differences in the appeal and competence of streamers were observed, contingent upon their position as experts or influencers. This study aimed to analyze the influence of specific streamer traits on trust and purchase inclination during live stream shopping. Additionally, it scrutinized the function of streamers, encompassing both experts and influencers. Through our research, we were able to examine the issue previously raised regarding streamers in live stream shopping in Austria. In this section, we answer the individual research questions and provide an outlook.

The first research question (RQ1) could be answered based on empirical research. Consequently, the attractiveness and expertise of the streamers positively influence trust. The more attractive and expert the streamers are, the higher the trust towards the streamers by Austrians aged 18 to 59. Increased trust in the streamers is positively correlated with an increased purchase intention for live stream shopping. These results are also consistent

with previous studies, which were presented in the research statements. Nevertheless, the descriptive results show that Austrians between the ages of 18 and 59 are less likely to buy products from live stream shopping.

The study's RQ2 utilized statistical methods to assess differences in the attraction and competency of streamers, based on whether they were experts or influencers. The findings indicate that experts were rated significantly higher than influencers in both aspects.

The third research question (RQ3) was also answered based on empirical results. All correlations could be confirmed significantly. Results indicate that attractiveness and trust have a significantly stronger relationship for influencers than experts. Conversely, expertise and trust tend to have a higher correlation for experts than influencers. Regarding the relationship between trust and intent to purchase, there is a significant and similar correlation for both factors.

**Important Role of Experts in Livestream Shopping.** The results suggest that the expert received higher ratings than the influencer in both attractiveness and expertise. Among experts, there were significant, positive correlations between trust and both attractiveness and expertise, with a stronger correlation between trust and expertise. Influencers showed a similar pattern, with a moderate correlation between trust and attractiveness, and a weaker correlation between trust and expertise. The results substantiate previous research, such as the study conducted by [15], which proved that expertise positively impacts trust. The correlation between trust and purchase intention was significant, albeit small and positive. In conclusion, higher trust in streamers is closely linked to increased intention to make a purchase during live stream shopping. This result is in line with the study results of [31] and [52], which confirmed a significant, positive influence of trustworthiness on the intention to buy.

Regardless of the statistical tests, the results of the descriptive analysis indicate that the participants' intention to buy products during live stream shopping is rather low. Regarding purchase intention, it is unclear if test participants were able to answer realistically due to the fact that a significant number of the respondents had never before participated in a live stream shopping event.

## 7 Conclusion

Live stream shopping is highly prevalent and thoroughly researched in Asia, while only a few studies have been conducted in Europe due to its nascent stage of development. Despite this, the format shows great potential and provides numerous opportunities for businesses to promote their products and services. The live stream shopping format stands out for its engaging video content, use of streamers, and high level of interaction. Studies show that in Austria, experts are perceived as more attractive and knowledgeable than influencers in live stream shopping. As electronic and social commerce continue to evolve, along with ongoing digitalization, new opportunities for research are opening up. This creates new avenues for further investigation in this field.



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