BUILDING A LOYAL FOLLOWING: A LEGAL PERSPECTIVE ON CONVERTING VIEWERS TO FANS THROUGH INTERACTIVE BOOK STREAMING ON DOUYIN

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Abstract: *In this research, the objective is to collect a large amount of live streaming data over a long period of time, to argue the micro problems of live streaming e-commerce environment (live streaming book selling e-commerce) with big data, how to efficiently interact with viewers to convert live streaming traffic into subscribers, to discuss the moderating effect of the number of live interactions between live streaming traffic (viewership) and the number of new subscribers, and to discuss the influence of demographic characteristics (gender, age, geographic regions) of viewers as control variables. This research applied Python data crawling, and took into account 1,664 live streaming events from the top ten book publisher accounts in China from January 1 to June 30, 2022, and 52,788,900 live comments, and conducted a statistical analysis of the data to discuss the research hypotheses. The research results that anchors should cater to the reviewers and interact with them according to their psychological needs in a timely manner. In addition, anchors should appropriately guide interactions at live streaming events, control the pace of the live streaming events, allocate a reasonable amount of time to demonstrate the products, answer to questions raised by viewers and guide them to subscribe their live streaming accounts. The value is an attempt to explain the cause-and-effect in social science with big data, thus to offer experience for live streaming e-commerce companies to improve their marketing performance.*

Keywords: *live streaming book selling e-commerce, live streaming traffic, subscribers, interaction, the demographic characteristics of viewers.*

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Introduction

With the rapid development of new technologies and the popular application of information media, the development of Internet in China has witnessed the emergence of new platforms in three e-commerce bonus periods. The first was in 2003 when Taobao went to market and many people started Taobao shops online. The second was in 2011 when WeChat went to market and some people started to do business on WeChat moments. The third is when Douyin went to market. With the explosive development of short-video platforms, many people are now doing live streaming e-commerce on Douyin. The anchor plays a key role at a live streaming e-commerce event. With his

charisma, attractiveness, professional product introduction knowledge sharing and real-time interaction, he helps viewers understand the products on sale. The anchor plays a moderating role between the products and consumers. According to the *Annual Report on the Development of China's Internet Economy (2023)*, as of June 2022, the number of Chinese Internet users reached 1.051 billion, of which the number of Internet video (including short video) users reached 995 million, accounting for 94.6% of the overall number of Internet users, and the number of short video users reached 962 million, an increase of 28.05 million from December 2021, accounting for 91.5% of the overall number of Internet users. The scale of webcast users reached 716 million, an increase of 12.9 million from December 2021, accounting for 68.1% of the total. Chinese consumers spend nearly 6 hours on average a day on their mobile phones. The explosive growth of short videos has not dissipated internet users' demand for video platforms such as Douyin and Racer, with over 70% of users watching both short and long videos, and over 40% of users watching media every day. Short video has become the new windfall for mobile internet, overtaking integrated video as the third largest mobile application. Although the content quality of short videos has been improved and the awareness of copyright has been enhanced as the mobile short video competition environment is improving, as an emerging industry, there are still many ecological problems in mobile short video industry. How to cash out the traffic of short videos, and how to find out the factors influencing user information behaviors of mobile short video viewers? Based on the personal characteristics of users (gender, age, geography) and the laws of live marketing in the Internet, improving the interaction between the anchor and the audience in the live room and increasing the profitability of the live account are all directions worth studying.

In terms of user volume, the number of daily active users on Douyin exceeds 600 million. In 2021, around 10 million users purchased books on Douyin each month, a 205% year-on-year increase in the number of book consumers. 2021 witnessed a continuous growth of the number of book publishers on the platform, and nearly 10,000 book publishers opened accounts on Douyin by the end of 2021. In terms of knowledge content, in 2021, the traffic of searches on book publishing related content on Douyin exceeded 140 million, and the number of monthly consumers was close to 30 million, an increase of 43% year on year. "Book recommendations" grew 441% year on year. From these two key dimensions, interest-based e-commerce has become a new market for book publishers today. There are many algorithms for *Douyin E-commerce Industry Development Data Report: Live Streaming E-Commerce Drives Newly Published Book Sales* on Chinese market every day. Douyin e-commerce sold more than 450,000 books a day. Every month more than 10 million consumers purchase books on Douyin, and the number of book consumption increased 205% year on year, of which live streaming e-commerce book sales increased 143% year on year. Therefore, when operating a video account, it is important to increase both the traffic and the number of subscribers by regularly releasing high quality short videos. At the same time, when doing live streaming e-commerce, it is also important to focus on attracting the attention of viewers through different ways, transforming the traffic of the viewers at live streaming events into stable subscribers to the short video account and making private domain traffic profitable in a long-term compound interest model. This research selected Douyin, the

platform with the largest number of domestic short video users in China, as the main research subject, and selected the top 10 Douyin accounts on live streaming book selling e-commerce to explore which variables influence the efficiency of the interaction with viewers at live streaming events, so as to effectively convert viewers at live streaming events into subscribers to the live streaming accounts. How to efficiently do live streaming on Douyin to increase the live streaming conversion rate and how to convert the traffic at live streaming events into subscribers are issues worth studying. This research aimed to conduct an empirical research through data mining and data analysis to analyze the process of live streaming on outstanding book publishers on Douyin and to explore the rules and factors involved, thus to provide replicable live streaming suggestions and practical methods for attracting and converting viewers into subscribers for other publishers on Douyin.

The research objectives of this research were to collect a large amount of live streaming data over a long period of time, to argue the micro problems of live streaming e-commerce environment (live streaming book selling e-commerce) with big data, and to explore the methods facilitating social science researches with the help of AI tools. With Python data mining research methods, this research analyzed the influencing factors of live streaming interactions in the process of live streaming book selling e-commerce, and explored the moderating role of interaction in the conversion process from viewers to subscribers, and the changes of moderating results with viewer gender, age and geographic region as control variables. Wymer, Naraine, Thompson, & Martin (2021) evaluated opportunities for subscriber engagement and discussed what makes live streaming rugby events more attractive to viewers on Facebook, Periscope and Snapchat. Wang, Huang, Zheng, Lin, & Wang (2022) argued that celebrities promote consumers' willingness to pay more attention to anchors selling brand products. Hsu (2019) found that the enthusiasm for brands is effective in attracting loyal subscribers in virtual communities. Wang & Liao (2023) did a study on netizens and demonstrated that too much self-disclosure has a negative influence over subscribers' perceptions and that sustained engagement has a positive influence over subscribers' perceptions. Brech, Messer, Schee, Rauschnabel, & Ivens (2018) found that having many Facebook subscribers can have a detrimental influence over individual subscriber engagement, and too frequent and too infrequent updates leading to a decrease in subscribers. Gong & Li (2017) found that he credibility shown by netizen anchors and celebrity anchors in Weibo will positively attract viewers. Cai & Huang (2011) found that today's ever-improving web technologies enable a wide range of internet users to also participate in the archiving, commenting and redistribution of web content. Through their active participation in the web, consumers make themselves producers of content through the medium. Yan (2022) found the presence of emotional sensibility provides an effective method for the construction of a live subscriber correlation in publishing. Liu & Shi (2020) found that excellent content, incentive mechanisms, the unique charisma of Netflix, good interaction, and the trust in Netflix can all significantly and positively influence subscribers' purchase decisions. Among them, the main influencing factors over viewers’ attention are high quality content and effective consumption incentives. Chen, Zhang & Guo (2020) found that the more pronounced the personal characteristics an Internet celebrity has, the higher the functional, emotional and social value of the recommended

products can be perceived by subscribers. Tao (2009) found the ability of the webcast anchor to create a positive and positive connection with viewers cannot be separated from the matching and emotional identification between the two in terms of interests, values, etc. According to Lawrence Crossberg, "subscriber engagement by interaction and words allows the anchor to gain somewhat dominance over subscribers' emotional state." Research by Zhang (2020) pointed out that traffic is viewership and that live streaming platforms have become an emerging super traffic portal. Live streaming is becoming a frontline for mass consumption, and the number of subscribers to a live account has becomes one of the most important factors for pulling off robust sales at live streaming events. How to attract subscribers is one of the most important factors for the success of live streaming, and the path to achieve this result is to develop effective interaction with viewers. Most of such current researches are conducted through traditional methods such as literature review and questionnaire survey, using AI models programmed in Python to collect data automatically. Big data is used to analyze and explore issues in economics and management, providing an innovative path for researches on social science cognitive systems and achieving a multi-path interpretation of the real world (Zhang, Mi, & Li. 2018). This research focused on the traffic, subscribers, and interaction data at live streaming events, and spent 6 months collecting actual data from the live streaming frontline to explain the correlation between traffic, subscribers and interaction, which is an innovative exploration in terms of research method.

1. Literature Review

This research selected the top ten book publisher Douyin live streaming accounts ranked by *China's Publisher Magazine* as the research object, and used secondary data and Python to crawl the data of 1,726 live streaming events of the top ten top book publisher accounts on Douyin from January 1 to June 30, 2022. For live streaming events whose time was too short, whose live streaming event viewership was too high and whose live streaming events were closed due to other unexpected reasons and did not produce data were kicked out, and finally 1,664 live streaming events were selected. Statistics show that book selling accounted for 97.92% of the 1664 live streaming events, and books sold at live streaming e-commerce was 1,484,000 pieces, with a total sale of 64,438,800 yuan by 52,788,900 viewers. Viewership accounted for 28.17% of the profit, and viewership pushed up 11.03% of the sale. Males accounted for 22.81% of the viewers, and females 77.19%. Live streaming traffic is an information type analyzed by Python crawl, including personal information such as the age and gender. It was obtained from professional live streaming statistics websites (Archaeology Home Data). Online interaction refers to the transmission of information by users on the internet with the help of online media, where emotional interaction and information is transmitted through signals such as voice, text and pictures. The interactive behavior under live streaming e-commerce mainly refers to the communication and interaction between consumers and the anchor, the salesman, and the viewers who also watch the live streaming e-commerce event. (Zhao, 2015) Interaction is an activity in which consumers influence the role of other users when placing orders online. (Zeng, 2019) Interaction essentially refers to the sharing of information and the exchange of emotions between

two or more individuals or groups, and the interaction online establishes a plenary correlation between individuals, businesses, and society. Most scholars used perception and trust as moderating variables to explore the correlation between interaction and consumer behavior. Zhang (2009) explored consumer willingness to purchase through the lens of interactivity with a research on C2C shopping sites. Another important feature that distinguishes online media from traditional media is interactivity. Only by fully exploiting the interactive nature of the Internet and making full use of its features to communicate with consumers can the function of online e-commerce be maximized. Consumers at social e-commerce shopping scenes are motivated from both the promotions and the interpersonal interaction between the users. The two together encourage consumers to purchase. The personal characteristics of consumers (Michael, 2018) are mainly demographic variables such as gender, education, age, disposable income, etc. The purchase decision traits of consumers are related to their family and social class, cultural environment where they grow up, subcultural groups, etc. Females are more likely to make impulsive purchase decisions than males. What factors influence consumers' motivation in interaction engagement is what this research attempted to explore.

The viewers at live streaming events are all potential live streaming e-commerce consumers. Viewers come from different regions and different cities, so their respective overall consumption ability is different. According to the statistics by China's National Bureau of Statistics and local statistical bureaus published in 2022, GDP, per capita disposable income (yuan) and urban residents' per capita disposable income (yuan) are three important indicators to measure the urban residents purchase ability. The total GDP of the four first-tier cities of Beijing, Shanghai, Guangzhou and Shenzhen was 14.7 trillion yuan, and the national per capita disposable income for 2022 was 36,883 yuan. The per capita disposable income in Beijing and Shanghai was 77,000 yuan and 79,000 yuan respectively, while the per capita disposable income in Nanjing and Tianjin was 69000 yuan and 49000 yuan respectively, and the per capita disposable income in Wenzhou and Yantai was 63,000 yuan and 45,000 yuan respectively. The disparity in per capita disposable income in different cities somehow reflects the different purchasing power of consumers.

In 2013, China's leading economic publication, *CBN Weekly*, first introduced the concept of "new first tier" cities and published *City Business Attractiveness Ranking* for several years from 2013 to 2022. Among the 337 cities at prefecture level or higher in Mainland China evaluated on the list, the first-tier cities are Beijing, Shanghai, Guangzhou and Shenzhen; the new first tier cities are Chengdu, Hangzhou, Wuhan, Suzhou and Nanjing; the new second tier cities are Kunming, Shenyang and Wenzhou; the new third tier cities are Taizhou and Luoyang; the new fourth tier cities are Meizhou and Baoji and the new fifth tier cities are Tianshui and Chizhou. The live streaming e-commerce economy is an extension of the physical shopping stores, and the number of anchors and the aggregation density of the location is of obvious and strong clustering characteristics in terms of geographic distribution, which are in line with the pattern of China's regional economic development in Yangtze River Delta and Pearl River Delta city cluster, demonstrating a decreasing trend from east to west. Guangzhou, Hangzhou, Shenzhen and Chengdu have the largest number of anchors, and Guangzhou and Hangzhou are the center of China's live streaming e-commerce. This research divided

different cities into difference categories to explain the varying willingness and purchasing power of viewers from different cities to participate in emerging live streaming e-commerce. That is, consumers from different cities have different purposes to participate in live streaming e-commerce. Different disposable income per capita and different overall consumption ability are used to explore the influence of geographical factors over the number of new subscribers to the live streaming fashion. The demographic characteristics of consumers include gender, age, education background, income and other demographic variables. In this research, consumers were divided into six gradients according to their urban geographic locations: first tier cities, new first tier cities, new second tier cities, new third tier cities, new fourth tier cities and new fifth tier cities, with the division criteria referring to the results of *CBN Weekly* (2021). At a live-streaming e-commerce event, the commonly used indicators to measure whether the live streaming e-commerce is effective or not are sales volume, the number of new subscribers, etc. The willingness to purchase (Zuo & Wang, 2014) refers to the possibility of consumers to buy the product after they acquire certain knowledge of the product under a certain context, which is an important prerequisite for consumers to make purchase decisions. To measure the success of a live streaming event, apart from sales, the number of new subscribers is also a very important indicator.

However, the vast majority of current researches have been conducted through questionnaires namely, asking consumers questions in a written form, with little access to real-time data from frontline live streaming to discuss how this influence the engagement into interaction through the variables of individual consumer characteristics. Therefore, this research counted the number of subscribers converted to live streaming accounts at each live streaming event, discussed the influence of interaction factors between traffic and subscribers, and selected three characteristics of viewers' gender, age and geographic locations as control variables to analyze the influence of these factors over the degree of interaction in consumer participation in live streaming e-commerce, and proposed the following hypotheses.

H1: The gender of viewers significantly influences live interaction

H2: The age of viewers significantly influences live interaction

H3: The geographic location of viewers significantly influences live interaction

H4: Live interaction plays a moderating role between live traffic and the number of new subscribers.

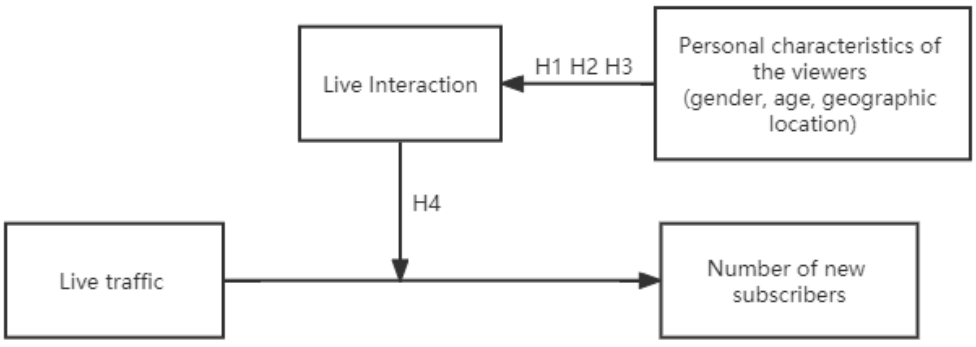

Figure 1: Research model

The variables under research were divided, drawing on the definition of moderating variables by Wen et al. (2005). The purpose of this research was to analyze and verify the moderating effect of live streaming interactions between traffic (independent variable) and the number of new subscribers (dependent variable), while examine the personal characteristics of live streaming viewers (gender, age, geographic locations) as control variables, as detailed in Figure 1.

2. Data Analysis

The data were imported into SPSS software for analysis and the results are shown in Table 1.

Table 1: Results of the analysis of moderating effects

Results of the moderating effect analysis			
	Model 1	**Model 2**	**Model 3**
Constants	15.495**	12.719**	13.526**
	(8.183)	(6.332)	(6.703)
Male	0.105**	0.094**	0.088**
	(4.528)	(4.037)	(3.785)
Female	0.224**	0.199**	0.205**
	(5.349)	(4.733)	(4.882)
< 18	0.008	0.007	-0.001
	(0.294)	(0.244)	(-0.033)
18-23	-0.001	0.011	0.003
	(-0.063)	(0.531)	(0.142)
24-30	-0.028	-0.007	-0.023
	(-0.983)	(-0.224)	(-0.773)
31-40	0.202**	0.190**	0.181**
	(9.537)	(8.938)	(8.469)
41-50	-0.030**	-0.028**	-0.030**
	(-3.343)	(-3.050)	(-3.315)
>51	-0.019*	-0.025**	-0.023**
	(-2.397)	(-3.148)	(-2.843)
First tier	0.232**	0.193**	0.205**
	(6.912)	(5.578)	(5.887)
New first tier	0.144*	0.106*	0.122*
	(2.173)	(1.586)	(1.838)
New second tier	-0.106	-0.015	-0.019
	(-1.785)	(-0.236)	(-0.300)
New third tier	0.389**	0.343**	0.359**
	(6.347)	(5.525)	(5.784)
New fourth tier	-0.033	0.009	0.011

Results of the moderating effect analysis			
	Model 1	**Model 2**	**Model 3**
New fifth tier	(-0.811) -0.133** (-4.145)	(0.213) -0.117** (-3.641)	(0.255) -0.120** (-3.753)
Views	2.449** (10.609)	2.159** (8.961)	2.259** (9.326)
Number of people Interaction		0.072** (4.004)	0.071** (3.946)
Viewership * Number of interactions			0.032** (3.250)
Sample size	1654	1654	1654
R^2	0.868	0.870	0.870
Adjustment R^2	0.867	0.868	0.869
F □	F (15,1638)=719.966, p=0.000	F (16,1637)=682.163, p=0.000	F (17,1636)=646.409, p=0.000
ΔR^2	0.868	0.001	0.001
ΔF □	F (15,1638)=719.966, p=0.000	F (1,1637)=16.031, p=0.000	F (1,1636)=10.565, p=0.001

* p<0.05 ** p<0.01 t-values in parentheses

From the analysis above, it can be seen that the moderating effect is divided into three models. Model 1 included the independent variable (viewership) and 14 control variables such as male, female, <18, 18-23, 24-30, 31-40, 41-50, >51, tier 1, new first tier, new second tier, new third tier, new fourth tier 4 and new fifth tier. Model 2 included the moderating variable (number of interactions) to model 1 and model 3 included a moderating variable (number of interactions) to Model 1. Model 3 included an interaction term (the product of the independent variable and the moderator variable) to Model 2.

For Model 1, the goal was to investigate the influence of the independent variable (viewership) over the dependent variable (number of new subscribers) without interfering the moderating variable (number of interactions). As can be seen from the table above, the independent variable (viewership) shows significance (t=10.609, p=0.000<0.05). This means that the viewership has a significant influence over the number of new subscribers. The data shows that males (0.105**) and females (0.224**) positively influence interactions at live streaming e-commerce events, and that females are more active in participation than males. Through analysis, this research found viewers of different genders have different perceptions to the language of the anchor and the type of products sold at live streaming e-commerce. For online activities, females are also more likely to express their opinions, send pop-ups, ask for information about products and interact interpersonally with anchors or other

viewers. This is related to the fact that females are more likely to engage in the online environment for other factors such as emotional catharsis, while males may be more likely to engage in interactions at live streaming events for pleasure and become subscribers to live streaming accounts. For the influence of age over live interaction, the table above shows that the three age groups of 31-40-year-old (0.202**), 41-50-year-old (-0.030**), and >51+ year old (-0.019*) all significantly influence live interaction. Through analysis, it is clear from the age that most consumers of 31- 40 years old in China are parents and their children are generally infants, toddlers and primary school students. In China, most books on the market are for children, as can also be seen from the data statistics. Females accounted for 77.19% of the viewers in this research. Female viewers have stronger willingness to purchase more children's books for their children, and naturally have stronger willingness to participate in the interaction at the live streaming events, to understand the price, discounts, delivery service and other practical information of the product, thus there is also a greater probability of becoming a subscriber to the live streaming account, participating at live streaming events for their children and clicking to follow and purchase books has become a norm for live streaming book selling e-commerce in China. When selecting Douyin live streaming accounts for this research, as many as 6 of the top ten accounts are children's book accounts, and children's books are available on sale in other 4 Douyin accounts, so these children's book live streaming accounts also indirectly attract females aged between 31 and 40 to live streaming events.

Viewers aged 41-50 and >51 negatively influence the interaction between live streaming events. Through analysis, this research found that a very important practice of interaction at live streaming events is sending pop-ups in real time, and the anchor will choose to answer questions raised by the viewers to interact with them based on the information in the pop-ups. According to the statistics, at one of the live streaming events, for example, the number of pop-ups exceeded 149,000 entries, an average of 264 per minute. Faced with a huge amount of data, the anchor needs to explain the product information with limited time, so he can only answer to the pop-up questions selectively. As the focus of the questions concerned by viewers of different age groups is different, more replies to the pop-up questions by viewers over 41 years old means a higher degree of interaction with such age group, which inevitably leads to neglecting the pop-up questions by viewers of other age groups. Female viewers of 31-40 age group have a higher probability of matching the product and converting into subscribers, and less interaction with this age group will inevitably lead to a reduction in the amount of traffic converted into subscribers at live streaming events It is clear that the marketing strategy for potential consumers aged 31-40 should take their needs into account and that the interaction at live streaming events should be skewed towards them in order to attract this age group to become subscribers to the live streaming account and to further convert subscriber traffic into sales.

The table above shows that first tier (0.232**), new first tier (0.144**), new third tier (0.389**) and new fifth tier 5 (-0.133**) significantly influence the interaction at live streaming events. New second tier (-0.106) and new fourth tier (-0.033) had no significant influence over the interaction at live streaming events. In terms of the geographic locations of the viewers, there are 4 first tier cities and

15 new first tier cities in China, and these 19 cities scattered across China and are cities with radiating influence over their respective regions. 19 first tier and new first tier cities have a GDP of 38.57 trillion yuan with a regional population of over 280 million (as of December 2022) and a per capita consumption ability that ranks among the top in China. As leading cities in the region, a large number of quality human resources are attracted to these cities, and residents in the cities have stronger consumption ability. Therefore, at live streaming book selling events, the diversion of subscribers and the development of marketing strategies should focus on the consumption habits of this type of population. As can be seen from the table above, the interaction between viewership and number of interactions shows significance ($t=3.250$, $p=0.001<0.05$). This means that the magnitude of the influence of viewership over the number of new subscribers is significantly different at different levels of the moderating variable (number of interactions). Model 3 is based on model 2, with an interaction between the viewership and the number of interactions. In terms of control variables, the value for males (0.088**) decreased slightly when compared to model 2, while that for females (0.205**) increased slightly. This indicates that females are more engaged than males in live interaction, and the probability of female viewers converting into subscribers is higher than that of male viewers. Females prefer live interaction as a method of interaction than male viewers because not only can they acquire the practical value the discount of products at the live streaming events, but also enjoy the charisma of anchors. The groups of 31-40 years old (0.181**), 41-50 years old (-0.030**) and >51 years old (-0.023**) are still significantly influenced by the addition of the moderating variable, but the value decreased slightly. Through the analysis, this research found that too much interaction takes up limited live streaming time. As at a viewer stays at a live streaming event for an average of 99 seconds, it is difficult for the anchor to cater to the preferences and demands of each age group, and older viewers are less engaged or motivated than younger viewers in terms of like-and-follow the live streaming account, thus leading to a negative influence.

In terms of geographic locations, first tier (0.205**), new first tier (0.122*), third tier (0.359**) and fifth tier (-0.120**) remained significantly influenced and had slightly increased values after the inclusion of the moderating variable. First tier and new first tier cities in China generally have a strong purchasing power and is a clustered population with long daytime work and commuting hours, while most third tier cities are prefecture-level cities and are the downtown areas of the counties under their jurisdiction, which are more attractive to the county population. The live streaming events take place in an online environment, providing physical goods as well as spiritual values such as entertainment. For this type of people, the interactive links at live streaming events are relaxation in the virtual world and they are entertained at live streaming events to satisfaction, so there is a natural impulse for them to become subscribers to a live streaming account and they will check on its next live streaming event.

In summary, H1 was positive, H2 partially positive and H3 partially positive.

Table 2: slope analysis

Slope analysis					
Level of adjustment variables	Regression coefficient	Standard error	t	p	95% CI
Average	2.259	0.242	9.326	0.000	1.784 2.733
High level (+1SD)	2.229	0.241	9.241	0.000	1.756 2.702
Low level (-1SD)	2.288	0.244	9.397	0.000	1.811 2.766

When examining the moderating variable in depth at different levels, it is clear from the slope analysis that the moderating variable has a significant moderating effect at high levels (mean +1 standard deviation) and low levels (mean -1 standard deviation) of the mean. This indicates that the number of people participating in the interaction has a moderating effect between viewership and the number of new subscribers. The magnitude of the moderating effect of the viewership on the number of new subscribers when the moderating variable is taken at different levels is shown in the table above. The slope is flatter for low interaction and the corresponding moderating effect is relatively low. The slope is steeper for high interaction and the corresponding moderating effect is relatively high. In model 3 in the table above, the interaction shows significance, i.e. viewership * number of interactions (0.032**), indicating a moderating effect, and H4 is positive.

3. Discussion and Conclusion

Traffic (viewership) at a live streaming event does not directly convert into subscribers to the live streaming account. The viewership involved in the live streaming is the basis of the number of new subscriber to a live streaming account. Through the efficient positive interaction between the anchor and viewers, a live streaming event can mobilize more viewers to participate in the live interaction, in order to effectively promote the viewers to follow the live streaming account. Participating in live streaming events is to participate in live activities, but to activate potential consumers in the live streaming e-commerce process, it is important to motivate the viewers to actively interact, and it is important for the anchor to cater to the needs of viewers, and interact according to their psychological needs. To narrow the distance with the viewers is more likely to win their trust, and they will pay attention to the live streaming accounts and place orders at its live streaming e-commerce events. This is an important means of building the trust between the anchor and the viewers. The interaction with the viewers at live streaming events can enhance their sense of participation, thus making the interaction more efficient so viewers are more likely to trust the anchor. The anchors at live streaming e-commerce events usually interact with the viewers by answering pop-up questions, setting questions to guide them and creating topics. At live streaming events, viewers may ask questions about things they do not understand, such as details, quality, origin, and live streaming discounts of the products. As viewers enter a live streaming event at different time points and stay at the live streaming event for different lengths of time, it may happen that no sooner did anchor answer the questions raised by the last viewer than a new comer raised similar

questions. This requires the anchor to be patient and treat viewers as real people, but also to control the pace of answering questions, putting high-frequency questions in the pop-ups so the majority of viewers' concerns can be addressed in priority when they see the rolling answers on the screen.

At a live streaming event, when the traffic (viewership at the live streaming event) is low, efficient interaction is effective in increasing the number of new subscribers. When the viewership is low, most of the questions asked and requests expressed by viewers can be answered and the probability of emotional satisfaction is greater. Whereas if there are thousands or even tens of thousands of viewers online at the same time, interaction means answering pop-up questions, which can take up time for e-commerce. But the majority of viewers might not care the questions asked by some viewers, so when there are many people at the live streaming event, interaction with a few viewers obviously takes up these viewer's time, and the content of the interaction is not of interest to all viewers, which influences viewing experience. For the marketing strategy of anchors, the style of anchors and the products they sell at live streaming e-commerce events influence the positioning of the live streaming event, and it is important to develop an interactive strategy that corresponds to the preferences of viewers at the live streaming events (gender, age composition, geographical locations). The anchor should read more pop-ups and answer questions patiently. Answering questions raised by the viewers is one of the most direct ways of interaction, therefore, at a live streaming event, the anchor should read more pop-ups patiently, selectively and focus on answering questions raised by the viewers. The anchor should also ask open questions to guide interaction with the viewers. At the same time, the anchor can create topics to encourage viewers to participate in interaction. Finally, the anchor must control the pace and length of interaction at the live streaming event. These are two key points.

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