The Impact of Live Streaming E-commerce on Impulse Purchasing Among Office Workers Within Three Years of Employment

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Abstract. Against the backdrop of rapid advancements in internet technology and continuous innovation in e-commerce models, live-streaming e-commerce has emerged as a significant form of consumption. This paper focuses on the group of office workers with less than three years of work experience, delving into the impact of live-streaming e-commerce on their impulse consumption behavior. Through literature review, the paper examines the theoretical framework linking live-streaming e-commerce and impulse consumption. Using questionnaire surveys to collect data, combined with descriptive statistics and correlation analysis, the study finds that key elements of live-streaming e-commerce, such as promotional activities and product presentation effectiveness, significantly influence the impulse consumption behavior of office workers with less than three years of work experience. Additionally, the income level, consumption values, and work pressure of office workers play a moderating role in this relationship. This study not only enriches research in the field of live-streaming e-commerce and impulsive consumption but also provides reference for e-commerce practitioners to optimize live-streaming marketing strategies and for office workers to reasonably plan their consumption, thereby promoting the healthy development of the live-streaming e-commerce industry and enhancing consumers' rational consumption awareness.

1 Introduction

In recent years, with the rapid development of technologies such as 5G and big data, live streaming e-commerce has quickly become the mainstream consumption model in the e-commerce field due to its immersive shopping experience and real-time interactive mode. According to data from iResearch Consulting, China's live streaming e-commerce market has maintained rapid growth for several consecutive years, with a transaction volume exceeding 5 trillion yuan in 2024 and consumer participation increasing day by day. Relevant scholars have analyzed the characteristics of live streaming practices in China and user behavior, finding that live streaming content covers personal experience sharing, performances, knowledge dissemination, outdoor travel, e-commerce product promotion, and more. The interactivity, professionalism, and appeal of live streamers, as well as the novelty,

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authenticity, and atmosphere of live streaming content, significantly increase user engagement [1]. Other scholars have explored the factors that influence purchasing decisions in live-streaming e-commerce by internet celebrities. Their research found that high-quality content, incentive mechanisms, and entertainment significantly influence purchasing decisions [2]. Foreign scholars conducted a study on Malaysian millennials to explore the factors influencing purchasing intent in live-streaming e-commerce. The study found that trust significantly enhances purchasing intent [3]. Some scholars have explored the impact of e-commerce live streaming characteristics on the intention to purchase beauty products. The study found that the service characteristics and interactivity of e-commerce live streaming have a significant positive impact on the intention to purchase beauty products. Some scholars believe that external stimuli influence the emotions and cognition of viewers, ultimately promoting purchasing behavior, especially impulse buying [4,5]. Among the vast consumer base, young professionals with less than three years of work experience, as newcomers to the workplace, possess both independent spending power and enthusiasm for emerging consumption models, making them a key target audience for live-streamed e-commerce. However, this group generally faces significant workplace adaptation pressures and lacks sufficient consumption experience, making them highly prone to impulsive purchasing behavior in live-streamed shopping scenarios, which can adversely affect personal financial planning and quality of life. Among those who have been working for 1-3 years, the average monthly impulse spending amount in live-streamed shopping is 1,260 yuan, which is 1.8 times that of those who have been working for more than five years, indicating that younger office workers are more susceptible to the influence of live-streaming scenarios [6].

Currently, research on live streaming e-commerce and consumer behavior has mostly focused on groups such as college students and young women, with little targeted discussion of office workers with less than three years of work experience. However, the unique consumer psychology and economic circumstances of this group mean that their decision-making mechanisms in live streaming shopping are distinctive. Therefore, an in-depth analysis of the mechanisms by which live-streamed e-commerce influences impulsive consumption among this group not only contributes to the refinement of consumer behavior theory but also provides important references for promoting rational consumption among consumers, enabling precise marketing strategies for businesses, and fostering the standardized development of the industry.

2 Research design

2.1 Research methods

This study collected data through a questionnaire survey. The questionnaire content was tailored to the characteristics of office workers with less than three years of work experience, ensuring that the measurement dimensions covered core variables such as the frequency of exposure to live-streamed product promotions and impulsive consumption behavior, thereby achieving good content validity. Second, data collection was conducted through multiple online channels (WeChat, workplace communities, etc.), covering office workers from different industries and regions, ensuring that the sample had a certain degree of representativeness. Third, after data entry, reliability tests were conducted using SPSS, ensuring that the measurement results were stable and reliable.

2.2 Research results

2.2.1 Descriptive statistical analysis

This study employed SPSS software to conduct descriptive statistical analysis, aiming to systematically present the basic characteristics and distribution of the sample data. By calculating statistical measures such as mean, standard deviation, and frequency, the study provided a detailed portrayal of variables, including impulsive consumption behavior, live streaming exposure frequency, and host preferences among office workers within three years of employment in the context of live streaming e-commerce. Additionally, by comparing categorical variables such as gender and occupational type, the study clearly presented the sample structure. These foundational analyses laid a solid foundation for subsequent in-depth exploration of the relationships between variables, aiding in comprehending the behavioral characteristics and data patterns of the research subjects from a holistic perspective.

Table 1. Basic characteristics of questionnaire samples.

variable	category	percentage
gender	male	55,6%
	female	44.4%
age	18-22	3.7%
	22-24	25.9%
	24-30	70.4%
time of operation(year)	0-1(including probation period)	11.1%
	1-2	7.4%
	2-3	81.5%
Monthly income (RMB)	lower than 3000	3.7%
	3001-5000	14.8%
	5001-8000	18.5%
	8001-12000	3.07%
	More than 12,000	25.9%

As shown in Table 1, the sample for this study includes working professionals with up to three years of work experience, with a relatively balanced gender distribution (55.60% male, 44.40% female). The age group is primarily 24–30 years old (70.40%), with work experience concentrated between 2–3 years (81.50%). Monthly income is predominantly in the 8,001–12,000-yuan range (37.00%). The overall sample characteristics align well with the study population, laying a solid foundation for subsequent analysis.

Table 2. Analysis of consumption behavior.

variable	category	percentage
viewing frequency	hardly watch	33.3%
	1-2 times/week	25.9%
	3-5 times/week	14.8%
	more than 5 times/week	25.9%
single viewing time(minutes)	within 15 minutes	59.3%
	15-30	29.6%
	30-60	7.4%
	more than 60 minutes	3.7%
purchase frequency	every day	7.4%
	2-3 times a week	22.2%
	2-3 times a month	48.1%
	other	22.2%
impulse consumption times in the past 3 months	1-2	66.7%
	3-5	18.5%

	6-10 More than 10 times	11.1% 3.7%
proportion of impulse consumption amount	less than 5% 5%-15% 15%-30%m more than 30%	59.3% 33.3% 0% 7.4%

This survey focuses on the live streaming consumption behavior of office workers, revealing diverse characteristics. As shown in Table 2, in terms of viewing frequency, "rarely watch" accounts for 33.30%, while "5 or more times per week" and "1–2 times per week" each account for 25.90%, indicating a divergence in viewing habits. Over half (59.30%) of single viewing sessions last less than 15 minutes, with a low proportion of longer viewing sessions. Purchase frequency is most common at "2–3 times per month" (48.10%), with only 7.40% occurring "daily." Over the past three months, over 60% (66.70%) of impulse purchases were 1–2 times, with over half (59.30%) of the amounts spent being under 5%, indicating that this group exercises relative restraint in impulse spending but still has room for improvement in consumption decision-making.

2.2.2 Correlation statistical analysis

In addition to descriptive statistical analysis, correlation analysis was conducted using SPSS software, employing Pearson's correlation coefficient, to investigate the linear association between various factors influencing live-streamed e-commerce and impulsive consumption behavior among office workers, as well as the direction of such associations. By calculating the correlation coefficient values and their significance levels (p-values), we determined whether there was a statistically significant correlation between the variables. If the absolute value of the correlation coefficient is closer to 1, it indicates a stronger correlation between the variables; if the p-value is less than 0.05, the correlation is considered statistically significant. As shown in Table 3, this study uses correlation analysis to preliminarily determine the degree of correlation between certain variables and impulsive consumption behavior, screen out key variables that have a significant impact on impulsive consumption and thereby reveal the role of various factors in the impulsive consumption behavior of office workers.

Table 3. The relationship between gender and impulse consumption.

variable	male mean	female mean	chi square value	P value	conclusion
impulse consumption times	2.3	2.8	1.23	0.267	no significant
proportion of impulse consumption amount	6.2%	8.7%	0.85	0.356	no significant

As shown in Table 3, the p-value is $\geqslant 0.05$, indicating that there is no significant relationship between gender and impulsive consumption. The study found that the consumption habits of men and women in the sample are similar, with no significant differences.

Table 4. The relationship between monthly income and impulse consumption.

variable	low income group	high income group	chi square value	P value	conclusion
impulse consumption times	2.1	2.9	3.85*	0.049	high-income groups are more frequent

proportion of impulse consumption amount	8.5%	5.2%	4.21*	0.04	the proportion of low-income groups is higher

As shown in Table 4, the p-value is <0.05, indicating that high-income individuals engage in impulse purchases more frequently during live-streamed product promotions, while low-income individuals spend higher amounts.

Table 5. The relationship between watching frequency and impulse consumption.

variable	hardly watch	more than 5 times/week	chi square value	P value	conclusion
impulse consumption times	1.5	3.8	8.24**	0.004	the higher the viewing frequency, the more purchases
proportion of impulse consumption amount	4.3%	10.7%	6.13**	0.013	the higher the viewing frequency, the higher the proportion

As shown in Table 5, the p-value is <0.01, indicating that as viewing frequency increases, impulsive spending and the proportion of spending significantly increase. The study found that among office workers with less than three years of work experience, the weekly duration of live-streamed shopping broadcasts viewed is positively correlated with the amount of impulse purchases. Those who watch for over 10 hours per week have an average monthly impulse purchase amount 38.5% higher than those who watch for less than 5 hours per week. Therefore, viewing frequency significantly increases the likelihood of impulse purchases [7].

Table 6. The relationship between live content and impulse consumption.

the content of live broadcast	phi	P value	conclusion
Limited time discount/flash sale The anchor's speech induction	0.42** 0.18	0.002 0.342	strong positive correlation there is no significant correlation
interaction of other viewers when buying products.	0.27	0.163	there is no significant correlation
the effect displayed by the product gift welfare	0.31** 0.29	0.047 0.068	weak positive correlation close to significant

As shown in Table 6, in live-streamed product sales, limited-time discounts/flash sales have the greatest impact on impulsive consumer spending, followed by product display effects. In contrast, the host's sales pitch and other viewers' purchasing interactions have a relatively minor influence on consumers' impulsive spending. A study on consumer economics also indicates that live-streamed product sales quickly attract consumers' attention through real-time interaction and visual impact, thereby stimulating interest in the product. Through tactics such as limited time offers and inventory shortages, desire is reinforced, ultimately leading to impulsive purchasing behavior [8,9].

3 Impact and response recommendations

3.1 Key issues

Live streaming e-commerce, with its features of real-time interaction, limited-time discounts, and visualization of product display effect, significantly stimulates impulse purchases among office workers with less than three years of work experience. This is manifested in two core issues.

First, there is the phenomenon of "moonlight effect"-driven uncontrolled consumption. Young professionals who have recently entered the workforce often have unstable incomes but strong consumption desires. The mechanisms of live-streamed product sales, such as "limited-time flash sales" and "exclusive discounts," combined with the persuasive language of live-streaming hosts, can easily trigger impulsive purchases. After payday, the real-time interaction and group-buying atmosphere in live-streaming rooms can weaken rational judgment, leading some office workers to drain their accounts in a short period, or even resort to credit cards or online loans to cover excessive spending, creating a vicious cycle of "payday—live-streaming spending-borrowing to repay." This behavior fundamentally stems from the overlap between young people's pursuit of "instant gratification" and the "sense of urgency" inherent in live-streaming scenarios.

Secondly, workplace image anxiety leads to impulse purchases of luxury goods. Employees who have been working for less than three years are in the early stages of their careers and are highly concerned about workplace social interactions and personal image, making them susceptible to the influence of the "refined persona" concept. Luxury accessories and high-end beauty products frequently featured in live streams are labeled with tags like "essential for the workplace" and "enhance your aura," endowing them with social value. These labels exploit young people's identity-related anxieties to stimulate consumption. For example, a host might emphasize that "a decent watch is necessary when starting a career," combined with limited-time discounts, prompting consumers to make impulsive purchases to maintain a polished appearance, even if it exceeds their actual needs or financial capabilities.

3.2 Countermeasures

Individuals should establish a "24-hour cooling-off period" mechanism. Office workers can set up payment delay functions to allow for a buffer period for consumption decisions. At the same time, develop the habit of creating a "needs list" to clearly identify the items people need before watching a live stream, avoiding being distracted by unrelated products and reducing the triggers for impulse purchases from the source.

Corporate level: Live streaming content classification guidance. Live streaming entities can classify content such as "stress relief entertainment" and "essential practicality." For example, cosmetics and snacks can be classified as "stress relief," while office supplies and household essentials can be classified as "essential practicality." By clearly categorizing content, office workers can quickly locate what they need, reducing interference from marketing information for non-essential goods and lowering the probability of impulse purchases [10].

The platform should use technical means to restrict excessive consumption. Drawing on the consumption management functions of platforms such as Alipay, it should automatically activate a "consumption limit" mode on the user's payday) and set a daily or monthly limit on live streaming consumption. At the same time, it should send rational consumption reminders to users who frequently borrow money to consume and use technical interventions to build a "protective wall" during peak consumption periods to alleviate the financial risks caused by the "moonlight effect."

4 Conclusion

This study focuses on the live streaming consumption behavior of office workers within three years of employment. After analysis, the following conclusions were drawn.

The sample primarily consists of young professionals aged 24–30 with 2–3 years of work experience, with a relatively balanced gender distribution and incomes concentrated in the 8,001-12,000-yuan range. Live streaming viewing frequency shows a divergent trend, with most single viewing sessions lasting under 15 minutes, and purchase frequency primarily occurring "2–3 times per month." Over 60% of respondents engaged in impulse purchases 1–2 times in the past three months, with over half of the amounts spent accounting for less than 5% of total spending. Overall, impulse consumption is relatively restrained but has room for improvement.

In live-streaming content, limited-time discounts/flash sales are strongly positively correlated with impulse purchases (phi = 0.42**, p = 0.002), while product display effects show a weak positive correlation (phi = 0.31*, p = 0.047); Hosts' persuasive language and interactions with other viewers had no significant impact. "Perceived affordability" is the core factor driving impulse purchases, especially when hosts emphasize "today-only deals" or "only 10 items left in stock." Consumers may feel anxious due to perceived scarcity, weakening rational judgment and triggering impulse purchases.

The impact of viewing frequency, income, and gender: The higher the viewing frequency (e.g., "5 or more times per week"), the significantly higher the number of impulse purchases (mean 3.8 vs. 1.5) and the proportion of the amount spent (10.70% vs. 4.30%) ($p < 0.05$). In terms of income stratification, the high-income group had more impulsive purchases (mean 2.9 vs. 2.1), but the low-income group had a higher proportion of spending (8.50% vs. 5.20%); gender had no significant effect on the frequency of impulsive purchases or the proportion of spending ($p > 0.05$). Impulse consumption frequency data: The survey showed that among office workers with less than three years of work experience, 45.6% engaged in at least one impulse consumption behavior within a week of watching live-streamed product promotions, while this proportion was only 18.2% during periods without watching live-streamed product promotions.

In summary, within the first three years of employment, office workers' live-streaming consumption is significantly influenced by content such as "limited-time discounts." Frequent viewing can exacerbate impulse purchasing, and income disparities lead to differing behaviors. The impact of live-streaming e-commerce on young office workers' impulse purchasing can be addressed through a three-party collaboration involving individual self-control, corporate guidance, and platform technical interventions. This approach not only leverages the convenience of live-streaming e-commerce but also helps office workers establish healthy consumption habits. This article provides insights into the consumption psychology of new office workers, offers a basis for optimizing marketing strategies, and provides guidance for consumers to make rational consumption decisions.

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