

Analysis of Influencing Factors on Impulsive Buying of Teenagers' Live Streaming: An Example from Taobao Live Streaming

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Abstract: The study focuses on the consumption behavior of teenagers' live online shopping, taking Taobao platform as the research sample, and analyzing the development status of Taobao live platform to analyze and summarize the factors influencing teenagers' impulsive buying. The study shows that the factors influencing teenagers' live impulsive buying are characterized by the three-dimensional feature of "service-price-experience".(1)The immaturity of teenagers' ability to discriminate is easily influenced by external factors, which promotes impulsive buying; teenagers' blindness, comparison and herd-like consumption psychology also induces impulsive buying.(2)Live platform quality after-sales service and risk monitoring can enhance the youth's sense of trust in consumption, impulsive buying has a promotional effect; Live broadcast process anchor professional services and emotional interaction also has a promotional effect on the youth's impulsive buying.(3)Price is the primary factor to stimulate teenagers' impulsive buying, and live shopping can relatively reduce the shipping cost and bring commodity price discounts.(4)The development and application of new technology and new functions can enhance the experience and fun of teenagers' live shopping, improve their sense of identification with commodities, and have a promoting effect on impulsive buying.

Keywords: impulsive consumer behavior, adolescents, webcast shopping, Taobao

1. Introduction

1.1. Research Background

Driven by the rapid development of mobile communication technology and the widespread popularization of intelligent mobile devices, the digital economy is developing rapidly. According to CCNIC statistics, as of June 2023, the number of Internet users in China had reached 1.079 billion, with an Internet penetration rate of 76.4% [1]. The development of Internet technology has led to the transformation of the economy to digital, which in turn has promoted the change of life and consumption, giving rise to multi-directional interaction, real-time communication, and a real and interesting experience of live webcast shopping [2]. The emerging model of webcast shopping breaks the time and space limitations of shopping by opening up the universal sales network with the help

of Internet technology. It brings consumers a new shopping experience, and greatly subverted the original offline physical shopping mode and time and space constraints of the consumer industry, providing a new broader market space for the supplier! Supported by 5G technology, the network live shopping to achieve explosive development, data show that China's live consumption users have more than 638 million, live shopping has become a very important way of consumption [3].

The model of webcast shopping is strongly dependent on the development of network technology and the promotion and application of mobile terminals, a characteristic that makes it easier to penetrate in the youth group. Teenagers are familiar with the operation of the Internet, curiosity and inclusiveness and have just entered the consumer market, by the traditional shopping inertia is very small, it is easier to accept the emerging network live shopping. However, it is worth noting that teenagers are different from adult consumers, this group has a meager income but a stronger willingness to buy, and is more likely to be attracted by the live talk and atmosphere, inducing unnecessary consumption. At the same time, young people are influenced by social networks, in addition to live bloggers, but also susceptible to the "herd effect", driven by peers in the network live consumption, network live consumption of the "multiplier effect" is obvious. It is worth noting that young people are in an important period of construction of shopping concepts and shopping psychology, their minds are not mature enough, and their choices are easy to be impulsive. It is necessary for the society to provide benign guidance and care for their consumption behaviors, so as to help them grow up in a healthy way.

1.2. Research Significance

In order to better help adolescents establish correct consumption concepts, manage and control adolescents' impulsive consumption behaviors, and help them carry out healthy network live consumption. This study tries to analyze the current situation of teenagers' consumption on the Taobao live platform by focusing on the consumption behavior of teenagers' webcast shopping, taking Taobao platform as the research carrier, and then deducing the factors influencing teenagers' impulsive buying. It tries to provide a referable direction for the guidance of teenagers' consumption behavior and some reference for the management of live shopping platforms.

The second part of this paper defines and analyzes the impulsive consumption behavior from the theoretical level; the third part introduces the shopping status of teenagers on the Taobao live platform; the fourth part explores the factors affecting teenagers' impulsive live shopping; and the last part summarizes and discusses the conclusions of the study.

2. Literature Review

2.1. Impulsive Buying Defined

Scholars have carried out in-depth interpretation and analysis of impulsive buying behavior from different perspectives, and the relevant basic research has been relatively complete. In general, the existing research on impulsive consumption behavior focuses on the following aspects. First, for the definition of impulsive buying behavior. Relevant research can be traced back to the middle of the 20th century, when the DuPont Research Institute in the United States paid attention to the fact that consumers have the desire to buy products unplanned and defined this desire as impulsive buying behavior. Clover, Vernon T proposed a key trigger for impulsive buying based on DuPont's institutional research theory - the influence of external factor. Clover believes that impulsive buying behavior refers to the behavior of having no original purchase plan for a certain commodity, but being influenced by external factors, one ends up purchasing this commodity [4]. Nesbitt, Saul defined impulsive buying behavior from a cognitive perspective. Nesbitt proposed that impulsive buying behavior is an instruction to act given by the brain, and that the influence of mental activity on the

impulsive buying activity should be fully discussed, rather than exploring impulsive buying behavior only from an unplanned perspective [5]. Second, the typology of impulsive buying behavior is divided. Based on the impulsive buying behavior definition study, Stern, Hawkins proposed that impulsive buying behavior is the result of the joint action of the external shopping environment and the buying subject. According to the different paths of action of the two forces, Stern classified impulsive buying behavior into four types, which are pure impulsive buying, reminder impulsive buying, suggestion impulsive buying, and planning impulsive buying [6]. The above categorization criteria are easy to understand and are currently the most common categorization paradigm drawn upon by academics. Beyond that, Valence, Gilles, Alain d'Astous, and Louis Fortier classified the subjects of impulsive buying behavior into three types: frenzied consumers, impulsive consumers, and compulsive consumers, based on the differences in the consumers' own reactions, emotions, and cognitions [7].

Based on the research of the previous scholars, this study defines impulsive buying as the purchasing behavior of consumers without prior planning or awareness prompted by external factors. It is also believed that impulsive buying behavior is characterized by prior unconsciousness, unplanned, formed under external motivation, and influenced by the consumer's consumption psychology.

2.2. Impulsive Buying Influencing Factors

Impulsive buying behavior has been a hot topic in academia, and the research on the factors influencing impulsive buying behavior is even hotter. Hoch, Stephen J., and George F. Loewenstein developed a decision-theoretic model based on reference points. The model reveals that the amount of disposable funds available to consumers is significantly associated with the creation of impulsive buying behavior, and as the amount of disposable funds decreases, the incidence of impulsive buying behavior decreases significantly [8]. Li Li starting from the subject of consumption, found through empirical data analysis that gender affects consumption behavior, and the incidence of impulsive buying behavior in men is significantly lower than that of women [9]. In addition to this, the study found that consumer age, self-control, individual impulsive personality, hedonistic notions and other factors can influence impulsive buying behavior. In terms of external factors, existing research has focused on the impact of product features impulsive buying behavior [10-12]. Liao Jiajue used regulation-oriented theory to confirm that luxury goods stimulate impulsive buying behavior [13]. Li Yalin, and Jing Fengjie focusing on "post-purchase behavior", found that impulsive buying induced by non-price promotional strategies tends to be more satisfying [14]. In addition, factors such as price discounts, type and variety of goods, and market environment all have an impact on impulsive buying behavior.

With the development of the digital economy and the popularization of e-commerce and electronic payment, the triggers and influencing factors of impulsive buying present new characteristics. Scholars have interpreted and analyzed the influencing factors of impulsive buying behaviors during live broadcasting from different entry points. For example, Gong Xiaoxiao et al. constructed a moderated mediation model based on the "S-O-R" model, and found that live atmosphere cues have a positive effect on impulsive buying intentions [15]. Li Pei through the construction of the "stimulus-organism-response" model, found that audio-visual merchandise elements, environmental atmosphere audio-visual perception and so on have a positive effect on impulsive buying intention.

Unfortunately, there is very little existing research analyzing the impulsive buying behavior of teenagers live shopping. And teenagers as an important main body of live online shopping, the study of their impulsive shopping behavior is of great significance to live marketing and management. On the other hand, as adolescents are in the period of value formation, understanding the factors affecting their impulsive buying is conducive to better and more targeted guidance for the healthy growth of adolescents.

3. Taobao Live Streaming Platform Development Status

3.1. Taobao Live Streaming As A Whole

From the overall scale of live broadcasting, as the first platform of national consumer live broadcasting, Taobao live broadcasting has a cumulative number of viewers of more than 50 billion. At 2018, the Taobao live broadcasting platform with the total sales of goods reached the level of hundreds of billions of dollars, and since then, the Taobao live broadcasting platform has opened up a comprehensive outbreak of the expansion stage. In 2019, the growth rate of Taobao open broadcast accounts increased by 100% year-on-year, the growth rate of live turnover was 150%, and the number of commodities available for purchase by users increased by 190% year-on-year, covering most of the types of commodities on Taobao and Tmall, and incubating the “all-purpose” Taobao live broadcast. In 2020, China had the highest percentage of consumer users using Taobao live streaming, at 68.5% [16]. This is followed by TikTok Live and AAUTOQUICKER Live, with a share of 57.8% and 41.0%, respectively. In terms of the percentage of loyal users, Taobao still ranks first, accounting for 46.3%. With a huge consumer group and strong user stickiness Taobao live firmly sitting at the top of the consumer live broadcast (Figure 1).

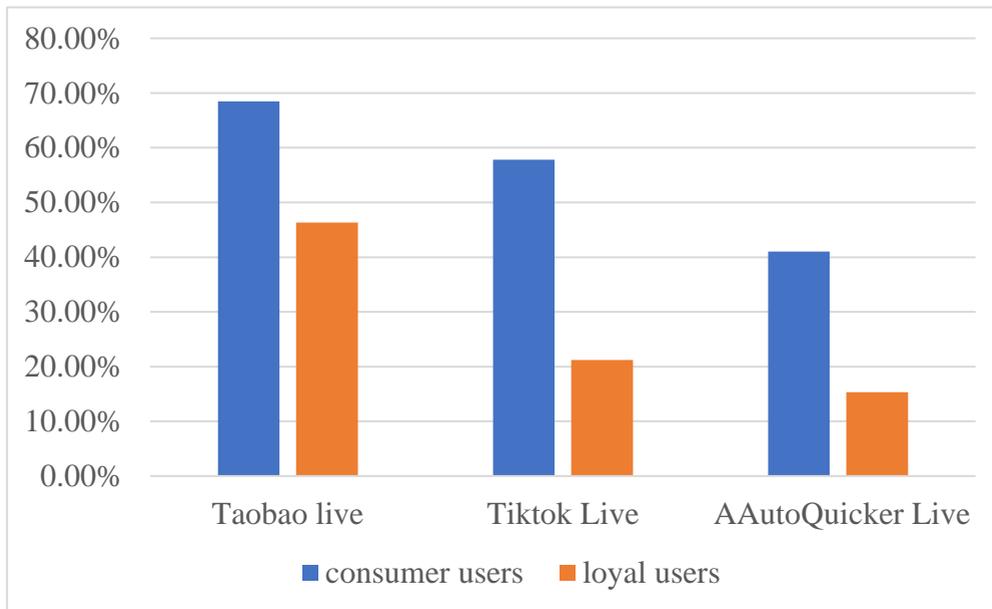


Figure 1: Live Streaming Platforms Market Share.

3.2. Situation of Taobao Live Streaming Hosts

From the point of view of the main body of the live broadcast, the number of anchors on the Taobao live broadcast platform has been expanding year by year, especially in 2020, the live account increased by 661% year-on-year. Host as a link between the goods and consumer users of the link, in the development process of live e-commerce plays an extremely important role, their ability to bring goods, the degree of professionalism has a direct impact on the consumer user's perception of the experience, which in turn affects the sales of the live platform turnover situation. Taobao live platform live can be divided into two categories of live and merchant live. Taobao according to the role of the different people live will be subdivided into Amoy Girl, celebrities, stars, hosts, bosses, shopping guide and other different categories. The different roles of the personage anchor have different advantages, and there are differences in the target groups of the live broadcasting service. For example, Amoy girl and red man have rich experience in live broadcasting, strong professional abilities to bring

the goods. The stars and hosts bring their own popularity and a certain degree of credibility, which is conducive to attracting more consumer users participate in the live broadcast shopping. The president of the brand recognition is strong, the right to speak, in the enrichment of the live broadcast content at the same time is often able to bring a greater degree of discounts. The diverse group of anchors is an important engine for the rapid development of live shopping, which has greatly boosted the popularity and sales of Taobao Live.

3.3. Taobao Live Streaming Environmental Conditions

The development of network live shopping needs technological support. Taobao live through technological innovation and change of generation, and constantly improve the viewing experience of consumer users, to maintain the fun and freshness of the live broadcast, to provide the maximum innovative marketing space for live shopping. For example, the commercial landing of the 5G network has broadened the scene of Taobao live with goods. The use of ultra-high-definition 8K images for live sales is conducive to consumers' faster, clearer and more intuitive understanding of the product details. The application of drones to the live broadcasting scenarios can enrich the live broadcasting outdoor scenes. The application of AR augmented reality technology, VR virtual reality and other technologies can enhance the live viewing of the fun, authentic and Interactivity. AI Artificial Intelligence virtual live can follow up user needs online 24 hours a day, and the reality of all-weather intelligent response. Continuous technological innovation and application has greatly enhanced the visual sense of consumer users, and enhanced the interactive stickiness of consumers during the live broadcast.

3.4. Teenagers' Shopping On Taobao Live Streaming

The number of teenagers using the Taobao live shopping is growing rapidly, according to Taobao live annual consumption data, in 2019, the post-00 live users rose 14% year-on-year, the growth rate is second only to the post-70s group, which is an important source of potential users for future live broadcasting. From the category preference of teenagers' live shopping, the commodity preference of teenage users has changed a lot. In 2019, the category of teenage shopping is more homogeneous, and the preference is concentrated in the field of 3C digital and sports and outdoor. In 2020, the category of teenage shopping has undergone a significant change, mainly focusing on men's clothing and beauty products. In 2021, the top five of the teenage shopping preference categories are beauty, men's clothing, men's clothing, food and outdoor sports, respectively, women's apparel, food, and outdoor sports. The unstable shopping preference of teenagers indicates that they shop arbitrarily and randomly, which is in line with the characteristics of impulsive buying. On the other hand, the category ranking of teenagers' preference is highly overlapped with the current year's live streaming turnover, especially the ranking of live streaming turnover of Daren. For example, in 2021, the top five of Daren's live streaming turnovers are women's clothing, beauty, food, consumer electronics, and jewelry. This shows that teenagers' shopping is greatly influenced by the live broadcast of Daren, and they are prone to impulsive buying in the live broadcast of Daren.

4. Analysis of Influencing Factors

4.1. Adolescent Consumer Behavior

Teenagers' basic shopping needs provide a possibility for live shopping, and under the influence of electronic payment and the popularization of mobile terminals, webcasting has become the main consumption method of the teenage group. From the point of view of consumption motives, the blindness of teenagers shopping is very strong, according to the survey of the First Financial Business

Data Center, 49.7% of teenagers buy goods due to cost-effective, 35.7% of teenagers purchase behavior occur due to good quality [17]. However, in the growth stage of the youth lack of sufficient understanding of the value of the commodity, do not have sufficient commodity efficacy, quality recognition ability, very susceptible to the influence of live propaganda, resulting in “stimulating impulsive buying” behavior. From the perspective of consumption content, teenagers are highly inclusive, active in thinking, highly receptive to new things and willing to try new products, presenting the characteristics of trend in consumption content. The shopping tendency of chasing new products makes adolescents consume more frequently, and they are easily attracted by live commodities, generating “pure impulsive buying” behavior driven by curiosity. From the point of view of consumer psychology, adolescents’ mental development is imperfect, and their consumption has the obvious characteristics in comparison, following the crowd and over-consumption. The social scope of the youth group is relatively fixed and frequent exchanges, in order to satisfy their own vanity in the social network, it is easy to produce irrational consumption behavior, and will even carry out over-consumption.

4.2. Live Streaming Platform Services

Taobao Live takes the lead in proposing management systems such as commodity pre-screening and live product pre-screening, preventing and controlling foreseeable risks before live broadcasting, and providing quality assurance for consumers’ live shopping. In addition, the Taobao live platform to establish a credit evaluation system, through the “compliance security code” on the anchor credit rating, to promote the development of anchor compliance. Taobao has a high-quality supply chain, after-sales service capabilities, logistics and transportation capabilities, so that young people have a strong degree of trust in the platform, which also makes young people more willing to live shopping orders. More importantly, Taobao anchors live broadcasting process on the youth consumption guidance. Live broadcasting promotes the emotional involvement of buyers and sellers and the degree of emotional consumption, consumer shopping utility is not only from the commodity itself, and the immaturity of the teenager’s mind. It is easy to establish a sense of trust with the anchor, resulting in impulsive buying behavior. Anchors show their strong personal characteristics and language patterns while outputting product information, and adolescents will enhance their purchasing intentions and make shopping decisions out of their recognition of the anchors’ charisma, live interaction, personality display and other aspects. Overall, the anchor’s professionalism and interaction with consumers will affect consumers’ cognitive trust and emotional trust in the anchor, and cognitive and emotional trust will further enhance the desire to buy, ultimately leading to impulsive purchasing intentions and behaviors.

4.3. Live Streaming Price Advantage

The price advantage of live shopping includes both relatively low shipping costs and commodity price discounts. Compared to the traditional offline shopping methods, live broadcasting breaks the time and space limitations of shopping, consumers can be freer and more flexible to choose the shopping time, without leaving home to buy the required goods. The “freight insurance”, “7 days no reason to return” and so on further reduce the cost of goods return, which can enhance the teenager’s willingness to try the goods, improve the possibility of impulsive buying behavior. The price of the goods is the first factor in the impulsive buying behavior of the consumer, the discount price is the most important factor in the impulsive buying behavior. The price of goods is the primary factor for consumers to generate impulsive buying behavior, and discount prices are absolutely tempting to teenagers. Teenagers compared to the price sensitivity of adults, live discount prices are extremely attractive to them, easy to produce impulsive buying behavior because of price concessions. From the

point of view of consumer psychology, limited-time price reductions, discount promotions, etc., so that teenagers produce the psychology of loss if they do not buy, in order to avoid regret and accelerate their purchasing behavior is more likely to lead to their impulsive buying behavior. The stronger the adolescents perceive the discount stimulus, the greater the perception of the value of the goods, and the easier it is to produce a stronger impulsive buying will and behavior.

4.4. Live Shopping Interactive Experience

The functional design of the live streaming interface facilitates consumers' purchasing behavior, and the live streaming scenarios will cause consumers' emotional resonance, which will play an important role in guiding teenagers' impulsive purchasing behavior. In addition to the anchor guide, other consumers can also constantly refresh their opinions on the product in the comment area, which is very easy to form the advantage of public opinion on the product, and induce teenagers to produce impulsive buying. In addition to the live broadcast atmosphere, the application of AR, AI, 3D and other new technologies can enhance the fun of live shopping and improve the viewing experience of consumers. A good interactive experience during the live broadcast can enhance the consumer's sense of recognition of the goods, which will enhance the teenager's willingness to buy, thus prompting the teenager to produce impulsive buying.

5. Conclusion

5.1. Key Findings

This study analyzes the current situation of teenagers' consumption on the Taobao live platform, combs through the factors affecting teenagers' impulsive buying, and summarizes the three-dimensional factors affecting teenagers' impulsive buying, namely "service-price-experience". Specific conclusions are as follows: First, from the perspective of teenagers' own factors, teenagers' shopping has a strong blindness, and their immaturity is that they are easily affected by external factors, which induces impulsive buying behaviors; the psychology of comparison, the herd mentality. The way of over-consumption also has a contributing role in the impulsive buying of teenagers' live broadcasting. Therefore, the control of impulsive buying behavior of young people should start by educating young people to set up a correct concept of consumption, and guiding the social atmosphere in the direction of pragmatism, pragmatism and rationality. Secondly, from the analysis of the live platform services, Taobao live to establish a series of standardized live operation, to prevent the shopping risk of the system, effectively enhance the sense of trust of the youth's consumption. High-quality platform endorsement and pre-sale and after-sales service to the youth impulsive buying has a boost. Live process of the anchor of the professional explanation of the goods to guide the youth to live shopping, while the live interaction enhances the youth cognitive and emotional trust of the anchor. Trust and emotional trust, which in turn can improve the desire of teenagers to consume, resulting in impulsive buying behavior. Reducing teenagers' impulsive buying behavior requires shopping platforms to further improve the live management system, which can try to set teenagers' daily consumption limits, teenagers' shopping lockout period and other systems to better regulate teenagers' shopping behavior. Third, live shopping has the price advantage of low shopping cost and commodity price discounts, commodity price is the primary factor to stimulate teenagers' impulsive buying, limited time price reduction, discount promotions and other live means of teenagers' impulsive buying have a direct role in promoting. Fourth, the function of Taobao live streaming and the live streaming scene can cause teenagers to resonate with each other emotionally, inducing them to make impulse purchases. The application of new technology can enhance the fun of live shopping, improve the degree of consumer identification with the goods, and have a promotional effect on impulsive buying. Strengthen the publicity of new technology, new technology, broaden the scope of

the publicity of new technology, is the youth can be cognizant of the new technology through various aspects. Side by side to reduce the live shopping process of technology on the youth's inducement, thus reducing the possibility of impulsive buying.

5.2. Research Limitations and Prospects

This study analyzes the consumption status quo of Taobao live broadcasting platform and sorts out the factors affecting teenagers' impulsive buying. The research on teenagers' impulsive buying behavior in live broadcasting scenarios has certain theoretical significance and practical value, but it still needs to further improve the existed limitations. First, this study explains the factors influencing teenagers' impulsive consumption of live streaming from the theoretical aspect, but there is a lack of effective empirical data and models to quantitatively verify the results. Second, the study was conducted on Taobao as an example, and the findings are generalizable to traditional live streaming e-commerce. However, emerging live streaming platforms such as TikTok have unique social attributes, and the relevant influencing factors deserve further research.

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