

# Online Impulse Buying: Impact of Internet Celebrity Endorsement and Peer Pressure

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## ABSTRACT

During the epidemic of COVID-19, online purchases have been rising and e-commerce live broadcasts have become more popular. As impulse buying happens a lot, the factors influencing impulse buying in e-commerce live broadcast rooms are of interest. Basing on the expectation confirmation model (ECM), we proposed a new model that explores the roles played by internet celebrity endorsement and peer pressure in the process. This study extends related research in consumer behavior and provides implications for marketing practices.

**Keywords:** *E-commerce, consumption impulse, expectation-confirmation model, internet celebrity endorsement, peer pressure*

## 1. INTRODUCTION

During the COVID-19 pandemic, numerous consumers have chosen online shopping without leaving their homes, and e-commerce live broadcasts have been widely favored by consumers to collect information of products. Therefore, how to further enhance sales through e-commerce live broadcasts by improving the content and design has become a key concern to managers. While previous studies have explored this issue from several perspectives, most of them focused on general online buying behavior, rather than online impulse buying [1, 2]. With an impulsive characteristic, the latter apparently has a different pattern in the purchase decision-making process. For instance, a good visual design and web-consumer interactions can immerse consumers in a flow state and stimulate impulsive purchase Wu, Chiu [3]. Given live-broadcast's unique features in terms of visual effect, direct communication and instant engagement [4, 5], it is necessary to focus on the impulse and explore influencing factors in such a context.

Basing on the expectation-confirmation model (ECM), this study develops a new research model to further explore the influence of consumer perception factors and live broadcast platform factors on impulse buying behavior. We highlight the impacts of celebrity endorsement and peer pressure on consumer purchase decision through their interactions during live broadcasts.

This paper contributes to the theoretical development in the field. And marketing implications are discussed. The findings suggest e-commerce platforms use live broadcast as a marketing strategy and utilize social influence from online celebrities and peers.

## 2. HYPOTHESIS DEVELOPMENT

### 2.1. Expectation confirmation model

Impulse buying refers to the sudden and immediate purchase made by consumers without the intention to purchase a specific category of goods or a specific purchase task [6]. Previous studies on external factors of online impulse buying mainly focused on the characteristics and contextual factors of e-commerce platforms. Website quality and attributes were found influential to consumer perception and impulsive purchase online [7]. Research on cognitive dimensions mainly referred to a series of psychological processes occurring when consumers receive external influence, which further affect the consumer's behavior [7, 8].

Thanks to the development of social media and instant communication, consumer purchase decisions have been given an interactive online environment, opening to more stimuli that may trigger their impulse [9]. As a new way for e-commerce, live broadcast enlarges such impacts with more visual, direct and instant interactions among the host, the focal viewer and other

viewers. To capture attentions, the products displayed on e-commerce live broadcast platforms usually have special functions or outstanding quality that consumers have not predicted, resulting in a lot of unplanned purchases.

Oliver [10] suggests that perceived usefulness has a positive impact on consumer satisfaction in environments such as mobile websites and e-commerce [3]. Previous studies have shown that consumers are more affected by the positive effects of situation factors in online platforms than the negative effects when they buy online [11, 12]. In addition, another driving factor in the structure is confirmation, which was mainly defined in previous studies as the confirmation between expected and perceived performance of electronic stores when using information systems [3]. In this study, based on the environment of e-commerce live broadcast platforms, it is summarized as perceived confirmation, which mainly refers to whether the functions and design of e-commerce live broadcast platforms are higher than consumers' expectations on them. Regarding consumer satisfaction, it is considered the core content of marketing research in previous studies [1]. It acts as a decisive factor in online purchases in studies using the ECM model [3]. In this study, it is defined as the customer satisfaction of online consumption in e-commerce live broadcast. It has been found that confirmation and satisfaction were related in the fields of social media and electronic product consumption [13]. Other studies have explored factors such as website quality and pointed out that effective product promotion and search processes could increase consumer satisfaction with the website, thereby promoting consumers' unplanned purchases or impulse buying tendencies [2]. These showed that improving consumer satisfaction may have a positive effect on promoting consumers' impulse buying behavior.

## ***2.2 Internet celebrity endorsement***

Internet celebrity refers to online celebrities who have an influence through social media. Internet celebrities use social media and other platforms to carry out interactive activities, creating a parasocial relationship, which makes them higher credibility and influence than traditional celebrities [14]. Internet celebrity endorsement is influential because consumers believe that Internet celebrities are unlikely to abuse their influence or damage their reputation by publishing false endorsement information [14]. Previous studies

have shown that when Internet celebrities have sufficient credibility, some consumers may believe that the products endorsed by the Internet celebrities are authentic and reliable, which can promote consumer impulse buying behavior to a certain extent [14, 15]. Moreover, consumers are more likely to be affected by positive reviews in the underlying cognitive information processing process (the perception process of the ECM model), while negative reviews are less affected [15]. Meanwhile, when the audience shows a sufficiently high degree of awareness of the internet celebrity, the audience's attitude will also be more positive [4]. The authenticity and enthusiasm of the information contained in the internet celebrity positive endorsement has a significant impact on impulse buying [15]. Internet celebrity endorsement enhances the mediating role of satisfaction between perceived usefulness, perceived confirmation and impulse buying.

## ***2.3 Peer pressure***

Peer pressure indicates that consumers are influenced by others' opinions and behaviors related to the product in the e-commerce live broadcast room (such as placing an order, 'favoriting' or evaluating the product, etc.). The influence of peer pressure is twofold. First, active purchase behavior of other consumers means fierce competitions among buyers for limited quantity of goods, causing a perception of scarcity and strengthen the motivation to get it. Previous studies have shown that scarcity leads to consumers' online impulse buying behavior [16]. Second, the "popularity" of a product can give consumers a belief: if most people think that the product is good, then it must be good. Hence, scarcity and popularity may stimulates consumers' desire for the product, which in turn leads to impulse buying behavior. Wang, Du [17] found that popularity has a significant moderating effect on consumer satisfaction. Peer pressure, which includes the popularity factor, may work in a similar way. With the development of technology, e-commerce live broadcasts have engaged more and more consumers to interact on the platforms, enlarging the effect of peer pressure. When the peer pressure is high (i.e., when a consumer perceives the product is more scarce or popular), a consumer is more likely to feel satisfied and is more impulsive to buy it.

Figure 1 illustrates the research model and hypotheses.

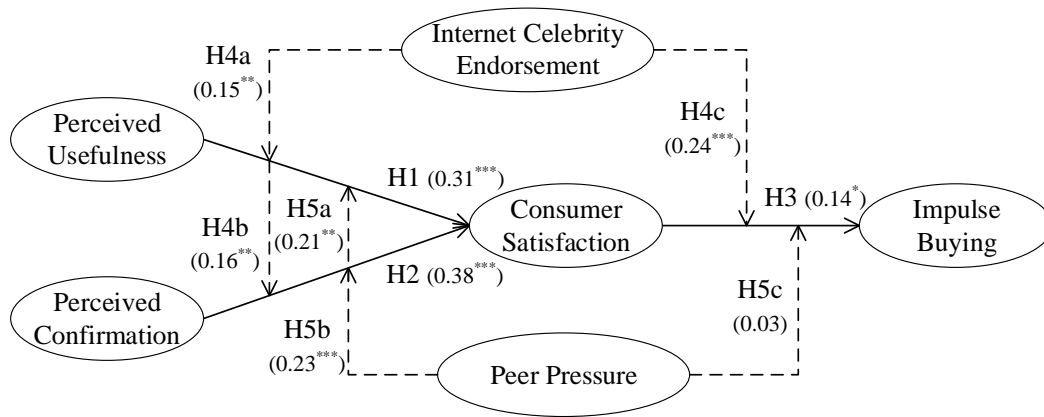


Figure 1 Research model and results

Notes: Coefficients ( $\beta$ ) and significance were indicated in the brackets; \*  $p < 0.05$ ; \*\*  $p < 0.01$ ; \*\*\*  $p < 0.001$ .

### 3. RESEARCH METHOD

This study adopted the method of online survey to test the proposed model. To ensure the validity of the questionnaire, the measurement items are adapted from previous studies [3, 18-20] and further modified to fit the context of this study. As the original measurement scales are in English, we used the method of translation and back-translation to ensure their linguistic equivalence. We administrated the questionnaire to participants in China via multiple social and shopping platforms in different time slots, and initially obtained 400 complete responses. To control the impact of outliers on the results, 21 questionnaires were excluded. Thus, a number of 379 responses were used for hypothesis test.

### 4. RESULTS AND DISCUSSION

This study applied a partial least square structural equation modelling (PLS-SEM) with Smart PLS 3 to test the model. As shown in Figure 1, the results indicated that only one hypothesis (i.e., H5c) was rejected, and all others were supported. Peer pressure can enhance the relationships between perceived usefulness/confirmation and consumer satisfaction, but cannot affect the consumer satisfaction-consumption impulse relationship. In other words, the more people were involved, the higher they feel satisfied, but it cannot improve consumers' impulse purchase in a specific marketing activity. It could be plausibly explained by people's requirement of uniqueness. Consumers would be more rational when they realized that a product becomes popular. Thus, we suggest marketers provide more options for consumers to choose in a sales promotion. To improve sales, marketers are suggested to invite internet celebrities in the marketing activities. More research may be conducted to clarify the effect in the future.

### 5. CONCLUSION

This study contributes to the theory and practice about consumer behavior in several ways. Theoretically, we extended the expectation-confirmation model by introducing internet celebrity endorsement and peer pressure as moderators, which are found can strengthen the mediating effect of satisfaction on online impulse buying. As these two factors are important elements of the contemporary e-commerce environment, especially given a fast emerging of live broadcast for online selling in the recent years, our findings provide valuable implication for e-business and online marketing.

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