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# Key Factors of Younger Generation Consumer's Attitude and Intention to Use Online Shopping Live Broadcasting Platform in Chengdu China

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## Abstract

**Purpose:** This paper mainly studies the significant influencing factors of younger generation consumers' attitudes and intentions toward online shopping live broadcasting platforms in Chengdu, China. The conceptual framework gives the causal relationship between online shopping intention, attitude, perceived ease of use, perceived usefulness, trust, perceived risk, subjective norm. **Research design, data, and methodology:** This study used a non-probability analysis method to investigate the factors influencing the attitudes and intentions of younger consumers in Chengdu towards online shopping live broadcasting platforms. Thirty questionnaires were distributed to part of the respondents who met the characteristics of the sample unit. After data collection, convergent validity and discriminant validity were assessed. Finally, structural equation models (SEM) were used to test all assumptions and model applicability. **Results:** The results showed that attitude and subjective norms significantly affect online shopping intention. Attitude has the most effect, followed by the subjective norm. Perceived ease of use, perceived usefulness, and trust significantly affect attitude, with perceived ease of use being the most affected, followed by perceived usefulness. **Conclusions:** It is recommended that operators of online shopping live-streaming platforms pay attention to the shopping experience of consumers and value their positive feedback to enhance their intention to shop.

**Keywords :** Online Shopping, Attitude, Perceived Ease of Use, Perceived Usefulness, Intention

**JEL Classification Code:** E44, F31, F37, G15

## 1. Introduction

Under the impetus of intelligent, mobile, and other media technology and the influence of the COVID-19 epidemic, the marketing method is undergoing profound changes, which in turn has given rise to a variety of new and effective marketing tools and online shopping live broadcasting is one of them. Online shopping live broadcasting platforms have gained significant popularity in recent years, revolutionizing how people shop online. These platforms combine e-commerce and live video streaming elements, allowing retailers and influencers to showcase products in real-time and interact with viewers directly. It provides a dynamic and engaging customer shopping experience, bridging the gap

between traditional brick-and-mortar retail and online shopping (Beaumont et al., 2022).

During COVID-19, China's live-streaming industry has become an important platform for economic recovery. With the rise of the "live streaming with goods" consumption model, the Chinese market has shown strong potential and vitality, accelerating the transformation of physical business to digital pace. The development of China's Internet celebrity economy and the increase in MCN institutions make China a global leader in the e-commerce live-streaming industry. According to Imedia research data, the number of online live streaming users in China reached 660 million in 2022, covering game live streaming, programs, life live streaming, and e-commerce, indicating that

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watching live streaming has gradually become one of people's online habits (Yu & Zhang, 2022).

Compared with reality TV live and game live, e-commerce live broadcasting has a clear business model. It performs better in attracting online consumers to use and purchase conversion rate, etc. It also creates interpersonal trust and a pleasant experience between merchants and users and creates a better marketing effect. However, now that the e-commerce platform has entered a period of steady development, the user market potential is tapped out, and the major e-commerce platforms need help finding flow and developing new users. Many merchants not only open live on traditional e-commerce platforms such as Taobao and Jingdong but also open simultaneously in the douyin, kuaishou, and other popular short video platforms (Wang et al., 2022).

According to iiMedia Research (IMedia Consulting) data, 70.4% of the common live streaming platforms for live streaming e-commerce are Douyin, 60.1% of the common live streaming e-commerce platforms are Taobao, 45.7% of the common live streaming e-commerce platforms are Kuaishou, and 18% of the common live streaming e-commerce platforms are Jingdong (SEO Agency China, 2022). Therefore, this paper analyzed the four most commonly used representative live-streaming online shopping platforms: Taobao.com, owned by Alibaba Group, Douyin, Jingdong.com, and Kuaishou, as study objects. Based on the theory of reasoned action technology acceptance model and social-technical theory, this paper constructs a structural equation model to investigate the key factors affecting the attitudes and intentions of Chinese users towards online live broadcasting shopping platforms and help e-commerce enterprises understand the mechanism of live broadcasting shopping platforms on consumers' online intentions and behaviors.

## 2. Literature Review

### 2.1 Perceived Ease of Use

According to Tong (2010), PEOU is defined as easily using new technology without requiring physical and mental effort. Research has authorized that PEOU is crucial in predicting technology-based self-services (Heijden, 2000). PEOU was the degree to which comprehending, studying, and operating a technology would be effortless (Kim et al., 2009). Okasha (2019) confirmed that PEOU is the extent of consumers' confidence that would help them to shop online with less effort. Consumers would prefer to use the internet to buy goods if they can easily control the way of online shopping and do not need additional skills. Davis (1989) identified perceived ease of use as a fundamental

determinant of acceptance of information systems. They defined PEOU as the extent to which no effort is required and how easy it is to learn and use the system.

Li (2016) confirmed that the perceived ease of use reflects consumers' willingness to shop online. If consumers browse more, it will increase the possibility of buying goods. Dellaert and Häubl (2012) realized that perceived ease of use affects consumer attitudes and intentions, so the potential dimension of this variable should be confirmed. Perceived ease of use can affect the personal attitude toward technology (Davis, 1989). Research has shown that perceived ease of use is key in predicting consumers' attitudes toward technology-based self-service (Kim et al., 2009). Szajna (1996) has discovered that PEOU positively impacts users' attitudes towards different functions of online shopping. Monsuwe et al. (204) have found that perceived ease of use will affect consumers' attitudes toward online shopping. Hakan (2006) suggested that it contributes to their sense of its usefulness if customers think online shopping is easy for them to use. Tong (2010) empirically demonstrated that the premise of perceived usefulness is ease of use, which indirectly affects consumers' online shopping intentions through usefulness. Hence, this study concludes below hypotheses:

**H1:** Perceived ease of use has a significant effect on attitude.

**H4:** Perceived ease of use has a significant effect on perceived usefulness.

### 2.2 Perceived Usefulness

Perceived usefulness is the extent to which people feel that using a specific technology can improve their work performance (Tong, 2010).

The earliest study has suggested that PU influences attitude and intention (Hsu et al., 2013). Mohamed et al. (2014) suggested that PU and online shopping intention have a positive relationship. Studies have empirically confirmed that PU is the crucial factor that affects consumers' intention to shop online (Tong, 2010). Existing research methods based on TAM also suggested that PU positively affects the intent to shop online (Hakan, 2006).

Ruyter et al. (2004) confirmed that PU is consumers' viewpoint that using the online shopping system can raise the result of their purchasing experience. PU explained over 50% of customer differences in online shopping intentions (Hakan, 2006). Aref and Okasha (2019) thought that the PEOU positively impacts the intent to shop online, such as encouraging online shoppers to increase their views and the possibility of shopping.

Tong (2010) suggested that attitudes are influenced by users' beliefs about the platform, which include perceived usefulness and perceived ease of use. People's attitudes are influenced by PU, practicality, enjoyment, consumer characteristics, and trust (Cao et al., 2018). Monsuwe et al.

(2004) have found that attitudes were influenced by the usefulness of the Internet. From TAM theory, there is a weak direct link between usefulness and attitudes and a strong direct link between usefulness and intention (Davis, 1989). Hence, this study concludes a hypothesis:

**H2:** Perceived usefulness has a significant effect on attitude.

### 2.3 Trust

Akroush and Al-Debei (2015) suggested that trust can be the expectation that others will not show opportunistically and that the seller will keep his promise. Raman (2019) showed that trust is the foundation and the important determinant of the success of online shopping. Trust has also been considered significant in forecasting consumers' intentions (Chetioui et al., 2020). Chen and Chou (2012) have found strong evidence for a significant relationship between trust and purchase loyalty. Lack of trust is a major factor preventing people from shopping online because consumers cannot confirm whether the website information is reliable (Ahmed & Akhlaq, 2014).

Chen and Chou (2012) suggested that trust is important and related to consumers' attitudes toward the website. Greater trust in online providers leads to a higher intention to shop online and vice versa (Raman, 2019). Trust is critical in the relationship between consumers' attitudes and shopping online intention because consumers cannot personally check the quality of goods and ensure the security of personal financial information when shopping online (Lee & Turban, 2014). Past studies suggested that before buying things, a consumer should believe in online vendors because online trading requires consumers to submit private information and data (Thakur & Kaur, 2019). Trust has been used to explain the exchange relationship between the two parties of online shopping (Chen & Chou, 2012). Hence, this study concludes a hypothesis:

**H3:** Trust has a significant effect on attitude.

### 2.4 Attitude

Attitude represents people's emotions about online shopping (Hsu et al., 2013). It is regarded as the people's approval or disapproval (Raman, 2019). Fishbein and Ajzen (1975) mentioned that one's attitude towards behavior includes a person's belief that behavior causes a particular result and a person's assessment of that outcome. Raman (2019) believed this attitude also determines whether the behavior is good or bad and whether a person wants to show such behavior.

Thakur and Kaur (2019) noted that consumer attitudes positively impact the intention to shop online. Attitude is connected with the sense of the advantageousness of actual behavior, possibly forecasting whether a consumer will

execute an actual behavior (Ajzen & Fishbein, 1980). Hsu et al. (2013) found that attitudes and online shopping intentions were influenced by perceived ease of use, perceived usefulness, and trust in online shopping. This means that online shoppers' attitude towards a product or service is mainly influenced by perceived trust (Heijden, 2000). Lin and Lu (2011) revealed that cyberspace's increasing uncertainty and vitality make online trust a key determinant of e-shopping attitudes. Hence, this study concludes a hypothesis:

**H5:** Attitude has a significant effect on online shopping intention.

### 2.5 Subjective Norm

Subjective norms are defined by how most people are significant to someone who believes he or she should or should not perform relevant actions (Raman, 2019). Ajzen (1991) defined subjective norm as the personal normative beliefs concerning a specific indicant weighted by the motivation to stand by the indicant. Subjective norms represent the social stress to carry out or elide an inevitable behavior (Ajzen, 1991). Previous empirical research confirmed that subjective norms are an important factor in influencing behavioral intention (Raman, 2019). Several research studies have been well established that subjective norm is a critical element, especially in the early period of innovation realization when consumers have limited expertise (Okasha, 2019).

Hansen (2006) found that subjective norms and intention to shop online, both in grocery and non-grocery scenes, have a positive connection. Subjective norm tries to capsule consumers' viewpoint of the impact of crucial referents such as family and friends. It is in connection with intention online because consumers will remember how they feel at the event after executing an activity (Raman, 2019).

Aref and Okasha (2019) suggested that SN is a strong influencing factor, especially in the early stages of innovation implementation, when user experience is limited. Subjective norms attempt to generalize consumers' perceptions of their impact on important references like family, friends, colleagues, and online forums (Raman, 2019). SN indirectly influenced behavioral intentions regarding internalization and identifying effects (Hakan, 2006). Hence, this study concludes a hypothesis:

**H6:** Subjective norm has a significant effect on online shopping intention.

### 2.6 Perceived Risk

Perceived risk is the person's consciousness of the unsureness and adverse effects of buying a good or service (Han & Li, 2020). Fagih (2013) believed that perceived risk

reflects the impact of consumers' favorable reception of security and privacy issues in online shopping behavior. Aref and Okasha (2019) suggested that perceived risk has a negative impact on the willingness to shop online. Some studies have also noted a negative relationship between perceived risk and attitudes (Hsu et al., 2013). Although the risk is variable, Akroush and Al-Debei (2015) thought perceived risk is dissuasive for consumers. For instance, Akroush and Al-Debei (2015) believed that the perceived risk of privacy breaches would prevent consumers from online shopping.

Ke and Wu (2015) thought perceived risk discourages consumers' shopping intention because of poor product quality, inadequate after-sales service, and invasion of privacy. Perceived risk is a big challenge for online shopping, as customers always make judgments about online products and services (Han & Li, 2020). Perceived risk was seen as a barrier to transaction success, as customers continue to perceive risk when judging online products and services (Hsu et al., 2013). Customers believe that the risk of loss caused by online shopping is greater than that of offline shopping (Thakur & Sriwastava, 2014). Pelaez et al. (2019) believed that perceived risk affected online shopping intention negatively. Eggert (2006) believed that the perceived risk of privacy violations prevents consumers from shopping online. Hence, this study concludes a hypothesis: **H7:** Perceived risk has a significant effect on online shopping intention.

## 2.7 Online Shopping Intention

Online shopping intention is the degree to which people think they will shop again on the Internet (Ajzen & Fishbein, 1980). With the gradual improvement of online shopping mode, people's choice of shopping software is becoming increasingly diversified. How to increase consumers' understanding of the platform and products through online shopping platforms, to obtain consumers' goodwill, recognition, and loyalty, and to reach the purchasing behavior, which is of great significance to online shopping platforms. Therefore, online shopping platforms must explore consumers' attitudes and behavioral intentions towards using online shopping platforms.

Early research displayed a positive correlation between attitude and intention in online shopping (Thakur & Kaur, 2019). Chiu et al. (2009) suggested that consumers' attitudes toward online shopping positively impact their intention to search online and buy goods. Like any other goods buying, the success of shopping online relies on consumers' degree of satisfaction and elements that raise consumers' continuance intentions (Chen & Chou, 2012).

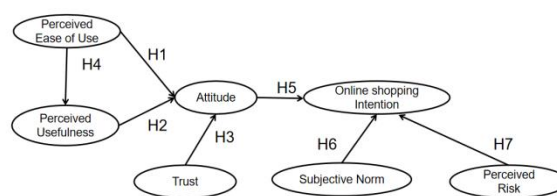
To stimulate consumer shopping intention and translate it into real shopping behavior is a crucial area for online

shoppers to study (Arora & Aggarwal, 2018). They should strive to improve those elements, which significantly help form positive shopping intentions. Hsu et al. (2013) revealed that attitudes are important to the intention to shop online. Thakur and Kaur (2019) noted that consumer attitudes positively impact the intention to shop online. Akroush and Al-Debei (2015) argued that consumers' attitudes positively impact the intention to shop online. In recent years, many researchers have also found that perceived ease of use, perceived usefulness, and reputation affect customers' intention to buy goods from the same online platform (Aren et al., 2013).

## 3. Research Methods and Materials

### 3.1 Research Framework

The conceptual framework of this paper builds upon previous research frameworks, incorporating three theoretical models. Bigné-Alcañiz et al. (2008) proposed that the perceived ease of use (PEOU), a shopping-oriented construct, exerts a crucial positive influence on the intermediary variable set, comprising future shopping intention and the perceived usefulness (PU) as a shopping channel. Additionally, Raman (2019) discovered that factors such as attitude, trust, and subjective norms impact consumers' willingness to shop online, with subjective norms demonstrating a stronger influence on intentions than attitudes. Furthermore, Han and Li (2020) put forth a framework that analyzes the development of the rural online shopping consumer market from a social technology perspective. Their findings reveal that farmers' intention to shop online significantly affects perceived risk, perceived ease of engaging in interpersonal communication (PEEIM), and adoption readiness. The framework of this study is visually depicted in Figure 1.



**Figure 1:** Conceptual Framework

- H1:** Perceived ease of use has a significant effect on attitude.  
**H2:** Perceived usefulness has a significant effect on attitude.  
**H3:** Trust has a significant effect on attitude.  
**H4:** Perceived ease of use has a significant effect on perceived usefulness.  
**H5:** Attitude has a significant effect on online shopping intention.  
**H6:** Subjective norm has a significant effect on online shopping intention.  
**H7:** Perceived risk has a significant effect on online shopping intention.

**H5:** Attitude has a significant effect on online shopping intention.

**H6:** Subjective norm has a significant effect on online shopping intention.

**H7:** Perceived risk has a significant effect on online shopping intention.

### 3.2 Research Methodology

This study used a descriptive analysis method to investigate the factors influencing the attitudes and intentions of Chinese consumers in Chengdu towards online shopping platforms. In this study, the investigators collected information from the sample by distributing questionnaires to the sample units. The item-objective congruence (IOC) index was evaluated, and all scale items received a rating of 0.6 or higher from three experts. Furthermore, a pilot test involving 50 participants demonstrated strong internal consistency for all items, with a Cronbach alpha coefficient reliability exceeding 0.6.

Then, thirty questionnaires were distributed to part of the respondents who met the characteristics of the sample unit. The questionnaire consisted of three parts. First, screening questions were used to determine the characteristics of the respondents. Second, a 5-point Likert scale was used to measure the five proposed variables, ranging from "strongly disagree" (1 point) to "strongly agree" (5 points), to analyze all seven hypotheses. Lastly, demographic questions are gender and age.

After the questionnaire was tested for validity and reliability, it was distributed to the target respondents, and 500 accepted responses were obtained. The researcher used SPSS AMOS 26.0 software to analyze the collected data. The convergence accuracy was then tested using confirmatory factor analysis (CFA) and validation. The model fit measure was calculated by the overall test of the given data to ensure the validity and reliability of the model. Finally, structural equation models were used to test all assumptions and model applicability.

### 3.3 Population and Sample Size

The target population of this paper is consumers who use the top four online shopping live broadcasting platforms in Chengdu, China. This survey was conducted on 552 respondents. After data screening, 500 questionnaires were used in this study.

### 3.4 Sampling Technique

In this study, the researcher adopted multistage sampling as the sampling procedure, which included three steps. The first step is purposive sampling. Purposive sampling involves

selecting particular individuals to participate in the research (Hibbert, 2012). In this study, the respondents must have experienced using the top-four rankings online shopping applications. Then, stratified sampling is performed. This study investigated populations aged from 18-40 years old in Chengdu. To assign the number of 500 samples to those who had used the top four live-streaming online shopping platforms, the researchers collected the number of people using the top four live-streaming online shopping platforms in Chengdu. The four live-streaming online shopping platforms' search indexes in Chengdu are obtained through the Baidu Index Query. By calculation, the 500 samples in Chengdu City aged 18-40 years were divided into 146, 158, 36, and 159, respectively, assigned to Taobao, Douyin, Kuaishou, and Jingdong, as shown in Table 1.

**Table 1:** Sample Units and Sample Size

| Platforms | Population Size | Proportional Sample Size |
|-----------|-----------------|--------------------------|
| Taobao    | 4376            | 146                      |
| Douyin    | 4747            | 159                      |
| Kuaishou  | 1088            | 36                       |
| Jingdong  | 4761            | 159                      |

Source: Constructed by author

## 4. Results and Discussion

### 4.1 Demographic Information

The demographic profile targeted 500 participants; the results are presented in Table 2. 49.2% of the respondents were male and 50.8% were female. Regarding age group, 53.6% of the respondents were aged 18-30, and 46.4% were aged 40-50. The majority income ranged between 80000-150000 yuan, representing 40.4%, followed by 150000-300000 yuan (27%), 30000-80000 yuan (16.8%), below 30000 yuan (10.4%), and above 30000 yuan (5.4%). In terms of respondents' level of education, 47% had a bachelor's degree, and 33.6% had a master's degree, which was lower than the 19.4% with a bachelor's degree and the 1.3% with a doctoral degree.

**Table 2:** Demographic Profile

| Demographic and General Data (N=500)       |                   | Frequency | Percentage |
|--------------------------------------------|-------------------|-----------|------------|
| Gender                                     | Male              | 246       | 49.2%      |
|                                            | Female            | 254       | 50.8%      |
| Age                                        | 18-30             | 268       | 53.6%      |
|                                            | 31-40             | 232       | 46.4%      |
| Level of Annual Income (Ten thousand yuan) | <3                | 52        | 10.4%      |
|                                            | 3-8               | 84        | 16.8%      |
|                                            | 8-15              | 202       | 40.4%      |
|                                            | 15-30             | 135       | 27%        |
|                                            | >30               | 27        | 5.4%       |
| Education                                  | Bachelor's degree | 235       | 47%        |

| Demographic and General Data (N=500) |                 | Frequency | Percentage |
|--------------------------------------|-----------------|-----------|------------|
|                                      | Master's degree | 168       | 33.6%      |
|                                      | Doctor's Degree | 97        | 19.4%      |

Source: Constructed by author

## 4.2 Confirmatory Factor Analysis (CFA)

Confirmatory Factor Analysis (CFA) was conducted in this study. The factor loadings showed values greater than

0.30 and p-values lower than 0.05 (Hair et al., 2006). Cronbach's Alpha was used to test the reliability of the questionnaire. In this study, the alpha coefficient values of all groups were higher than 0.7, which indicated that all structures were reliable. To ensure that all correlations were greater than the corresponding values, the square root of the average variance extracted (AVE) was extracted and compared to the correlations, as shown in Table 3.

**Table 3:** Confirmatory Factor Analysis Result, Composite Reliability (CR) and Average Variance Extracted (AVE)

| Variables                       | Source of Questionnaire (Measurement Indicator) | No. of Item | Cronbach's Alpha | Factors Loading | CR    | AVE   |
|---------------------------------|-------------------------------------------------|-------------|------------------|-----------------|-------|-------|
| Online Shopping Intention (OSI) | Raman (2019)                                    | 3           | 0.742            | 0.708 – 0.837   | 0.817 | 0.599 |
| Attitude (ATT)                  | Raman (2019).                                   | 3           | 0.741            | 0.645 – 0.772   | 0.742 | 0.491 |
| Trust (TR)                      | Bigné-Alcañiz et al. (2008).                    | 3           | 0.802            | 0.753 – 0.816   | 0.828 | 0.616 |
| Perceived Risk (PR)             | Bigné-Alcañiz et al. (2008).                    | 5           | 0.852            | 0.688 – 0.801   | 0.854 | 0.539 |
| Subjective Norm (SN)            | Raman (2019).                                   | 4           | 0.813            | 0.695 – 0.750   | 0.814 | 0.524 |
| Perceived Ease of Use (PEOU)    | Han and Li (2020).                              | 5           | 0.824            | 0.653 – 0.730   | 0.826 | 0.487 |
| Perceived Usefulness (PU)       | Raman (2019).                                   | 5           | 0.867            | 0.707 – 0.813   | 0.869 | 0.572 |

The construct reliability was greater than the cutoff point of 0.7, and the average variance extracted was greater than the cutoff point of 0.5 (Fornell & Larcker, 1981), as shown in Table 4. Additionally, in the CFA analysis, the model's goodness of fit was evaluated using various fit indices, including GFI, AGFI, NFI, CFI, TLI, and RMSEA.

|      | OSI   | ATT   | TR    | PR     | SN           | PEOU         | PU           |
|------|-------|-------|-------|--------|--------------|--------------|--------------|
| SN   | 0.359 | 0.373 | 0.357 | 0.033  | <b>0.723</b> |              |              |
| PEOU | 0.383 | 0.358 | 0.381 | 0.036  | 0.397        | <b>0.698</b> |              |
| PU   | 0.358 | 0.380 | 0.405 | -0.045 | 0.395        | 0.445        | <b>0.757</b> |

Note: The diagonally listed value is the AVE square roots of the variables  
Source: Created by the author.

**Table 4:** Goodness of Fit for Measurement Model

| Fit Index     | Acceptable Criteria                                | Statistical Values             |
|---------------|----------------------------------------------------|--------------------------------|
| CMIN/df       | < 5.00 (Al-Mamary & Shamsuddin, 2015; Awang, 2012) | 1.817                          |
| GFI           | ≥ 0.85 (Sica & Ghisi, 2007)                        | 0.926                          |
| AGFI          | ≥ 0.80 (Sica & Ghisi, 2007)                        | 0.909                          |
| NFI           | ≥ 0.80 (Wu & Wang, 2006)                           | 0.904                          |
| CFI           | ≥ 0.80 (Bentler, 1990)                             | 0.954                          |
| TLI           | ≥ 0.80 (Sharma et al., 2005)                       | 0.947                          |
| RMSEA         | < 0.08 (Pedroso et al., 2016)                      | 0.040                          |
| Model Summary |                                                    | In harmony with empirical data |

Remark: CMIN/DF = The ratio of the chi-square value to degree of freedom, GFI = goodness-of-fit index, AGFI = adjusted goodness-of-fit index, NFI = normalized fit index, CFI = comparative fit index, TLI = Tucker Lewis index and RMSEA = root mean square error of approximation

The study's convergent and discriminant validity were greater than the acceptable values, as shown in Table 5. This result ensured convergent and discriminant validity, and the measurement model was confirmed to have satisfactory validity for subsequent structural model estimation.

**Table 5:** Discriminant Validity

|     | OSI          | ATT          | TR           | PR           | SN | PEOU | PU |
|-----|--------------|--------------|--------------|--------------|----|------|----|
| OSI | <b>0.774</b> |              |              |              |    |      |    |
| ATT | 0.427        | <b>0.701</b> |              |              |    |      |    |
| TR  | 0.366        | 0.322        | <b>0.785</b> |              |    |      |    |
| PR  | -0.027       | -0.019       | 0.066        | <b>0.734</b> |    |      |    |

## 4.3 Structural Equation Model (SEM)

According to Kline et al. (2011), Structural Equation Modeling (SEM) considers the direct causal relationships among variables and the impact of measurement error on the model. The goodness-of-fit indices used to measure the fit of the Structural Equation Model (SEM) are shown in Table 5.2. The model fit measurement should not exceed 3 for the Chi-square/degrees of freedom (CMIN/DF) ratio, and the goodness-of-fit indices (GFI) and (CFI) should be higher than 0.8. By conducting calculations through SEM and adjusting the model using SPSS AMOS 26, the results of the fit indices can be divided into different categories: CMIN/DF = 2.653, GFI = 0.889, AGFI = 0.868, NFI = 0.854, CFI = 0.903, TLI = 0.893, RMSEA = 0.058, as shown in table 6.

**Table 6:** Goodness of Fit for Structural Model

| Index   | Acceptable                                         | Statistical Values |
|---------|----------------------------------------------------|--------------------|
| CMIN/df | < 5.00 (Al-Mamary & Shamsuddin, 2015; Awang, 2012) | 2.653              |
| GFI     | ≥ 0.85 (Sica & Ghisi, 2007)                        | 0.889              |
| AGFI    | ≥ 0.80 (Sica & Ghisi, 2007)                        | 0.868              |
| NFI     | ≥ 0.80 (Wu & Wang, 2006)                           | 0.854              |
| CFI     | ≥ 0.80 (Bentler, 1990)                             | 0.903              |
| TLI     | ≥ 0.80 (Sharma et al., 2005)                       | 0.893              |

| Index         | Acceptable                    | Statistical Values             |
|---------------|-------------------------------|--------------------------------|
| RMSEA         | < 0.08 (Pedroso et al., 2016) | 0.058                          |
| Model Summary |                               | In harmony with Empirical data |

**Remark:** CMIN/DF = The ratio of the chi-square value to degree of freedom, GFI = goodness-of-fit index, AGFI = adjusted goodness-of-fit index, NFI = normalized fit index, CFI = comparative fit index, TLI = Tucker Lewis index and RMSEA = root mean square error of approximation

#### 4.4 Research Hypothesis Testing Result

The significance of each variable in the research model is calculated through the regression weights of each variable and the R<sup>2</sup> variance. The results in Table 7 indicated that six hypotheses are supported and meet the significance requirement of  $p < 0.05$ . The results show that the impact of ATT on OSI is the greatest, with a result of 0.515, followed by SN, with a results of 0.227, respectively. PEOU has a relatively large impact on ATT, with a result of 0.284, followed by PU and TR, with results of 0.282 and 0.223, respectively. PEOU also has a significant impact on PU, with a result of 0.523, as shown in Table 7.

**Table 7:** Hypothesis Results of the Structural Equation Modeling

| Hypothesis                 | ( $\beta$ ) | t-Value | Result        |
|----------------------------|-------------|---------|---------------|
| H1: PEOU $\rightarrow$ ATT | 0.284       | 4.211*  | Supported     |
| H2: PU $\rightarrow$ ATT   | 0.282       | 4.336*  | Supported     |
| H3: TR $\rightarrow$ ATT   | 0.223       | 4.146*  | Supported     |
| H4: PEOU $\rightarrow$ PU  | 0.523       | 9.156*  | Supported     |
| H5: ATT $\rightarrow$ OSI  | 0.515       | 7.695*  | Supported     |
| H6: SN $\rightarrow$ OSI   | 0.227       | 4.404*  | Supported     |
| H7: PR $\rightarrow$ OSI   | -0.039      | -0.813* | Not Supported |

**Note:** \*  $p < 0.05$

**Source:** Created by the author

**H1:** The consequence of H1 suggests that PEOU is one of the key driving factors of ATT, as revealed by a standardized coefficient value of 0.284 in the structural path. Dellaert and Häubl (2012) confirmed that PEOU is one of the important factors influencing ATT, as users' perception of system usability affects their attitudes and acceptance of the system. For consumers, when a product or system is perceived as easy to use, individuals may have a more positive attitude toward it. Conversely, when a product or system is perceived as difficult to use, individuals may have a more negative attitude toward it. Thus, perceived ease of use plays an important role in forming attitudes.

**H2:** The result of H2 suggested that PU has a significant impact on ATT, as revealed by a standardized coefficient value of 0.282 in the structural path. This demonstrated that when individuals perceive that a product or system has

practical benefits, they may be more willing to use it and hold a more positive attitude toward it as Hsu et al. (2013). mentioned that the greater the perceived usefulness of consumers for shopping at home, the better their attitude towards the Internet.

**H3:** Lin and Lu (2011) mentioned, the massive increase in online platforms and users' needs make trust a decisive factor affecting attitudes. H3 also further illustrates the importance of TR to ATT, with standardized coefficient values of 0.223. Consumers' trust in the online shopping platform is a prerequisite for choosing the shopping platform.

**H4:** The standardized coefficient value of 0.523 for H4 showed a significant effect of PEOU on PU. Previous studies have shown a positive relationship between PEOU and PU (Davis, 1989). This indicated that an increase in user's perception of the system's ease of use enhances their perception of the usefulness of the system. So, improving system usability and usefulness is an important factor in promoting user acceptance and use of new systems.

**H5:** The results for H5 with standardized coefficient values of 0.515 reflect ATT's significant effects on OSI. Early studies confirmed that ATT significantly impacts online shopping intentions, for instance, individuals' attitudes toward their favorite clothing sites, affecting their search for information and willingness to buy clothing (Seock & Norton, 2007).

**H6:** The results for H5 with standardized coefficient values of 0.227 reflect the significant effects of SN on OSI. Consumers also often consider others' opinions (Raman, 2019). Opinions and recommendations from friends, family, or other consumers are crucial in online shopping intentions. Positive reviews and recommendations can encourage people to purchase, while negative reviews can create hesitation. As a result, consumers typically consider others' opinions and weigh various factors when making purchase decisions.

**H7:** The standardized coefficient value, which is -0.039, indicated a negative correlation between perceived risk and online shopping intention; that is, the higher the perceived risk, the lower the shopping intention. This may be because consumers are worried about encountering problems or being cheated in the shopping process, so they choose to reduce online shopping behavior. Some studies have not found a significant relationship between perceived risk and online shopping intention. This may be because other factors, such as trust, convenience, etc., influence consumers' shopping intentions more, making the impact of perceived risk relatively small.

## 5. Conclusion and Recommendation

### 5.1 Conclusion and Discussion

This article examines the factors affecting consumers' attitudes and intentions towards online shopping live broadcasting platforms. The study's conceptual framework is developed from three core theories and three previous theoretical frameworks. The variables included in the conceptual framework are online shopping intention, attitude, perceived usefulness, perceived ease of use, trust, perceived risk, and subjective norm. In addition, the researcher proposed seven hypotheses to correspond to the defined research questions. The researcher distributed 30 questionnaires to conduct the survey and tested the validity and reliability of the questionnaire using the Item Objective Consistency Index (IOC) and Cronbach's alpha. Based on the collected data, a sample of 500 consumers from Chengdu, China, was collected using non-probability sampling techniques. Furthermore, Confirmatory Factor Analysis (CFA) was used to evaluate the convergence and discriminant validity of the measurement model. The Structural Equation Model (SEM) was used to test the impact of the observed variables and draw conclusions.

The results of this study are shown as follows. Firstly, attitude and subjective norms positively and significantly impact online shopping intention, with attitude having the strongest influence. This is consistent with previous research, such as Kim et al. (2009), who found that attitude has a significant predictive effect on online shopping intention. The more positive a user's attitude towards online shopping, the higher their intention to shop online. In addition, perceived risk was found to have a negative impact on online shopping intention. This is consistent with studies that support the negative correlation between perceived risk and online shopping intention. That is, the higher the perceived risk individuals have towards online shopping, the lower their intention to purchase. This study's conclusion suggests that perceived risk (PR) and online shopping intention (OSI) are insignificant factors. This suggests that for the younger generation, factors such as trust, convenience, and product price influence their purchase intentions more than risk. They are willing to take on more risk if there are suitable prices and return policies. These findings have important implications for designing and marketing online shopping platforms. They can help these platforms better understand and meet the needs and expectations of consumers while also taking specific measures such as improving platform credibility, providing secure payment methods, and providing detailed product information to increase consumers' willingness to purchase and improve their overall shopping experience.

Secondly, the impact of perceived ease of use, perceived

usefulness, and trust on attitude is significant, with perceived ease of use and perceived usefulness having a greater impact, followed by trust. Research has shown a positive relationship between perceived ease of use and attitude, meaning that individuals who perceive a system or product as easier and more convenient to use may have a more positive attitude towards that system or product. This is because perceived ease of use can increase an individual's satisfaction and trust in a system or product, enhancing their attitude toward it.

The third finding is that perceived ease of use significantly impacts perceived usefulness. Previous research has found a close relationship between perceived ease of use and perceived usefulness. Users' subjective perception of the ease of use of a system or product can influence their subjective perception of the actual value and benefits.

For the younger generation of consumers, if using a certain online shopping platform is easier, they are more likely to use it and be more satisfied. Conversely, if the consumer finds the platform difficult to use or the operation could be more convenient, they may abandon it, even if it provides significant actual value and benefits.

Therefore, to improve the usage rate and satisfaction of the younger generation consumer on a platform, designers need to simplify the platform's usage process and interface as much as possible, improve the ease of use of platform operations for consumers, and emphasize the actual value and benefits of the platform's products, helping users better understand and recognize the actual functions and advantages of the platform.

### 5.2 Recommendation

The researchers identified the key factors that affect younger-generation consumers' attitudes and intentions toward online shopping live-streaming platforms. They put forward several suggestions that operators of online shopping live-streaming platforms should pay attention to. Firstly, the researchers found that consumers' attitudes and subjective norms significantly impact online shopping intention. Platform operators can better understand consumers' needs and expectations by measuring and evaluating consumers' attitudes and subjective norms. In addition, many factors affect consumers' attitudes, including perceived ease of use, usefulness, and trust. One of the main benefits of a live-streaming online shopping platform is building trust and authenticity. Studying these factors can identify the gap between the service demands provided by online shopping platforms and the demands expected by consumers. For example, businesses can enhance the overall shopping experience by enhancing the live interaction between the host and the audience to allow immediate feedback and clarification.

### 5.3 Limitation and Further Study

Firstly, this study focuses on the younger generation of consumers who use the top four online shopping live-streaming platforms in Chengdu, China. Due to the influence of factors such as the district, income, and education, different samples may yield different results. Therefore, in future research, it is necessary to compare the differences in influencing factors among different regions, industries, and educational backgrounds to make up for the shortcomings of this study.

In addition, as the COVID-19 pandemic improves and consumer spending increases, the factors influencing consumers' attitudes and behavior may change. Therefore, the relevant variables in this study need to be continuously improved in future applications.

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