

# FACTORS INFLUENCING PURCHASE INTENTION TOWARD ONLINE FOOD DELIVERY SERVICE: A CASE STUDY OF EXPERIENCED CONSUMERS IN HUNAN PROVINCE, CHINA

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Received: July 16, 2021. Revised: July 28, 2021. Accepted: July 30, 2021.

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## Abstract

The purpose of this research was to identify the factor influence online food delivery service purchasing intention who live in Hunan province, China. The variables that had been used in this study framework were Price value, Health consciousness, Food safety concern, Prestige value, Affordances value and Visibility. The questionnaire was conducted and selected from 200 respondents in Hunan province by using the non-probability sampling method as purposive sampling. The Multiple Linear Regression was applied for hypothesis testing. The result revealed that Food Safety Concern ( $\beta = 0.31$ ,  $p=.02$ ). was the most influence factor toward consumers' purchasing intention of online food delivery service. Thus, it showed that Food Safety Concern towards online food delivery service was the most important in determining online food delivery service of Hunan province consumers. The finding suggested that by enhancing the consumer purchasing intentions, the online food delivery service owners should rather focus on Food Safety Concern factor.

**Keywords:** *Affordances value, Food safety concern, Online food delivery service, Purchase intention, Price value*

## 1. INTRODUCTION

Online Food Delivery Service (OFDS) is a new way to purchase food. Through the Internet, consumers can easily order Food by themselves without leaving home (Cho et al., 2019). This innovative technology combines the social and personal needs of customers. OFDS have become more common in the past few years (Alalwan, 2020). OFDS occur through platforms that allow customers to purchase a variety of products or services online or from physical stores (Cho et al., 2019). These platforms, such as Meituan, Eleme, Baidu and others in China, allow users to buy food from multiple different restaurants through apps or websites.

As of June 2019, the number of online food delivery users in China reached 421 million, accounting for about half of the total number of Internet users, according to the 44th

Statistical Report on Internet Development in China released by CNNIC (2019).

### **1.1 Purpose of the study**

The purpose of this research was to determine the factor that influence on online food delivery service purchasing intention who live in Hunan province, China.

## **2. LITERATURE REVIEW**

### **2.1 Price value**

Price value refers to a key indicator that is often used as of what a user must sacrifice to get a product or service, it is a cognitive trade-off between the user's perceived benefit to applications and the monetary cost of using them (Venkatesh et al., 2012). It plays a critical role in purchase decision of consumers. Fernández-Guzmán and Bravo (2018) shows that price value structure is studied as a predictor of consumers' willingness to continue.

### **2.2 Health consciousness**

Jayanti and Burns (1998) believe that health consciousness is used as the extent of awareness to which health problems are integrated into daily activities of certain people. Mai and Hoffmann (2012) found that health-conscious consumers are concerned about their healthy and adopt healthy behaviors, and they are more likely to focus on health-related food attributes, such as eating healthy food in order to maintain their health. Because of the health problem in the food filed, consumers are increasingly care about food quality and safety (Arvanitoyannis et al., 2004). Steptoe et. al. (1995) emphasized that health is one of the most important predictors of consumer food choices. In addition, Kim and Chung (2011) pointed out that between health consciousness and purchase intentions have a significant impacting relationship.

### **2.3 Food Safety Concerns**

Safety is the opposite of risk. Food safety concerns refer to behaviors that are activated by consumers through subjective risk assessment of food rather than the technical or objective level of risk assessment (Frewer, 2000). Various risks are associated with food safety issues. Anater et al. (2011) emphasized that personal reaction to food safety concern have been studied extensively. Food safety concerns exist in other consequences of chemical spraying, fertilizer or production methods (Zanoli & Naspetti, 2002). These concerns positively influence people's attitude and purchase intention (Michaelidou & Hassan, 2008).

### **2.4 Prestige Value**

Prestige, also known as status and position, refers to the social status of a person or thing. Many goods and services have prestige value, that is, they enhance the status of the consumers who own or use them (Hirsch, 2013). From the point of view of food prestige value, it is based on the quality of the food, the quality of the service, and the grade of the food (Urala & Lähteenmäki, 2007). Most studies in the context of food have shown that food quality affects the prestige value and satisfaction of food (Namkung & Jang, 2007). The argument for this

indirect effect is that the prestige value of food will affect customer loyalty if the food meets customer expectations and has the expected value (Suhartanto et al.,2018).

### **2.5 Affordances Value**

Affordances Value, also known as conditional value, which refers to the value that consumers obtain from some external factors, such as the quality of life provided by the alternative option (Gomez et al., 2018). Scholars who study hospitality and tourism have found a relationship between conditional value and consumer choice behavior. In addition, tourists tend to regard conditional value as the key value in tourism-related decisions (Hur et al., 2012). Previous studies have reported the significant influence of conditional value on consumer decision making (Zolkepli, 2016).

### **2.6 Visibility**

Epistemic value, also known as visibility, refers to the ability of a product or service to stimulate curiosity, provide freshness, and satisfy the information-searching instinct (Choe & Kim, 2019; Wong et al., 2019). Thomé et.al. (2019) found that there is a positive correlation between Epistemic value and choice behavior in areas such as health food and travel destination (Ashton, 2015). The study measures cognitive value by visibility in the m-payment services by Johnson et al. (2018) emphasized that research on information systems shows that visibility increases the willingness of the observer to adopt.

### **2.7 Purchase Intentions**

Purchase intention can be understood as the probability that consumers are willing to take a specific purchase behavior (Fishbein & Ajzen, 1975). According to the statement of Felix and Braunsberger (2016), it is believed that the purchase decision will affect the attitude of consumers. Health awareness and attitude are positively correlated with purchase intention. A study conducted by Teng (2009) shows that a positive attitude tends to have a strong purchase intention.

## **3. METHODOLOGY**

The current research on factors influencing purchase intention toward online food delivery service: a case study of experienced consumers in Hunan province, China is a quantitative research through online questionnaires as a tool for data collection. Referring to theories, literature reviews and various related researcher, the research framework and methodology were developed as follows.

### **3.1. Research Framework**

The conceptual framework is adapted from the value proposition of food delivery application from the perspective of theory of consumption value by Kaur et.al. (2021). A conceptual framework was developed to investigate the impact of purchase intention toward online food delivery consumers.

The independent variables comprised of price value, health consciousness, food safety concern, prestige value, affordance value, and visibility. The dependent variable is purchase intention towards online food delivery as shown in figure 1.

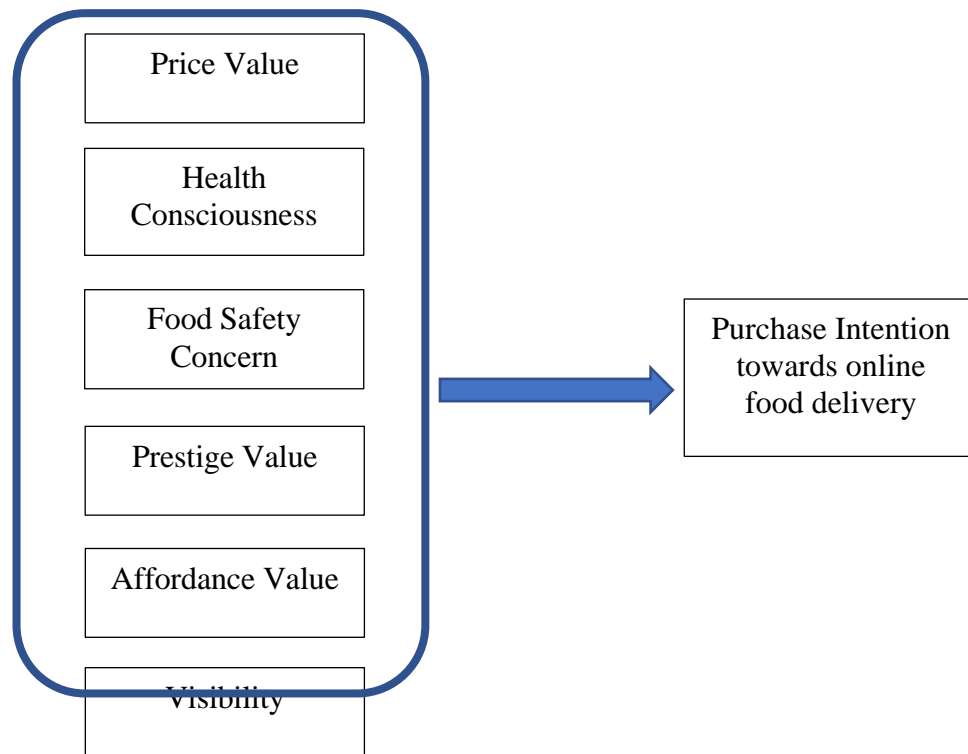


Figure 1: The Research Conceptual Framework

From the conceptual framework, the hypothesis was framed as follows.

$H_0$ : Price Value, Health Consciousness, Food Safety Concern, Prestige Value, Affordance Value, and Visibility do not statistically significant influence on consumers' purchase intention towards online food delivery.

$H_a$ : Price Value, Health Consciousness, Food Safety Concern, Prestige Value, Affordance Value, and Visibility statistically significant influence on consumers' purchase intention towards online food delivery.

### 3.2 Population and sample

The population are respondents living or working in Hunan province, China who have experience in Online Food Delivery Service. The sample size of the study was 200 people recruited from Hunan province people who have experienced in online food delivery service. The purposive sampling technique was applied to recruit the sample to ensure that the sample has the same characteristics of the population as well as aligned with the research purpose.

The online questionnaires were distributed to the sample via a Chinese social media. The screening questions were included to ensure that only samples who matched the research target population were included in the data collection.

### 3.3 Pilot test

Cronbach's alpha coefficient was employed to ensure the reliability of the research instrument. The pilot test was conducted on 30 target respondents to determine the internal consistency reliability with the Cronbach's alpha value. According to Sekaran (1992), the standard of reliability test requires that Cronbach's alpha coefficient must be greater than 0.6 (Sekaran, 1992). The pilot test results are shown in Table 1. Cronbach's alpha coefficient of all variables is above 0.6, indicating the reliability of the questionnaire. Since the questionnaire was adopted from the previous research, it is evident that the content validity has been proven. Therefore, it is indicated that the questionnaire is valid.

Table 1: Internal Consistency Reliability of the Pilot Test (n=30)

Variables	Cronbach's Alpha	Number of Items
Price Value	.77	3
Health Consciousness	.78	5
Food Safety Concerns	.67	2
Prestige Value	.90	7
Affordances Value	.79	5
Visibility	.73	4
Purchase Intention	.87	4

## 4. RESULTS AND DISCUSSION

### 4.1 Demographic Information

Descriptive analysis was used to describe data drawn from 200 respondents. According to the screening method, 100 percent of the interviewees are Hunan residents who have received online food delivery service experience. Gender: male 43.00% (n=86), female 57.00% (n=114). In terms of age range, 1.0% (n=2) were under 18 years old, 89.5% (n=179) were between 18 and 39 years old, 7.0% (n=14) were between 40 and 59 years old and 2.5% (n=5) were over 60 years old. On the average income, 41.50% (n=83) of respondents earn less than 3,000 RMB, 31.00% (n=62) earn between 3,000 and 5,000 RMB, 15.50% (n=31) earn between 5,000 and 8,000 RMB, and 12.00% (n=24) earn more than 8,000 RMB. In terms of occupation, students account for 42.00% (n=84), civil servants 14.00% (n=28), company owners 4.50% (n=9) and others 39.50% (n=79). The frequency of using online food delivery services was: daily 16.5% (n=33), more than three times a week 25.0% (n=50), weekly 33.50% (n=67), and once a month 25.0% (n=50).

### 4.2 Inferential Statistics

In this study, multiple linear regression (MLR) method was used to analyze and investigate six hypotheses of purchasing intention of online food delivery service as dependent variable and six factors as independent variables.

Table 2: Model summary of hypothesis test

Model Summary			
R	R Square	Adjusted R Square	Std. Error of the Estimate
0.56	0.30	0.28	1.97

From table 2, the result of multiple linear regression (MLR) analysis tested relationship between the dependent variable which is purchase intention (PI) for online food delivery service in Hunan Province and independent variables of Price Value, Health consciousness, Food Safety Concerns, Prestige Value, Affordances Value and Visibility. It showed that R Square value is 0.30 which means that the independent variables (P, HC, FSC, PV, AV, and V) can explain the dependent variable (PI) for 29.9% with standard error 1.97.

Table 3: ANOVA statistics of hypothesis test

ANOVA					
Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	318.62	6	53.10	13.74	0.00
Residual	746.13	193	3.87		
Total	1064.75	199			

Note: Dependent variable is PI. Independent variables are P, HC, FSC, PV, AV, and V

From table 3, the F-test result showed that sig. value (P-value) is 0.00 which is less than 0.05 significant level, means the hypothesis is supported and at least one independent variable is significantly affecting purchase intention for online food delivery service in Hunan, China.

Table 4: Hypothesis Testing Result

Coefficients			
Variable	Unstandardized Coefficients(β)	Sig.	VIF
Price Value	0.23	0.00	1.11
Health Consciousness	-0.06	0.29	1.22
Food Safety Concerns	0.31	0.02	1.24
Prestige Value	0.08	0.01	1.12

Affordances Value	0.28	0.00	1.08
Visibility	0.13	0.00	1.16s

Note: Dependent variable is purchase intention for online food delivery service in Hunan, China

From table 4, the result showed the Health consciousness was not statistically significantly affecting purchase intention for online food delivery service in Hunan, China. Meanwhile other five independent variables showed statistically significant results with the p-values less than 0.05 which were Price value ( $p=0.00$ ), Food safety concern ( $p=0.02$ ), Prestige value ( $p=0.01$ ), Affordances value ( $p=0.00$ ) and Visibility ( $p=0.00$ ) respectively. It explained that Price value, Food safety concern, Prestige value, Affordances value and Visibility are significantly affecting purchase intention for online food delivery service in Hunan, China. Moreover, the beta coefficients value showed the level of effectiveness of variables ranged from strongest to weakest values; Food safety concern ( $\beta=0.31$ ), Affordances value ( $\beta=0.28$ ), Price value ( $\beta=0.23$ ), Visibility ( $\beta=0.13$ ), and Prestige value (0.08) respectively. In addition, variance inflation factors (VIF) also were investigated in term of multi-collinearity problem and found that VIF value of Price value, Health consciousness, Food safety concern, Prestige value, Affordances value and Visibility are 1.11, 1.22, 1.24, 1.19, 1.08 and 1.16 respectively which all less than 5 therefore the multi-collinearity problem is considerable and not a critical issue in this regression analysis (Johnston et al., 2018).

## 5. CONCLUSION

This study is formed by the body of empirical evidence regarding online food delivery service, focus on general factor of the findings toward Hunan province, China. The factors considered in this study are Price value, Health consciousness, Food safety concern, Prestige value, Affordances value and Visibility toward purchase intention in online food delivery service. Nevertheless, the research does have some limitations. Results generated from only six independent variables might not be the true influencer which impacting purchase intention in online food delivery service. It is possible that other factors can also affect and impact the intention of online food delivery service that should be investigated. However, the results of this study will help people who own business and online food delivery service to have better idea and understanding of how to boost up their sales via online platform.

The purpose of this research was to study the factor that impact on online food delivery service purchasing intention by using multiple linear regressions. The conceptual framework was adapted from the value proposition of food delivery apps from the perspective of theory of consumption value by Kaur et.al. (2021). The result of this model can explain the dependent variable by 27.7% with Food Safety Concern factor was the highly-influence factor toward online purchasing intention ( $\beta = 0.31$ ).

To improve online food delivery service to increase profitability, the result showed that Food Safety Concern had both statistically significant and highest beta value to online purchasing intention. Hence, Food Safety Concern must be considered. Furthermore, factor such as

Affordances Value and Price Value are the secondary and third concerned factor. online food delivery service must be developed in term of Food Safety Concern, Affordances Value, and Price Value on the website to attract more consumers which can lead to purchasing probability.

The survey conducted within Hunan province boundary only. Suggest that it would be more effective if research can be conducted other area. Moreover, further study can be more effective by extending into the area of respondent to another province in China. In additional, the other factors should be added to improve the research to result more reliability as well as other demographic factors to scrutinize relationship with purchase intention of online food delivery service.

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