



Factors Influencing College Students' Choice of Takeout Vendors

Study in Chengdu, China

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Abstract

In today's increasingly fierce competition in the catering industry, the takeout industry also develops rapidly. More and more catering enterprises have begun to pay attention to catering delivery. The delivery data show that some vendors sell more takeout food than they do in brick-and-mortar stores. Takeout greatly meets college students' needs, who have become the mainstream group in the takeout industry in China. At present, there are various forms in the takeout market, so it is particularly important to study the factors affecting college students' choice of takeout vendors. Based on the Theory of Consumer Behavior and Technology Acceptance Model and previous research review, four factors are identified: User Review, Price, Delivery Time, and Business Service that influence college students' consumption behavior. The target population is Chinese college students in Chengdu city, China. 384 survey questionnaires were collected via online using convenience and snowball sampling. Descriptive statistics and inferential statistics were utilized to describe demographic characteristics and do hypotheses testing. The results showed that user reviews, delivery time, and business service selection had significant effects. According to the research model and conclusion, suggestions are put forward to develop takeout vendors in the college students' market.

Keywords: Takeout, User reviews, Price, Delivery time, Business Service

1. Introduction

The continued impact of the COVID-19 has led to a significant increase in registered members across the takeout market as many restaurants are unable to provide indoor dining services and are, therefore, only offering takeout services (Baidu, 2020).

According to statistics, the scale of China's takeout market has reached 204.8 billion, and the number of urban residents is constantly increasing, which provides a broad customer base for the downstream demand of China's takeout. However, the current takeout market pattern has been stable, so how to extend takeout to life services has become the new direction of China's takeout development (Zhang, 2016).

The takeout ordering system was first developed in the southeastern coastal areas of China, especially in economically developed areas such as Beijing, Shanghai, Guangzhou, and Shenzhen. Due to the accelerated pace of life and work, people gradually began to take out orders to

save time. In the above regions, many local catering enterprises have gradually launched their takeout ordering system, mainly based on

fast food. In Shandong province, the takeout ordering system is still in its infancy stage, and the takeout ordering system in Qingdao city will also face a broader market (Ni, 2015).

In 2019, the scale of China's food and beverage delivery industry reached 653.6 billion yuan, up 39.3% from 2018. Meanwhile, the penetration rate of the food delivery industry also continued to increase. The penetration rate of the takeout industry reached 14.0% in 2019, up to three percentage points from 11.0% in 2018. By the end of 2019, there were about 460 million takeout food consumers in China, up 12.7% from 2018, accounting for about 50.7% of 900 million Internet users and 53.9% of the country's urban permanent residents (Baidu, 2020).



The current situation of college students' takeout consumption is characterized by low ordering frequency, difficulty in meeting the delivery time requirements.

College students are the main consumers of takeout food. They do not have a fixed order frequency but usually choose to order food at lunchtime. There are many options for takeout, which is conducive to discovering new food and dishes and also conducive to

the promotion of new stores for vendors. In addition, college students actively communicate with the takeout platform and give feedback to the vendors to understand the customers' needs and their shortcomings, urge them to improve the quality of the food and drink, and create a better takeout consumption environment. This current paper focuses on the field study on university students ordering. By clearly understanding their needs and the platform's service system, they can better choose the takeout vendor (Xiao, 2019).

This research investigated Chinese college students living in Chengdu who had ordered takeout.

2. Literature Review

The researchers concluded in-dept literature to identify key theories related to the choice of takeout vendors. Two theories were examined, which are the Technology Acceptance Model and Model of Consumer Behavior.

Technology Acceptance Model (TAM)

TAM has been one of the most influential technology acceptance models to an individual's intention to use new technology, perceived ease of use, and perceived usefulness (Davis et al., 1989, Braun, 2013). Online food ordering and delivery service is an emerging business in today's world. Like e-commerce businesses, these food-tech companies depend on technological platforms. TAM is developed to study the acceptance of new technology from owners' and user's points of view (Davis, Bagozzi, & Warshaw, 1989). Food application is increasingly downloaded and used by a class of people having smartphones. The result showed that the technology adoption of food applications is influenced by the quality of food application (Information, Security, and System), the consumers who are proved using TAM. Therefore, the

quality of food application is the foremost external stimuli that result in technology adoption; these service providers have to be very conscious of maintaining the quality of the food application to ensure that it results in ease of use and ultimately purchase intention (S. Preetha & S. Iswarya, 2019).

Model of Consumer Behavior

Walters (1974: 7) defines consumer behavior as: "... the process whereby individuals decide whether, what, when, where, how, and from whom to purchase goods and services."

Trying to understand what goes on in a consumer's head and exactly what makes them buy is a goal of every business only way to do this is by closely studying the buying patterns and building theories and models. Consumer behavior theory studies how people make decisions when they purchase, helping businesses and marketers capitalize on these behaviors by predicting how and when a consumer

will make a purchase. It helps to identify what influences these decisions, as well as highlight strategies to manipulate behavior proactively. Consumer behavior theory allows businesses to understand more about their target audience and so be able to craft products, services, and company culture to influence buying habits.

College students' choice of takeout vendor

By clearly understanding their needs and the platform's service system, they can better choose the takeout vendor (Xiao, 2019). Because college students lack the time or psychological dependence, many times will choose to order takeout to solve the problem of eating (Zhao, 2016)

Here are four variables that influence College students' choice of takeout vendor upon literature review.

User reviews

User reviews are the process of making value judgments about certain ideas, methods, and materials. It is a process of using criteria to evaluate the accuracy, effectiveness, economy, and satisfaction of things (Bloom, 2017).

Based on the analysis of customer reviews and rating data and the interview of O2O consumers, it is



believed that user reviews have a significant impact on the choice of takeout (Cao,2017). The more comprehensive, objective, and credible the content published by reviewers, the more likely consumers will be to give their comments, thus influencing consumers' choices (Shi,2018). Furthermore, a good evaluation can increase the merchant's reputation and improve the score in the consumer's mind, thus affecting the choice of the takeout vendor when consuming (Du,2015).

Price

Price refers to the quantity of payment or compensation given by one party to another in return for one unit of goods or services (Schindler & Robert M, 2012).

On the whole, the lowest discount price most college students can accept is between 2 yuan and 9 yuan, which means that they may turn to the canteen or the way of eating below this discount price (Chen & Jiang,2014). Although college students have a great demand for takeout sales, their consumption level is greatly restricted. Therefore, college students will choose it reasonably according to the price (Shen,2016). According to the survey, the proportion of college students ordering takeout food is high. The boom is that takeout has obvious advantages in taste, time, and price (Li,2015).

Delivery time

It means that the goods delivered to you are within the standard service time. It means to arrive on time (Ma,2017).

According to the research, consumers hope that the delivery time of takeout is as short as possible while taking into account the overall situation, the acceptable delivery time is 30 minutes, if more than 30 minutes will affect consumers' choice of the business (Sheng,2018). Ordering and delivery time are the primary issues consumers attach importance to, and preferential strength is the primary basis for choosing the ordering platform (Fang, et al., 2015). The results showed that the longer the delivery time, the greater the loss of customers (Huang,2015).

Business service

Any project that improves customer satisfaction falls under the category of business service (Zheng,2005).

First, it is necessary to realize the service's importance and key to making the served person happy. Only by constantly improving the service quality can the merchant win more markets (Chen,2015). The results show that good merchant service will increase customer loyalty, retain customer numbers for the takeaway merchants, and be actively promoted by customers (Xu,2012). Furthermore, business services with enthusiasm, patience, integrity, and a certain degree of professional knowledge to meet the needs of consumers, which will enable more consumers to continue to choose the business (Li,2015).

3. Conceptual Framework

Conceptual Framework

In this part, the researcher developed the literature review in the previous section.

The conceptual framework depicts between independent and dependent variables: college students' choice of takeout vendors.

Research Hypotheses

H01:User reviews do not influence college students' choice of takeout vendors.

Ha1:User reviews influence college students' choice of takeout vendors.

H02:The price does not influence college students' choice of takeout vendors.

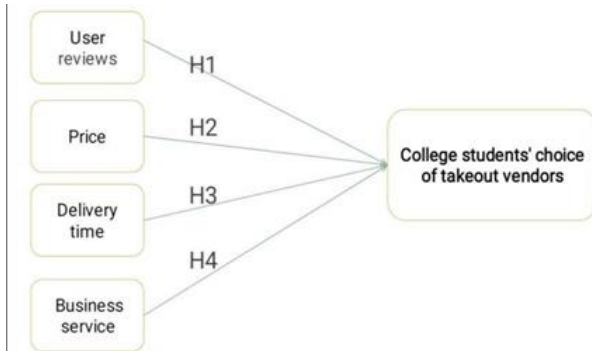
Ha2:The price influences college students' choice of takeout vendors.

H03:The delivery time does not influence college students' choice of takeout vendors.

Ha3:The delivery time influences college students' choice of takeout vendors.

H04:Business services do not influence college students' choice of takeout vendors.

Ha4:Business services influence college students' choice of takeout vendors.



4. Research Methodology

Methods of Research Used

This research applied quantitative research for collecting primary data. The survey questionnaire was utilized, and a series of statistical analyses were employed. Firstly, test the reliability of each variable in the research conducted by using Cronbach's Alpha in SPSS. Secondly, descriptive analysis was used to analyze and explain respondents' demographic data, and the multiple linear regression method is used to determine whether there is the statistical influence of independent variables on dependent variables.

Table 1 - Pre-Testing Result (N=30)

Variables	Number of Items	Cronbach's Alpha
User reviews	4	0.788
Price	4	0.848
Delivery time	4	0.811
Business service	4	0.885
College students' choice of takeout vendors	4	0.790

Data Collection Method

Researchers used online questionnaires to collect primary data from 384 Chinese people who live in Chengdu and previously ordered takeout. The researchers managed

Researchers used the survey technique method measured by 5 points Likert Scale because it is widely used and could easily adapt to any part of the questionnaire. The scales range from strongly disagree to strongly agree: Strongly Disagree = 1, Disagree = 2, Neutral = 3, Agree = 4, Strongly Agree = 5

Respondents and Sampling Procedures

Target respondents of this study are Chinese who are living in Chengdu and have takeout ordering experience. Three hundred eighty-four samples were selected by non-probability sampling. The questionnaires were distributed online. The questionnaire consists of screening questions, measuring variables, and general information questions.

Before collecting the real 384 respondents, researchers employ Cronbach's Alpha to test the reliability of each variable. Thus, 30 samples are the size to collect data for conducting pre-testing, identify the errors, and evaluating the quality of the questionnaire. The values for all variables exceed 0.7, which makes it acceptable. Since they range from 0.7 to 0.9, they are acceptable to collect the complete sample data (Jiradilok, Malisuwan, Madan, & Sivarakas, 2014).

the online survey by providing a survey link (Wechat 、WENJUANXING) to the respondents, allowing respondents to answer questions displayed on the screen.



Convenience and Snowball sampling are applied sampling methods.

Statistical Treatment of Data

After researcher collected 384

questionnaires, the researcher used descriptive analysis to identify the user's characteristics via the statistical package for the social science programs (SPSS), a tool for analyzing the use of multiple regression analysis to test hypotheses.

5. Result And Discussion

The researchers used statistical analysis software to analyze the data and discover the effects of independent variables on the dependent variable.

Demographic Analysis

The researchers conducted a demographic description of the basic information of 384 respondents who ordered takeout and live in Chengdu, as follows:

Table 2 - Demographic Information of respondents (N=384)

	Frequency	Percentage (%)
Gender		
Male	193	50.26%
Female	191	49.74%
Grade		
Freshmen	52	13.54%
Sophomores	62	16.15%
Junior	109	28.39%
Senior	93	24.22%
Postgraduates	68	17.71%

Table 2 demonstrates that the number of male and female respondents is 193(50.26%) and 191(49.74%). Percentage respondent for Freshmen for 52(13.54%), Sophomores 62(16.15%), Junior 109(28.39%), Senior 93(24.22%) and Postgraduates 68(17.71 %).

Inferential Analysis

Multiple linear regression analysis (MLR) at the significant level of 0.05 was appropriately applied to each hypothesis to find the effects and the important assumptions that mean difference. Variance

inflation factor (VIF) was to investigate a key multicollinearity problem in this study in $VIF > 5$ (Ringle Wende&Becker, 2015).

H1:User reviews influence college students' choice of takeout vendors.

H2:The price influences college students' choice of takeout vendors.

H3:Delivery time influences college students' choice of takeout vendors.

H4:Business services influence college students' choice of takeout vendors.

Table 3 - Result of Regression, DV: College students' choice of takeout vendors

Hypotheses	Variable	Standard Coefficient (β)	Significant value	VIF	Hypotheses Testing Result
H1	User reviews	0.226(2nd)	0.000	1.393	Supported
H2	Price	0.071	0.170	1.546	Not Supported
H3	Delivery time	0.230(1st)	0.000	1.577	Supported
H4	Business services	0.223(3rd)	0.000	1.502	Supported
R square		0.341			
Adjusted R square		0.334			

As shown in Table 3, $R^2 = 0.341$ of College students' choice of the takeout vendor can be explained by user reviews, price, delivery time

, and business services. The Significant value of the three variables is less than 0.05; these assumptions are supported. However, the Significant value of the price is greater than 0.05, so this assumption was not supported. Moreover, the standardized beta coefficients of three statistically significant independent variables -- user reviews, delivery time, and business service were 22.6%, 23.0%, and 22.3%, respectively. This result can be interpreted as follows: for

each unit increase in user reviews, college students choice will increase by 22.6%; for each unit increase in delivery time, college students choice will increase by 23.0%; for each unit increase in business service, college students choice will increase by 22.3% respectively. There is no statistically significant influence of price on college students' choice of takeout vendor. All independent variables were also tested for multicollinearity, and the results were 1.393, 1.546, 1.577 and 1.502 respectively. When VIF is less than 5, there is no serious multicollinearity problem in this study.

6. Conclusion And Recommendation

Conclusion

The purpose of this current research is to examine factors influencing college students' choice of takeout vendors. The Technology Acceptance Model (TAM) and Model of Customer Behavior related to college students' choice of takeout vendors. Referring to the result that researchers showed in table 3, user reviews, delivery time, and business services influenced college students' choice of takeout vendors. The following part is a discussion comparing the results of current research to those from previous studies.

User reviews

The result showed that user reviews influence college students' choice of takeout vendors. User reviews are the process of making value judgments about certain ideas, methods, and materials. It is a process of using criteria to evaluate the accuracy, effectiveness, economy, and satisfaction of things (Bloom, 2017). Based on the analysis of customer reviews and rating data and the interview of



Co-hosted by



O2O consumers, it is believed that user reviews have a significant impact on the choice of takeout (Cao,2017). This result supports previous studies such as Du (2015). A good review can increase the vendor's reputation and improve the score in the consumer's mind, thus affecting the choice of the takeout vendor when consuming.

Price

The result indicates that price had an insignificant influence on college students' choice of takeout vendors, which conflicts with research by Shen (2016). According to Shen(2016), college students will choose it reasonably according to price when considering takeout. In addition, Li(2015) proved that takeout has obvious advantages in terms of taste, time, and price.

Delivery time

The result showed that delivery time influences college students' choice of takeout vendors. First, it means that the goods delivered to you are within the standard service time. This result supports previous studies such as Fang. et al. (2015), ordering and delivery time are the primary issues consumers attach importance to, and the preferential strength is the primary basis for choosing the ordering platform. Second, it means arriving on time (Ma,2017). Third, the results showed that the longer the delivery time, the greater the loss of customers (Huang,2015).

Business services

The result showed that business services influence college students' choice of takeout vendors. This result supports previous studies such as Xu (2012). Good business service will increase customer loyalty, retain customer Numbers for the takeaway merchants, and be actively promoted by customers. Only by constantly improving the service quality can the merchant win more markets (Chen,2015). It is necessary to realize the importance and key of the service in order to make the served person happy.

Recommendation

This current study has a certain reference value for the sales of takeout vendors. The research results show that college students' choice of takeout vendors is affected by delivery time, user reviews, and business services in order of strength (Beta).

The strongest influential factor is the delivery time, which suggested that takeout vendors can increase the delivery personnel and develop the fastest delivery route. However, the survey indicated that the mean value of college students choosing the delivery service with a short delivery time is 3.443, which is the lowest. Therefore the managerial team should work harder on shortening delivery time.

The second influential factor is user reviews. It is suggested that takeout vendors should pay

more attention to pre-sales and after-sales evaluation to improve their praise rate, because in the questionnaire, college students think user reviews are very important when choosing takeout vendors. The mean value of this problem is 3.393 in the questionnaire survey, showing the lowest.

The third strongest factor is business services. It is suggested that the takeout vendors can often give small gifts because, in the questionnaire, the mean value of this problem is 3.492, which is the lowest. Providing small gifts can attract more attention of consumers that lead to purchase decision toward the takeout vendor.

Further Studies

Regarding the results of this study, researchers found that they cannot represent the opinion of other people who live outside Chengdu, China, with the ordered takeout. Therefore, further studies should expand to other provinces, which people have ordered takeout.

Moreover, the study collected the primary data from 384 respondents and applied the non-probability sampling method. Therefore, the results might not represent the whole population. Further research may apply probability sampling because probability sampling ensures that the sample represents the population more accurately for valid data.

References

Ahn,T. Ryu, S., & Han, I (2004). The impact of the online and offline features on the user acceptance of the internet shopping malls. *Electronic Commerce Research and Applications*. 3

(4) ,405—420.



- Chen,F.(2015). Study on the Present situation and development of college students' takeout consumption.The electronic commerce,2016.01.
- Chen,Y & Jiang,X.D (2014). Research on influencing Factors of College Students' online takeout ordering.Sales and marketing industry Observation,2014-8-10.
- Chen,X.C & Zhou,Y.S (2015). Consumer Psychology and Thought guidance in college students' take-out consumption.Shopping Mall modernization, 9-23.
- Du,C.E (2015). Analysis of college students' consumer groups in the O2O catering and takeout market.Knowledge of news,2015.04
- Fang,M.Z (2015), Current situation and development Trend of O2O catering enterprises in Shanghai.China Statistical Education Association,2015.04.
- Guo,J.Y (2015). Analysis of consumer behavior Characteristics of takeout O2O model.Modern business, 26, 13-14.
- Guo,Y.C (2015). Research on the Phenomenon of university students ordering takeout food.China Statistical Education Association,2015:28.
- Law,R.(2005). Study of hotel information technology application. International Journal of Contemporary Hospitality Management, 17(2), 70-180.
- Le,W.M (2019). How to select target merchants on takeout Platform.
- Li, L. J.(2015) , Research on the Current situation and Development of College Students' Online takeout consumption. Shopping Mall modernization,2015.02.
- Li,K & Liu,J.Y (2013). Study on the model of traditional takeout on campus and network takeout.The new finance and economics,8, 27-36.
- Pavlou,P.A (2003). Consumer acceptance of electronic commerce:integrating trust and risk with the technology acceptance model.International Journal of Electronic Commerce,7(3), 69-103.
- Shen,Q & Guo,F.P. (2016). Research on the Influence of The quality of takeout merchants.
- Sheng,L (2018). Analysis on o2o model innovation strategy of catering enterprises.
- Shi,K (2018). The sales impact of user reviews on takeout.Journal of Management, 5(5), 132-153.
- Sunny Ham. (2004). Effect of information technology on performance in upscale hotels .International Journal of Hospitality Management, 12, 6-20.
- Xiao,F (2015). Takeout analysis based on time distance.Operation manager,28, 171.
- Xiong,P.D & Chen,J.Y (2012). Top sellers list of the impact of takeout selling consumer behavior. Journalof Retailing and Consumer Services, 35, 141-152.
- Xu,X.F (2012). The influence of service quality on business choice. China's market industrial economy, 8, 18-32.
- Wu,M. Ruan,W.S & Zheng,H.J(2016). A Study on the Phenomenon and influencing factors of college students ordering takeout online. Contemporary Youth Studies, 2016.05.
- Zhao,Y (2016). Current situation and influencing factors of college students' takeout consumption. Modern business, 2016.20.
- Zhang,Z & Jing,Y.L (2018). A Study on the acceptability of takeout in universities