

ONLINE FOOD DELIVERY SERVICES AND UNCEASING BEHAVIORAL INTENTION: AN ASSESSMENT FOR INTEGRATING EXPECTATION-CONFIRMATION AND TECHNOLOGY ACCEPTANCE MODELS

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ABSTRACT

The coronavirus disease (COVID-19) quarantine restrictions led to significant changes in the food industry's delivery methods, with a notable rise in online food delivery services (OFDS). This increase necessitates a deeper understanding of the factors influencing the continued use of these services. This study investigates the relationships between perceived ease of use, perceived usefulness, satisfaction, confidence, trust, and continuous intention to use OFDS applications among young consumers in Kazakhstan. An integrated model based on expectation-confirmation and technology acceptance models, incorporating the habit of online shopping as a moderator, was used. Data was collected from 433 respondents with prior OFDS experience and analyzed using Smart PLS 4.0. The results show positive correlations between perceived ease of use, perceived usefulness, satisfaction, confidence, trust, and the continuous intention to use OFDS among young Kazakhstani consumers. Additionally, the study confirms the moderating role of online shopping habits in the relationship between satisfaction and trust and the continuous intention to use OFDS. These findings offer valuable insights for companies in the online food delivery sector, highlighting key factors that can enhance managerial and IT strategies to boost revenues and foster sustained use of OFDS applications.

Keywords: online food delivery services; continuous intention; consumer behaviour; expectation-confirmation model; technology acceptance model

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INTRODUCTION

The global threats caused by the coronavirus disease-19 (COVID-19) outbreak resulted in worldwide lockdowns to contain its spread. The lockdowns greatly affected virtually all industries, including restaurant and catering businesses, and disrupted their business processes. At the same time, however, online food delivery services represented an alternative option for restaurants to operate and survive.

Online food delivery services (OFDS) are a process of ordering food delivered to customers through mobile applications or the company's website (Pigatto et al., 2017). As a comparatively new form of business, online food delivery service applications have modified the purchasing process from the traditional way to an online mode. OFDS has two types of classifications. Individual retailers' websites or applications represent the first, and the second is operated by third-party aggregators connecting food outlets and customers (Shankar et al., 2022).

Over the last few years, OFDS has shown explosive growth, which is likely to continue. According to a report from The Business Research Company (2023), as of 2022, the estimated market value is USD 128.32 billion, and is forecasted to be USD \$159.46 billion by 2026, representing a compound annual growth rate of 5.6%. These statistics suggest that OFDS has great growth potential, and therefore is worth further study. Though research studying OFDS has been carried out, the body of knowledge that has been generated is fragmented (Ray et al., 2019). Different antecedents affecting customers' continuous intention to use OFDS are reported, including performance expectancy, social influence, satisfaction, confirmation, perceived ease of use, perceived usefulness, and trust (Shankar et al., 2022).

Each country, including Kazakhstan, has several food distribution platforms, such as Choco Food, Glovo, Yandex, and Wol,. These platforms aggregate the supplies of various restaurants. The OFDS application provides substantial advantages for customers, including a variety of selections, the absence of spatial and temporal limitations, time savings, information availability, the opportunity to adjust the order according to the customer's specifications, tracking of the whole process, a variety of payment options, and convenience as the desired

food is directly delivered to the customer's office or home. (Pillai et al., 2022).

At the same time, OFDS provides benefits to food outlets as well. The fact that OFDS apps continue to positively affect the catering sector because they have great customer coverage potential contributes to the income growth of food outlets, facilitate better service and experience for customers, help to maintain delivery accuracy, and create customer databases (Shroff et al., 2022) makes it necessary to keep on improving the services provided. The improvement of OFDS is now the focus of academicians, retailers, and marketers, who intend to increase the number of OFDS users while decreasing costs (Prasetyo et al., 2021). Young bachelors represent an important target audience for OFDS (See-Kwong et al., 2017) because they seek convenient meals without spending time preparing them themselves or dining out (Vijayan et al., 2020). The pandemic also has contributed to creating a new consumption habit among young customers due to distance learning. According to Statista Digital Market Insights (2022), it was estimated that revenue in Kazakhstan's OFD market would reach \$720 million in 2023, with user penetration at 14.1%. The annual growth rate of 22.38% (Compound annual growth rate 2023–2027) is projected to rise to \$1617 million by 2027 (Digital Market Insights, 2022).

The continued usage of OFDS apps defines its further success (Bhattacharjee, 2001). Thus, both online food vendors and academia must understand how to improve customers' continuous intention to use OFDS. Features affecting customers' continuous intention of ordering food using OFDS are more complicated and differ from traditional modes because, in the case of online ordering, customers have two identities: information technology users and shoppers. This paper adds to the existing literature by integrating factors affecting the continuous intention to use online food delivery services. The research contributes to a better understanding of customers' continuous intention to use OFDS, which can be applied while improving the marketing strategies of food outlets. Despite all the advantages provided by OFDS, some customers complain about negative experiences associated with poor food quality, longer delivery times, and inaccurate order accomplishments. (Guszkowski, 2022),

Therefore, more studies are needed on factors affecting customer satisfaction with OFDS (Bunarunraksa et al., 2022). Furthermore, there are no studies in Kazakhstan on OFDS to the best of our knowledge.

The purpose of this study is to define the relationship between perceived ease of use, perceived usefulness, satisfaction, confidence, trust, and continuous intention to use OFDS applications among university students in Kazakhstan through the creation of a comprehensive model with an integrated application of expectation-confirmation and Technology Acceptance Models with a moderating role for online buying habit.

LITERATURE REVIEW

Continuous intention to use OFDS and its antecedents

The definition of continuous intention suggests that it represents customers' positive post-utilization behavior, formed by the initial acceptance of a product to continue using it (Kumar & Shah, 2021). Retention of customers who make repeated purchases is five times more profitable than attracting a new one, though a third purchase is rarely completed by more than 50% of recurring customers. That is why understanding the drivers and motives of repeat customers is important for OFDS providers.

In the context of OFDS, previous research focused on the factors of continuous intention to utilize it in terms of the COVID-19 outbreak. Some of them studied the influence of enjoyment, perceived usefulness, customer attitude, and trust on the continuous intention to use OFDS (Azman et al., 2021; Raza et al., 2023; Troise et al., 2021). Other research attempted to prove that perceived usefulness has the most influence on the intention of customers to utilize OFDS platforms in times of pandemic (Hong et al., 2021). The study by Troise et al. (2021) analyzed the relationships between perceived usefulness, attitude, subjective norms, perceived behavior control, trust, and intentions of customers to use OFDS (Troise et al., 2021).

Expectation-confirmation model (ECM) and its application

The expectation-confirmation model proposed by Bhattacharjee (2001) is widely used to explain users' satisfaction and continuous intention to

use an information system (Basil Chibuike et al., 2021; Hsu et al., 2015; Li & Fang, 2019). The Expectation-Confirmation Theory (ECT) (Oliver, 1981) serves as a base for constructing ECM to predict the continued usage of information systems (Bhattacharjee, 2001). Along the same lines, Bhattacharjee's Expectation-Confirmation Model, an extension of ECT, postulates that continuous intention to use information systems is determined by perceived usefulness and user satisfaction. Satisfaction is affected by confirmation of expectations from previous usage and perceived usefulness. Perceived usefulness is positively related to confirmation (Bhattacharjee, 2001).

Given that the customer's continuance intention towards using information systems is like customer repurchase intention, the expectation-confirmation model fits the theoretical foundation for the current research to investigate the factors affecting customers' continuous intention to use OFDS.

Technology Acceptance Model (TAM) and its application

The Technology Acceptance Model developed by Davis (1989) is long considered to be one of the most widespread theoretical frameworks employed to explain customers' behavioral intentions, which can be successfully integrated with other antecedents to expand the descriptive and analytical power of the created model. The classical external variables of TAM incorporate perceived enjoyment (hedonic factors), trust, confirmation, and satisfaction. According to the model, the return intention of customers is determined by their level of satisfaction and prior purchasing experience. Other researchers previously examined the factor of satisfaction to establish its relation to customer repurchase intention (Ngubelanga & Duffett, 2021; Nguyen et al., 2022; Seo & Lee, 2021). The most powerful predictors of customers' online repurchase intention, according to the TAM are perceived ease of use (PEOU) and perceived usefulness (PU).

Revising the implication of perceived usefulness (Davis, 1989) in the context of OFDS refers to the level of improved food delivery experience using an online platform. Perceived ease of use in the context of the current study represents the extent to which the OFDS application maintains the ease of interaction and

availability of required information. Research by Preetha & Iswarya (2019), Song et al. (2021), Su et al. (2022), and Waris et al. (2022) proved the unreliability of the PEOU effect on customers' intentions, resulting in its exclusion, though it still significantly affects customers' perceived usefulness. The ability of the OFDS application to provide easy interaction and navigation, as well as the availability of payment methods, makes it more useful for customers. Though TAM was initially developed to explore technology acceptance, it was found to be suited to determining the continuous intention of IT users (Chaveesuk et al., 2022; Rahmayanti et al., 2021). Therefore, the previous studies examined the role of perceived usefulness, perceived ease of use, and trust in customers' intentions to use sites' social networks.

On the other hand, trust represents a set of beliefs associated with the competence, goodwill, and integrity of the counterparty. Trust in service providers is crucial in establishing continuous relationships both in traditional and online settings (Tandon et al., 2021). Using online service providers might be associated with the unavailability of signals inherent to traditional shopping, leading to a lack of confidence in vendors' trustworthiness and preventing customers from purchasing online (Tandon et al., 2021). Trust is gradually accumulated based on the outcomes of prior experience and shapes the continuous intention to use it (Li & Xue, 2021; Lu et al., 2021; Sun et al., 2022; Tsai & Hung, 2019).

Moderating Role of Habit of Online Buying

Verplanken and Aarts (1999:104) defined habit as "learned sequences of acts that have become automatic responses to specific cues and are functional in obtaining certain goals or end states." Habit represents a concept initially introduced in psychology and is incorporated in studies examining consumer behavior (both in traditional and online settings), as well as information systems (Limayem et al., 2007).

The definitions of habit imply that it is a learned, goal-oriented pattern formed gradually through recurring actions (Aarts et al., 1998). In that sense, habit in online shopping represents an unconscious behavioral reaction activated by situational impetus, skipping the cognitive part of the decision-making process in virtue of the acquired association of satisfactory results and prior online shopping behavior (Çebi Karaaslan,

2022; Jayagowri & Rajesh, 2021; Valaskova et al., 2021).

Habit as a moderating factor was analyzed by researchers such as Limayem et al. (2007), who examined the moderating role of habit in continued IS usage. As follows from the results obtained by Ouellette and Wood (1998), habit facilitates an automated decision-making process. The moderating effect of habit on satisfaction and online repurchase intention was investigated by Khalifa and Liu (2007). Their research examined the effect of habit on repeat purchase intention from two perspectives. According to the first point, habit has a direct effect on repurchase intention, whereas the second perspective assumes a moderating role of habit on continuous purchasing intention.

The existing literature provides for the moderating role of habit in relationships between trust and satisfaction on continuous intention to use (Chiu et al., 2012). Acknowledging that this study also aims to examine the moderating role of habit on the relations between continuous intention to use OFDS applications and its determinants (trust and satisfaction). Based on the extensive literature review, the following hypotheses have been developed:

- H1. Perceived ease of use is positively related to the perceived usefulness of online food delivery services.*
- H2. Perceived ease of use positively affects confirmation of online food delivery services.*
- H3. Confirmation has a positive effect on perceived usefulness in online food delivery services.*
- H4. Perceived usefulness positively affects customers' satisfaction with online food delivery services.*
- H5. Confirmation has a positive impact on satisfaction with online food delivery services.*
- H6. Perceived usefulness positively impacts the continuous intention to use online food delivery services.*
- H7. Satisfaction has a positive effect on trust in online food delivery services.*
- H8. Satisfaction positively affects the continuous intention to use online food delivery services.*

- H9. Trust is positively related to the continuous intention to use online food delivery services.*
- H10. The habit of online shopping increases the influence of perceived usefulness on the continuous intention to use online food delivery services.*
- H11. The habit of online shopping increases the influence of satisfaction on the continuous intention to use online food delivery services.*
- H12. The habit of online shopping decreases the influence of trust on the continuous intention to use online food delivery services.*

Figure 1 shows the proposed theoretical model of the present study based on expectation-confirmation and technology acceptance models with an addition of the habit of online buying as a moderator. Continuous intention to use online food delivery services was hypothesized based on the assumption that perceived usefulness, trust, and satisfaction have a direct impact on the customer's continuous intention. Confirmation and perceived ease of use, along with satisfaction and perceived usefulness characteristics, serve as indirect constructs for customer's continuous intention.

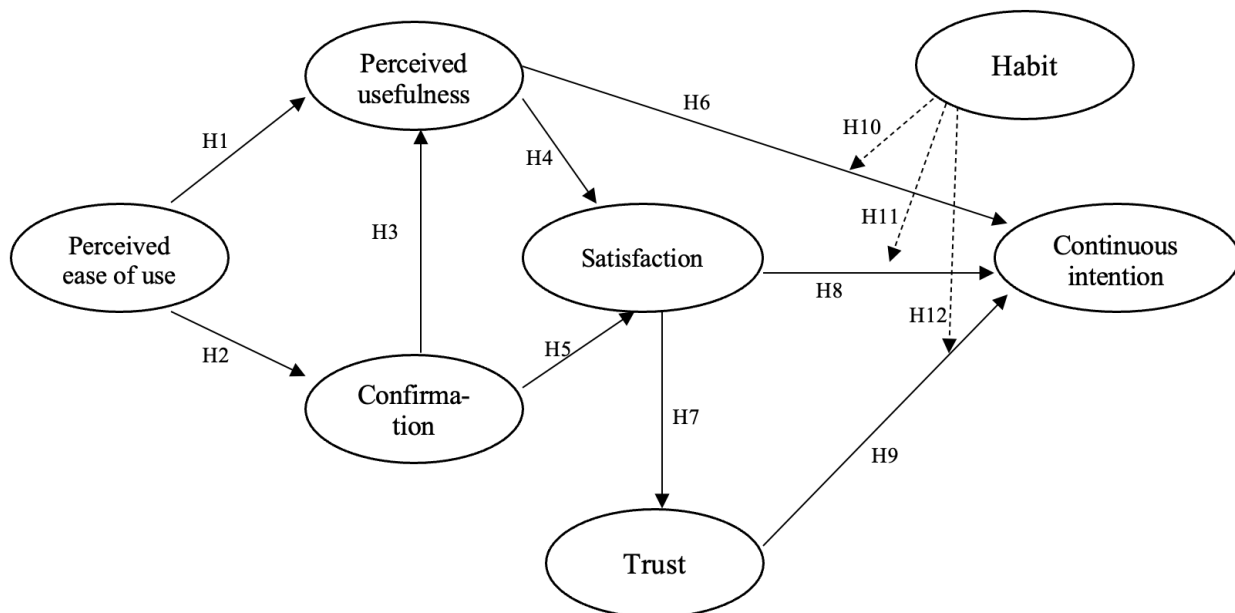


Figure 1:Proposed Theoretical Model of the Study

Research Methodology

The present study is focused on young consumers who were involved in the continuous intention to use OFDS platforms as the target population in Kazakhstan. The respondents were drawn from Kazakhstani universities. According to official statistics, the number of students enrolled in Kazakhstani universities will amount to 578,237 in 2022 (Bureau of National Statistics, 2022).

To ensure that the data gathered may be extrapolated to a larger population, the sample should be larger than 384 people, as per the population sample size recommendation. A simple random sampling method was used. A

total of 619 responses were collected; however, only 433 of them (or 69.95%) had prior experience with the OFDS platform, which was processed for analysis using Smart PLS 4.0. Smart-PLS is acknowledged for its computational efficiency and speed, which makes it well-suited for large sample sizes. Moreover, previous research focused on understanding the determinants of online repeat purchase intention and employed the same software for processing the results (Hsu, 2015).

The Qualtrics platform was used to create and distribute the questionnaire. The questionnaire consisted of 7 blocks and was available via the link. A 5-point Likert scale was used in the design

of the questionnaire. The survey was held in January-February 2023.

Table 1 shows the demographic characteristics of the respondents to the study. According to gender attributes, 75.21% of respondents were female, while 24.79% were male. According to age attributes, more than 80% of participants fell into the age brackets of 17 to 25 years. Most of

the young consumers were studying in undergraduate programs (75.21%). Along the same lines, most of these young consumers (42.82%) were spending USD 11–15 on buying food through OFDS platforms. More than 50% of the respondents were ordering 1–5 times (average) per month using OFDS platforms. Likewise, most of them (43.38%) were using the Yandex app to buy food through OFDS platforms.

Table 1: Respondents Profile

Measure	Item	Percentage %
Gender of respondents	Male	24.79
	Female	75.21
Age group	17-20 Years	52.39
	21-25 Years	32.68
	26-30 Years	7.61
	31-35 Years	4.51
	35+ Years	2.82
Education level	Undergraduate student	75.21
	Graduate student	22.54
	Other	2.25
Average spending per order (in USD)	5-10 USD	25.92
	11-15 USD	42.82
	16-20 USD	18.59
	21 and above USD	12.68
Average number of orders per month	1-3	36.62
	4-5	25.63
	6 and above	23.66
	Don't order every month	14.08
Online food delivery apps	Yandex	43.38
	Glovo	18.59
	Wolt	25.63
	Choco Food	10.70
	Other	1.69

FINDINGS AND DISCUSSION

The data was analyzed using structural equation modelling with the partial least squares approach (SEM-PLS) with Smart PLS (version 4.0) to test the measurement models and various hypotheses of the present study. The three steps of the data analysis were measurement and the structural model's analysis, as well as the moderation effect test.

Testing Measurement Model

Examining the measurement models is the first stage in analyzing PLS-SEM outcomes (Hair et al.,

2019). The following general guidelines (Hair et al., 2019) were used to assess construct validity. For convergent validity, all items' factor loadings and Average Variance Extracted (AVE) numbers must be higher than predetermined threshold values.

All factor loadings in this model are higher than the required value of 0.7. It is generally agreed that an Average Variance Extracted (AVE) of 0.5 or higher indicates sufficient convergent validity (Hair et al., 2019). The AVE values for all items in Table 1 are higher than the threshold value of 0.5.

Table 2: Factor Loading, Construct Reliability and Validity

	Factor Loading (λ)	AVE	CR	α
Perceived Usefulness (PU)		0.590	0.828	0.826
PU1	0.783			
PU2	0.814			
PU3	0.779			
PU4	0.708			
PU5	0.754			
Perceived Ease of Use (PEOU)		0.694	0.856	0.853
PEOU1	0.814			
PEOU2	0.855			
PEOU3	0.850			
PEOU4	0.813			
Trust (TRUST)		0.656	0.869	0.869
TR1	0.780			
TR2	0.826			
TR3	0.797			
TR4	0.837			
TR5	0.810			
Confirmation (CON)		0.699	0.789	0.785
CON1	0.809			
CON2	0.843			
CON3	0.856			
Satisfaction (SAT)		0.670	0.835	0.835
SAT1	0.790			
SAT2	0.852			
SAT3	0.834			
SAT4	0.796			
Habit		0.738	0.882	0.882
HAB1	0.847			
HAB2	0.878			
HAB3	0.853			
HAB4	0.857			
Continuous intention		0.639	0.861	0.858
CI1	0.763			
CI2	0.832			
CI3	0.828			
CI4	0.815			
CI5	0.756			

AVE = Average Variance Extracted, α = Cronbach's alpha, CR = Composite Reliability

Table 2 shows that Composite Reliability (CR) values exceed 0.7, indicating sufficient convergence reliability among the construct's items. Both Cronbach's alpha and CR were used to assess the construct's reliability. A CR value of 0.7 or higher (Hair et al., 2019) signifies good reliability. All CR values for the latent variables in this model surpass 0.7 (Table 1). Similarly, all

Cronbach's alpha values exceed the recommended 0.7 threshold (Hair et al., 2019), confirming the model's reliability.

Discriminant validity was assessed using cross-loadings (Table 3), the Fornell-Larcker criterion (Table 4), and the Heterotrait-Monotrait Ratio (HTMT) (Table 5). Cross-loadings ensure each

item loads higher on its parent construct than on others. Issues with discriminant validity arise if an item loads better on another construct than

its parent construct. All items' cross-loadings meet the criteria, indicating no issues with discriminant validity.

Table 3: Cross-loadings of the measurement model

	CI	CONF	HAB	PEOU	PU	SAT	TR
CI1	0.763	0.545	0.499	0.461	0.542	0.602	0.540
CI2	0.832	0.493	0.691	0.351	0.464	0.528	0.557
CI3	0.828	0.477	0.677	0.378	0.432	0.521	0.546
CI4	0.815	0.480	0.636	0.361	0.451	0.524	0.557
CI5	0.756	0.573	0.523	0.453	0.469	0.597	0.528
CONF1	0.523	0.809	0.367	0.542	0.517	0.555	0.559
CONF2	0.529	0.843	0.443	0.375	0.444	0.571	0.579
CONF3	0.552	0.856	0.439	0.467	0.569	0.644	0.643
HAB1	0.657	0.476	0.847	0.398	0.435	0.554	0.577
HAB2	0.651	0.410	0.878	0.251	0.335	0.487	0.537
HAB3	0.642	0.404	0.853	0.228	0.387	0.503	0.548
HAB4	0.665	0.420	0.857	0.268	0.376	0.525	0.568
PEOU1	0.431	0.469	0.302	0.814	0.670	0.471	0.467
PEOU2	0.387	0.452	0.209	0.855	0.526	0.489	0.421
PEOU3	0.413	0.488	0.311	0.850	0.554	0.513	0.493
PEOU4	0.425	0.434	0.283	0.813	0.541	0.492	0.506
PU1	0.457	0.503	0.304	0.587	0.783	0.457	0.474
PU2	0.493	0.493	0.323	0.535	0.814	0.448	0.479
PU3	0.498	0.489	0.440	0.487	0.779	0.467	0.573
PU4	0.411	0.429	0.359	0.473	0.708	0.419	0.501
PU5	0.394	0.440	0.291	0.576	0.754	0.440	0.467
SAT1	0.557	0.628	0.417	0.567	0.495	0.790	0.556
SAT2	0.583	0.558	0.482	0.470	0.473	0.852	0.594
SAT3	0.560	0.552	0.504	0.465	0.485	0.834	0.586
SAT4	0.560	0.579	0.570	0.425	0.448	0.796	0.565
TR1	0.558	0.583	0.496	0.538	0.563	0.555	0.780
TR2	0.559	0.552	0.590	0.418	0.499	0.551	0.826
TR3	0.546	0.557	0.520	0.413	0.480	0.551	0.797
TR4	0.548	0.566	0.547	0.408	0.492	0.561	0.837
TR5	0.553	0.624	0.480	0.514	0.586	0.627	0.810

The Fronell-Larcker criterion is one of the most popular techniques for assessing the

discriminant validity of measurement models (Table 4).

Table 4: Discriminant validity test through Fornell-Larcker criterion

	CI	CONF	HAB	PEOU	PU	SAT	TR
CI	0.799						
CONF	0.640	0.836					
HAB	0.761	0.497	0.859				
PEOU	0.498	0.556	0.334	0.833			
PU	0.588	0.615	0.446	0.692	0.768		
SAT	0.691	0.708	0.602	0.589	0.581	0.819	
TR	0.682	0.712	0.649	0.567	0.648	0.703	0.810

According to this criterion, the correlation between any two constructs must be greater than the square root of the average variance extracted by the construct. This prerequisite is met, so it can be concluded that the discriminant validity is proven.

The heterotrait-monotrait (HTMT) ratio of correlations is the most conservative

discriminant validity measure to date. The results of the HTMT criterion are below the critical value of HTMT 0.85, which suggests acceptable discriminant validity, according to Table 5. Overall, the reflective measurement model demonstrates adequate convergent and discriminant validity.

Table 5: Discriminant Validity Test via Heterotrait-Monotrait (HTMT) Ratio

	CI	CONF	HAB	PEOU	PU	SAT	TR
CI							
CONF	0.782						
HAB	0.871	0.598					
PEOU	0.585	0.672	0.382				
PU	0.700	0.756	0.524	0.818			
SAT	0.819	0.871	0.702	0.698	0.700		
TR	0.791	0.858	0.742	0.656	0.765	0.824	-

Structural Model Analysis

The structural model is sometimes referred to as an inner model in the context of PLS-SEM. (Hair et al., 2019). After the measurement model's validity and reliability are established, the structural model is utilized to assess the relationships between the constructs. The results of the structural model provide a method for the researcher to assess how well the data supports a hypothesis. The stages in evaluating the structural model include looking for collinearity issues and figuring out the significance level and

coefficients of determination for the path model. Finding any lateral collinearity issues is the aim of the lateral collinearity examination. For VIF to be recognized, the sum of the values must be less than or equal to 6 (Hair et al., 2012). It may be challenging to fit the model and comprehend the findings if there are more than five, which could mean that the independent variable in the model is correlated. Since the internal VIF for every independent variable in this study is less than 6, lateral multicollinearity is not of concern. The results of lateral collinearity are shown in Table 6.

Table 6: The outcome of the lateral collinearity test

	CI	CONF	HAB	PEOU	PU	SAT	TR
CI							
CONF					1.449	1.607	
HAB	1.898						
PEOU		1.000			1.449		
PU	1.863					1.607	
SAT	2.596						1.000
TR	3.033						
HAB x PU	2.562						
HAB x SAT	3.293						
HAB x TR	4.043						

Since no issues were detected regarding collinearity, the next stage of looking at the endogenous construct's R2 values was performed. As a measure of the model's

explanatory strength, the R2 assesses the variance, which is explained by each of the endogenous constructs (Shmueli & Koppius, 2011). Greater explanatory power is indicated by

higher values of the R2, which run from 0 to 1. R2 values of 0.75, 0.50, and 0.25 are regarded as significant, moderate, and weak, respectively. As a result, the model demonstrates a moderate degree of explanatory power; the variances explained are considered adequate. According to the findings, the R2 values of the respective constructs meet the criteria of moderate or high fit: Continuous Intention (0.702), Confirmation

(0.310), Perceived Usefulness (0.556), Satisfaction (0.535), and Trust (0.495).

Next, the path model and the importance of the structural model connections were evaluated. Bootstrapping was used to evaluate the result's confidence range. Figure 2 displays the path parameters for the structural model. The path coefficients were computed to evaluate the predictors' accuracy in the suggested model.

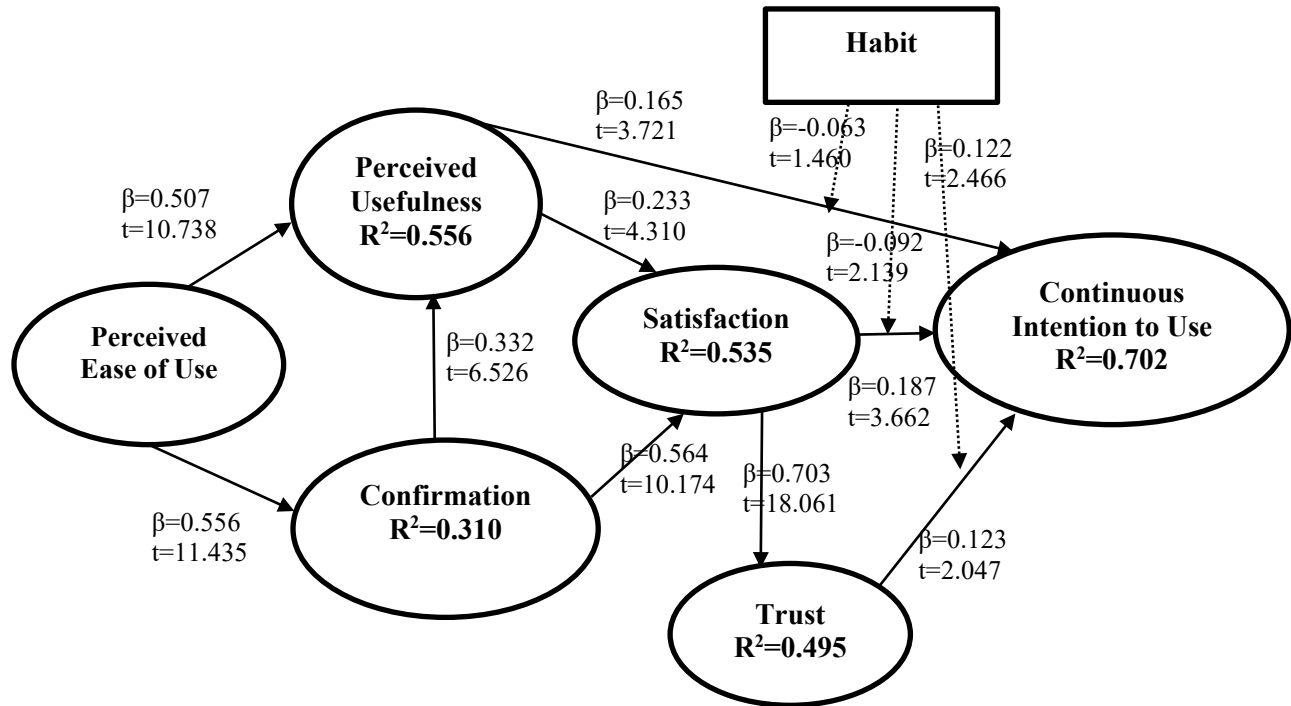


Figure 2: Structural Model

A bootstrapping procedure was run in Smart PLS 4.0 to test the hypotheses formulated in the study. For a hypothesis to be accepted, it should have t-values equal to or greater than 1.96 and p-values less than 0.05 (Table 7). All relationships met the required values except for the moderating effect of habit on perceived usefulness in continuous intention to use OFDS platforms.

The study aims to clarify the key antecedents of continuous intention to use OFDS and establish the effect that these antecedents have on continuous intention to use OFDS platforms among students. The outcomes of path analysis are displayed in Figure 2, and the summary hypothesis testing results are shown in Table 7. Eleven hypotheses were found to be statistically significant and were supported during the analysis performed, however one hypothesis

(H10) was not supported. The validation of the positive effect of perceived ease of use and confirmation of continuous intention to use OFDS through perceived usefulness is provided by the support of hypotheses 1, and 2. The assumption that perceived usefulness, satisfaction, and trust are all positively connected to students' continuous intention to use OFDS is validated by the support of Hypotheses 6, 8, and 9. The findings also may serve as a powerful incentive for online merchants to enhance the user experience on their online platforms, which can raise online users' opinions of the OFDS's perceived ease of use, perceived usefulness, satisfaction, and trust.

Table 7: Summary of hypothesis testing results

Hypothesis	Path	T values	P values	Decision
H1. Perceived ease of use is positively related to the perceived usefulness of online food delivery services	PEOU -> PU	10.738	0.000	Supported
H2. Perceived ease of use positively affects confirmation in online food delivery services	PEOU -> CONF	11.435	0.000	Supported
H3. Confirmation has a positive effect on perceived usefulness confirmation in online food delivery services.	CONF -> PU	6.526	0.000	Supported
H4. Perceived usefulness positively affects customer's satisfaction with online food delivery services	PU -> SAT	4.310	0.000	Supported
H5. Confirmation has a positive impact on satisfaction with online food delivery services	CONF -> SAT	10.174	0.000	Supported
H6. Perceived usefulness positively impacts continuous intention to use online food delivery services	PU -> CI	3.721	0.000	Supported
H7. Satisfaction has a positive effect on trust	SAT -> TR	18.061	0.000	Supported
H8. Satisfaction positively affects continuous intention to use online food delivery services	SAT -> CI	3.662	0.000	Supported
H9. Trust is positively related to continuous intention to use online food delivery services	TR -> CI	2.047	0.041	Supported
H10. The habit of online shopping increases the influence of perceived usefulness on continuous intention to use online food delivery services	HAB x PU -> CI	1.460	0.145	Not supported
H11. The habit of online shopping increases the influence of satisfaction on continuous intention to use online food delivery services	HAB x SAT -> CI	2.139	0.033	Supported
H12. The habit of online shopping decreases the influence of trust on continuous intention to use online food delivery services	HAB x TR -> CI	2.466	0.014	Supported

Hypothesis 10 was found not significant concerning the moderating function of habit in enhancing the influence of perceived usefulness on continuous intention to utilize online food delivery services. The study did not find strong supporting evidence for the notion that habit plays an important role in the effect of perceived usefulness on continued intention to use online food delivery services. The study did not find strong supporting evidence for the notion that habit plays an important role in the effect of perceived usefulness on continued intention to use online food delivery services. This may suggest that other factors or variables may be more influential in determining users' intentions to continue using these services. The lack of support for the consensus suggests that the relationship between habit and perceived

usefulness may not be as straightforward or synergistic as initially presumed. It is possible that other variables or interactions, which were not considered in the conceptual framework, could be influencing users' perceptions. Suppose the habit of online shopping fails to moderate the impact of perceived usefulness on the continued intention to use online food delivery services. In that case, providers may need to reconsider their strategies. Programs to encourage emphasis on attributes may not be as effective as expected, and efforts should be better focused on addressing other factors that more directly affect users' intentions. Hypotheses 11 and 12 are supported, however, with H11 regarding the positive moderating effect of habit on satisfaction in continuous intention to use online delivery food delivery services, and H12

including the negative moderating effect of habit on trust in continuous intention to use OFDS.

CONCLUSION AND RECOMMENDATIONS

Despite the efforts of our study to enhance understanding of OFDS, some limitations suggest avenues for future research. The findings of the study are specific to the context of Kazakhstan and may not fully represent factors influencing repeat purchase intention in other regions or types of online platforms. The data collected for the study is cross-sectional, which limits the ability to conclude changes in consumer perceptions and behaviors over time. The study responds to the literature's call to analyze factors influencing customers' intentions to use OFDS and ways in which food outlets can add value through these services.

A noteworthy contribution is the exploration of habit moderation effect on the relationship between perceived usefulness, satisfaction, trust, and continuous intention to use OFDS after COVID-19. Additionally, it advances the understanding of the attitudes and behaviors of a specific demographic (18 to 29-year-olds) in adopting online technologies post-pandemic, thereby strengthening existing research. As supported by Shankar et. al. (2022), and Chaveesuk et. al. (2022), online platforms played a vital role in mitigating the pandemic's effects. Consequently, the paper suggests sustained investment in online delivery services by food outlets, given extensive customer usage post-crisis. The research tests a model explaining repeat purchase intention based on the integration of the Expectation Confirmation Model (ECM) and Technology Acceptance Model (TAM). It emphasizes the simultaneous testing of perceived ease of use, perceived usefulness, satisfaction, confirmation, and trust on repeat purchase intention. The study suggests that to enhance customer satisfaction, perceived usefulness, and perceived ease of use, online vendors should set realistic expectations for customers, segment customer bases, and adjust marketing programs based on changing expectations. Furthermore, the research explores the moderating effect of habit on the relationship between behavioral intention and trust in the context of ECM. Results indicate that online shopping habits influence the impact of trust on the intention to make repeat purchases. Trust is emphasized as a significant factor in promoting

customers' intention to make repeat purchases, with suggestions for online sellers to encourage frequent usage through incentives. In the context of online food delivery services, the study confirms a significant positive relationship between perceived usefulness and continuous intention to use OFDS among students in Kazakhstan. This aligns with previous research emphasizing perceived usefulness as a determinant of users' intention to continue using food delivery apps (Bhattacharjee, 2001; Wen et al., 2011; Chiu et al., 2012; Azman et al., 2021; Jun et al., 2022). Moreover, the paper establishes a positive impact of perceived ease of use on perceived usefulness, corroborated by earlier studies (Wen et al., 2011; Lee et al., 2019). Perceived usefulness emerges as a powerful predictor of customer satisfaction.

However, the study does not strongly support the idea that habit plays a crucial role in the relationship between perceived usefulness and continued intention to use OFDS. Importantly, the failure to support a hypothesis does not necessarily negate its validity but may indicate the need for further research or a re-evaluation of factors in the analysis. Researchers often use such findings to refine their understanding and guide future investigations, which might include the following:

- conducting longitudinal studies to track the development of habits related to online food delivery usage over time;
- comparing the formation and impact of habits related to online food delivery across different cultural contexts;
- exploring other variables that may moderate the relationship between habit strength and online food delivery behavior.

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