



## The Online Food Delivery Services Sector Transformation in The Pandemic Scene

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### Abstract

**Aim:** The present study aims to determine these factors that influence a consumer's OFD purchase decision.

**Methods:** The data of the online research conducted on 419 people were analyzed using SEM.

**Results:** According to the results of the study; the comfort zone and information factor have positive effect on the consumer's purchasing decision with the Covid-19 Pandemic. A negative relation was found between healthy menus and OFD services decision contrary to expectations.

**Conclusion:** Contrary to previous literature support, the positive relationship assumptions

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between hygiene of OFD service & contactless delivery and purchasing decision of OFD services could not be supported statistically.

**Keywords:** Online food delivery (OFD), comfort zone, Covid 19, healthy menu, contactless delivery, information, Hygiene of OFD service

## INTRODUCTION

With the development of technology, online food delivery (OFD) services have also started to gain a place in the online environment. OFD services where consumers meet restaurants online; It is defined as internet-based platforms with contactless payment options, where businesses can review their menus and order food (Alalwan, 2020; Amin, Arefin, Alam, Ahammadd, & Hoque, 2021; Okumuş & Bilgihan, 2014; Wang et al., 2019). Prior to the Covid-19 pandemic, although people's expectation was on time delivery, online discounts and offers, and price savings (Deepika and Arun, 2021), it is observed that prioritization is returning to hygiene and social distancing norms. By looking at these behavioral changes, it is predicted that the factors affecting the purchasing decision in OFD have also changed with the pandemic (Tan et al 2021). In addition, consumers trying to avoid the risk of the Covid-19 Pandemic have turned to door-to-door delivery, takeaway and online ordering, even if they have never ordered online (Hall, Prayag, Fieger, & Dyason, 2020).

With the pandemic, identifying the factors that affect the consumer's OFD purchasing decision will allow both to allocate a sustainable relationship with existing consumers and to acquire new customers. The present study aims to determine these factors that influence a consumer's OFD purchase decision. The structure of the paper is as follows. The second section discusses the theoretical model and hypotheses. The third section explains the research method and describes the data, and the fourth section evaluates the results. The final section presents the resulting implications and conclusion.

### Theoretical Framework and Hypotheses

In the literature, different theories and models have been used to investigate the factors that affect consumers' service adoption, perceptions, intentions and purchasing decisions regarding OFD services. For this purpose, the studies conducted in the related literature in order to analyze the factors that affect the consumer's adoption of OFD service are mostly based on the Technology

Acceptance Model (TKM) (Alagöz and Hekimoğlu, 2012; Arı and Yılmaz, 2015; Dilek and Öztürk, 2021; Jun, Yoon, Lee et al. Lee, 2022; Tomaş, 2014; Tribhuvan, 2020). In the studies in the literature, not only the TAM model has been utilized, but also the Planned Behavior Theory (TBP) (Amin et al., 2021; Chen, Liang, Liao, and Kou, 2020; Deepika and Arun, 2021; Tran et al., 2020), Extended Planned Behavior Theory (Kılıçalp & Özdoğan, 2019; Prayesto, 2021), Unified Technology Acceptance and Use Theory (UTAUT) (Alalwan, 2020; Muangmee, Kot, Meekawunchorn, Kassakorn & Khalid, 2021), Extended Integrated Technology Use and Behavior Model (UTAUT2) have been used. In addition, models developed based on the literature were also tested in the relevant literature (Armağan and Eskici, 2019; Brewer and Sebby, 2021; Chai and Yat, 2019; Hong, Choi, Choi and Joung, 2021; Kapoor and Vij, 2018; Zhao and Bacao, 2020).

In a study conducted in Jordan using a conceptual model based on the UTAUT model, they discovered that, together with the Covid-19 Pandemic, online reviews and ratings, performance expectation, hedonic motivation, and price had an impact on consumers' intention to use OFD services and intention to use it consistently (Alalwan, 2020). In another study within the framework of the UTAUT model, it was found that performance expectation, effort expectation, social impact, time saving, task-technology compatibility, perceived trust and perceived safety factors affect the consumer's intention to use OFD services during the Covid-19 Pandemic period (Muangmee et al., 2021). As a result of their study using an expanded UTAUT2 model enriched with the information quality factor in order to determine the factors affecting the intention of consumers to use OFD services continuously in Korea, they discovered that habit has the most effect on the intention to use the OFD service (Lee, et al., 2019). In addition, they concluded that habit has performance expectancy and social impact, respectively, but that the information does not have a direct effect on the intention to use it continuously.

While Yeo, Goh, and Rezaei (2017) supported the structural relationship between convenience, convenience motivation, hedonic motivation, price-saving orientation, time-saving orientation, consumer attitude, and behavioral intention to purchase; Cho, Bonn and Li (2018) discovered that the accuracy and timeliness of the information provided by the platform or restaurant is the most important factor in OFD, which they define as the reliability factor. At the same time, food variety, price and reliability are the factors affecting the attitudes of single-person households, while convenience and food variety come to the fore in multi-person households. On

the other hand Tomaş (2014) stated that the variety of products, the fact that the platform has comments and evaluations, and the fact that consumers facilitate access to restaurants around them are the reasons for consumers to use OFD platforms. Tran et al. (2020) carried out in Vietnam to analyze the effects of perceived food safety, hygiene of food delivery service and behavioral intention on attendance behavior, in addition to the assumption that subjective norms and social isolation have a positive effect on behavioral intention and continuation behavior on the basis of PDT with the Covid-19 Pandemic. Food delivery hygiene, perceived food safety had been found a positive effect on intention to use OFD. Chai and Yat (2019), on the other hand, concluded that time saving had the most effect on the intention to use the OFD services while the other factors were convenience and privacy-security factors, respectively.

Cai and Leung (2020) aimed to analyze how the interaction of fictional mindsets and message frames influences OFD purchase intention during the Covid-19 Pandemic era. They found that promotional-framed messages were more effective on consumers' purchase intentions when paired with a "how" fictional mindset in dense regions, in New York, where the Covid-19 Pandemic was intense, and California, where it was infrequently seen, whereas in mild pandemic regions, "why" was framed with a fictional mindset. They discovered that messages were more effective on consumers' purchase intentions.

According to Saad (2020), the success of OFD services is directly influenced by delivery time, service quality, pricing, and the state of the food when it is delivered. Researchers in several nations have given OFD a great deal of attention (e.g., Ali et al., 2021; Bates et al., 2020; Chen et al., 2020; Daim et al., 2013; Dsouza and Sharma, 2020; Lee et al., 2017; Li et al.; 2020; Mehroliya et al., 2020; Troise et al., 2020). According to literature on technology adoption, a person's attitude, perceived usefulness and ease of use, speed of the website, quick response times for online services, and the friendliness and caliber of the staff all play a role in whether or not they adopt technology for OFD services (Lee et al., 2017, Daim et al., 2013).

Previous studies have shown that convenience motivation and post-usage usefulness (Yeo et al. 2017 Brewer and Sebby, 2021), pleasure and trust (Jun, Yoon, Lee, & Lee, 2022), hedonic values and utilitarian (Chen et al., 2020), performance expectancy, optimism, habit, and mindfulness (Gunden et al., 2020), congruity with self-image and innovativeness (Ali et al., 2021), menu information and visualization (Akgün and Zerenler, 2021; Brewer and Sebby. 2021), lifestyle adaptation (Belanche, Flavian, and Rueda (2020), trust, convenience, and social impact (Chotigo

and Kodono, 2021; Zhao and Bacao, 2020) exert a positive effect on intention of using the OFD services.

The factors affecting the Thai consumers' decision to use OFD service after the Covid-19 Pandemic were identified as Age, purchase frequency, affective and instrumental attitudes, perceived advantages, perceived threat, and product participation were found to account for 58.5 percent of the variance in respondents' choice of OFDs during the COVID-19 outbreak, according to Mehroliya et al. (2020). Furthermore, Ali et al. (2021) and Mehroliya, Alagarsmy ve Solaikutty (2020) discovered a strong and unfavorable association between OFD service intents and feelings of fear and discomfort.

### *Comfort Zone*

It is possible to define the comfort zone as all of the situations in which the individual feels safe and comfortable by identifying the problems that he may encounter and producing solutions for the related problems. With the Covid-19 Pandemic, consumers have created comfort areas where they feel at least at risk and lead a life away from the contagion of the epidemic with the least effort. In these comfort areas they have created, consumers can order online at any time they want (Deepika and Arun, 2021) by paying attention to the social distance rule (Hacıalioğlu and Sağlam, 2020). At the same time, they reduce the possibility of dissatisfaction with the products by reading consumer comments and scores (Kim, 2020). In this context, consumers can associate comfort zone factor with social distance, convenience and comments & ratings with the Covid-19 Pandemic in the online environment.

The social distance rule, which is one of the most important issues in the fight against the epidemic; It has also deeply affected the restaurant industry. Social distancing refers to actions that reduce the likelihood of transmission of COVID-19 by reducing physical interaction between individuals or groups. (WHO, 2020; Deepika and Arun, 2021). Due to the COVID-19 pandemic, social distance has also reshaped the daily lives and consumption practices of individuals (Amin et al., 2021).

With the Covid-19 Pandemic, it has been researched by the limited researches in the literature that while social distance is effective in the behavior of consumers, it also positively affects their intention to continue using OFD service (Amin et al., 2021, Deepika and Arun, 2021). In addition, it has been discovered by previous studies in the literature that consumers who choose to be online during the process where restaurants continue only as a take-out or take-out service,

after the bans are lifted, they turn to online in order to alleviate the virus by maintaining social distance (Deepika and Arun, 2021; Kirk and Rifkin, 2020; Sheth, 2020; Wang, et al., 2021).

The biggest advantage of using OFD services; It is the transformation of order taking / placing processes to become simple, free from misunderstandings for both consumers and businesses (Gavilan, Cejodo, Lores, & Navarro, 2021). At the same time, real-time connection to OFD platforms provides speed and flexibility to the user. Existing empirical studies have found that convenience is a strong factor in consumers' reasons for OFD services (Brewer and Sebby, 2021; Chai and Yat, 2019; Cho et al., 2018; Deepika and Arun, 2021). One of the features provided by OFD service platforms has given consumers the opportunity to create their own feedback with comments and ratings (Alalwan, 2020). Consumers who ordered food online through Yemeksepeti.com in 2020 made 9.5 million comments and 5.4 million points (Papuççiyen, 2020). Ha, Park and Park (2016) stated that as a result of their research with 294 participants, comments and ratings have a significant effect on consumers' preferences in choosing both online and offline restaurants. Considering the above-mentioned issues, the following hypothesis has been developed by associating the comfort zone with social distance, convenience and comments&points features in the online environment.

H1: With the Covid-19 Pandemic, the comfort zone positively affects the purchasing decision of OFD service.

### *Hygiene of OFD service*

During the Covid-19 Pandemic process, couriers take precautions such as wearing masks and gloves, using disinfectants, disinfecting delivery bags and using contactless delivery while delivering orders (Amin et al., 2021; WHO, 2020). Amen et al. (2021) associates the term “hygiene of the OFD service” with the courier, defining it as the ability of the courier to keep himself and the food clean. In a similar way, Chandrasekhar, Gupta, and Nanda (2019) state that since the hygiene of the restaurant cannot be observed by the consumer in OFD, the courier's image of hygiene will be associated with the degree of hygiene of the restaurant. With the Covid-19 Pandemic, it is likely that the image of being hygienic that the couriers will display during the food delivery service will have a positive impact on their decision to use OFD service platforms. Therefore, the following hypothesis has been developed.

H2: With the Covid-19 Pandemic, the hygiene of the OFD service positively affects the purchasing decision of OFD.

### *Contactless Delivery*

Various online applications have also brought certain updates to their services, based on the statements that individual contact should be reduced as much as possible in order to prevent the spread of the epidemic. One of these features has been the contactless delivery option. Consumers are encouraged to use contactless payment or online payment options to maintain social distance and minimize physical contact (Amin et al., 2021). At the same time Mehroliia et al. (2020) stated that the perceived risk at the process of OFD service negatively affects the probability of using this service. Zhao and Bacoo (2020) discovered that the contactless delivery option positively affects the consumer's intention to use OFD service. The following hypothesis has been developed in order to analyze the effect of the contactless delivery application, which has become a sought-after feature with the Covid-19 Pandemic, on the consumer's purchasing decision of OFD service. H3: With the Covid-19 Pandemic, the availability of contactless delivery option positively affects the purchasing decision of OFD services.

### *Healthy Menus*

Increasing health awareness with the epidemic has also led to an increase in the demand for the use of healthy and natural products (Demirdelen and Çiftçi, 2021; Fanelli, 2021; Galanakis, 2020; Zwanka and Buff, 2020). With the Covid-19 Pandemic, the increasing interest of consumers in healthy menu contents has led to the necessity of renewing some menu components by including recently trending products (Cömert and Yeşilyurt, 2021). The study carried out by Bucak and Yiğit (2021) with the Covid-19 Pandemic is the first research in the literature that examines the effects of the epidemic on the food and beverage sector and the changes in their behavior with the chefs working as managers through online interviews. Chefs stated that the change in the sector will be permanent, menu planning processes will be shaped according to local and healthy products, and food safety will be given maximum importance. However, with the Covid-19 Pandemic, this factor has not been examined in the literature on OFD, although chefs think that consumers will turn to healthy menus. Therefore, the following hypothesis has been developed:

H4: With the Covid-19 Pandemic, menus with health claims positively affect the purchasing decision of OFD.

### *Information*

Platforms that offer OFD services provide consumers with comprehensive, detailed and up-to-date information about menus and their contents. In addition to the menu information, it also gives the



consumer the opportunity to follow the status of their order (Alalwan, 2020). In the related literature, it has been stated that the density and currency of the amount of information available increases the interaction of consumers with OFD platforms (Peters et al., 2016). As a result of their research, Kapoor and Vij (2018) discovered that the information provided by OFD platforms has a positive effect on the consumer's order and payment. However, research has shown that consumers expect more than a menu from OFD platforms, the nutritional values, ingredients and cooking methods of the products (Peters and Remaud, 2020). Brewer and Shebby (2021) discovered that menu information increases the consumer's desire for the product during the Covid-19 pandemic. As a result of the study carried out in India by Bagla and Khan (2017), it was observed that consumers prefer platforms that provide detailed information about menus. In addition to these issues, it has been emphasized that the quality of information and knowledge structure in OFD applications are effective in increasing the loyalty of users during the Covid-19 pandemic period (Prasetyo et al., 2021). In the light of this information, the following hypothesis has been developed,

H5: With the Covid-19 Pandemic, information about menus and contents of OFD applications positively affects the consumer's purchasing decision.

## 1. RESEARCH METHODOLOGY

A self-administered questionnaire was developed based on a comprehensive review of previous literature. At the beginning of the questionnaire, a definition of OFD was presented. There were two main sections to the survey. The first section included questions asking the socio-demographic information of the respondents. The second section of the questionnaire was comprised of items measuring study constructs, including KA, TT, BLG, SME, YTH and SAK using a 5-point Likert scale (1 being “strongly disagree”; 5 being “strongly agree”). Three demographic inquiries were performed of the participants in the first section. The items of scales used in the study and the studies in which the questions were included in the study are as listed in Table 1.



**Table 1. Items of Scales Used in the Study**

Variable	Items	Research
Comfort Zone (KA)	SM1: Using OFD services helps me maintain social distance.	(Deepika and Arun, 2021)
	SM2: Using OFD services is better at maintaining social distancing than serving food in a restaurant.	
	SM3: Using OFD services is safer at maintaining social distancing than serving food in a restaurant.	
	SM4: Using OFD services gives me the opportunity to avoid the crowd.	(Praseyto et.al., 2021)
	YP1: Reviews and ratings are effective in choosing a restaurant when using OFD services	(Praseyto et.al., 2021)
	YP2: Points are important to me when choosing an Using OFD services	
	YP3: I prefer restaurants with good brand image when using OFD services	
	EL1: Using OFD services gives me the ability to order anytime	(Praseyto et.al., 2021)
	EL2: Using OFD services allows me to order wherever I want.	
	EL3: Using OFD services saves me time instead of going out and buying.	(Depika and Arun, 2021)
EL4: I like to use OFD services whenever I want.		
Hygiene of OFD Service (YTH)	YTH1: It is important for me that the courier wears gloves.	(Amin et.al., 2021)
	YTH2: It is important for me that the courier wear a mask.	
	YTH3: It is important for me that the courier uses products that will prevent hair loss such as bonnets and berets.	
	YTH4: It is important for me that the courier complies with the general hygiene rules.	
Contactless Delivery(TT)	TT1: The contactless delivery option encourages me to use OFD services	
	TT2: The contactless delivery option is effective in my decision when using OFD services	
	TT3: It is important to me to choose contactless delivery when using OFD services	
Healthy Menus (SME)	SME1: The nutritional content of the menus is important to me when using OFD services.	(Güney and Sangün, 2021)
	SME2: I am willing to choose healthy menu items when using OFD services	(Çetinkaya, 2019)
	SME3: I plan to choose healthy menu items when using OFD services	
	SME4: I make an effort to choose healthy menus when using OFD services	
Information(BLG)	B1: OFD applications have a detailed digital menu	(Kapoor and Vij, 2018)
	B2: OFD applications provide accurate information about products.	
	B3: OFD apps provide me with the information I need	(Brewer and Sheby, 2021)
	B4: Thanks to OFD applications, I can have detailed information about the products in the menus	
Purchase Decision(SAK)	SAK1: I would consider OFD purchase again	(Baytürk, 2021)
	SAK2 I will continue to OFD purchase	
	SAK3: I have a high probability of OFD purchase again.	
	SAK4: I have a strong desire to use OFD services again when I need it.	
	SAK5: I would recommend OFD services to my friends/family.	

A pilot research involving 20 people was carried out to determine the validity of the questionnaire and gauge how well the items were understood. They were all university graduates, 11 of them female and 9 of them male, with ages ranging from 31 to 58. They were made aware of the study and participated voluntarily. An online questionnaire was used as a data collection method in the

research. The online survey was administered in December 2021 and answered by 469 respondents. At the end of the section, where the demographic information of the participants was collected, the question “have you ever used OFD services?” and “when was the last time you used OFD services?” were included. The surveys of the participants who answered “No” or “Before the Pandemic” to these questions were automatically terminated. For this reason, the survey of 51 participants in total was terminated, as 42 of the 469 participants stated that they had never used OFD services before and 9 of them stated that they only used OFD services before the pandemic. As a result, 418 questionnaires were evaluated and included in the analysis. The population of the research consists of consumers who have used OFD services at least once during the pandemic period. When the probability of occurrence or non-occurrence of events is calculated as 0.5 in cases where the number of individuals in the population is not certain, the sample size is calculated as 384 with a confidence level of 95 percent and a margin of error of 0.05 samples (Kurtulmuşoğlu & Atalay, 2019). In this direction, it can be said that the sample size of 418 reached in the study is sufficient at the 95 percent confidence level. Data analysis was performed using statistical software package SPSS 26 (Statistical Package for the Social Sciences – IBM®) and AMOS 24 program. Structural equation modeling used in this research, which allows the relationships between direct and linear variables to be measured through a single model, is a statistical method that is increasingly used in scientific studies in the field of social sciences (Civelek, 2018). SEM allows to test the hypothesis about the relationships between the observed variables measured in the data collection process and the latent variables measured by connecting them to the observed variables since they cannot be measured directly.

## 2. FINDINGS

Frequency and percentage values for demographic characteristics, time of using OFD services are shown in Table 2 and Table 3.

**Table 2.** Profile of Respondents (n = 418)

Characteristics	Category	Frequency (n=418)	(%)
<b>Gender</b>	Female	231	55,3
	Male	187	44,7
<b>Marital status</b>	Married	173	41,4
	Single	245	58,6
<b>Age</b>	18-24	131	31,3
	25-34	163	39,0
	35-44	80	19,1
	45 and above	44	10,5
<b>Education Status</b>	Primary education	9	2
	High school	61	15
	associate degree	48	11
	Licence	235	56
	Graduate and above	65	16

**Table 3.** Last Time to Use OFD Service

Time	Frequency (n=418)	(%)	
<b>Last Order</b>	In this week	157	37,6
	In this month	128	30,6
	In the last three months	64	15,3
	longer than three months	69	16,5

To determine the reliability of the scales, the coefficients of the Kaiser–Meyer–Olkin (KMO) test ( $0.910 > 0.5$ ) and Bartlett’s test of sphericity ( $p = 0.000 < 0.01$ ) were identified (Table 4).

**Table 4.** Kaiser-Meyer-Olkin Measure of Sampling Adequacy and Bartlett’s Test of Sphericity

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0,910
	Approx. Chi-Square	3988,108
Bartlett's Test of Sphericity	df	231
	Sig.	0,000

Principal component analysis with quartimax rotation was then used. As a result of the factor analysis, five dimensions were obtained for respondents’ evaluations regarding OFD services during the pandemic period namely comfort zone, contactless delivery, healthy menu, hygiene of OFD Service, information. In terms of reliability analysis, Cronbach’s alpha value was determined as 0.926. Each dimension’s factor loadings and internal consistency values are provided in Table

6.5. the variables YTH2, YTH4, EL1 and EL3 variables were excluded from the analysis because they were loaded on more than one factor with factor values very close to each other.

**Table 5. Results of EFA and Reliability**

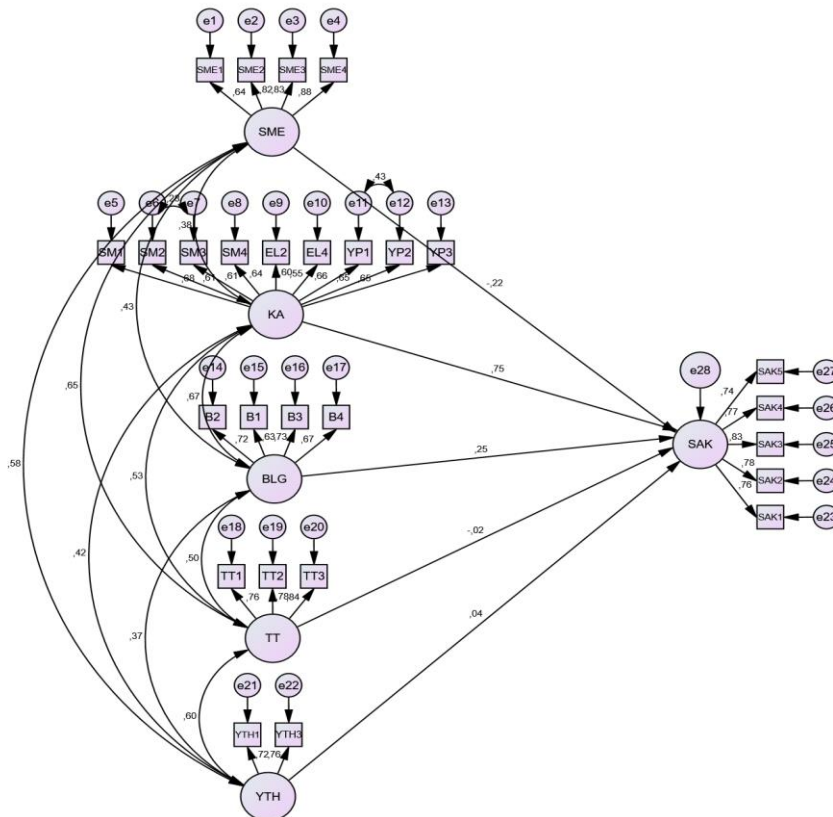
	<b>Factor scores</b>	<b>Internal consistency</b>	<b>Explained Variance</b>
<b>Comfort zone</b>		<b>0,865</b>	<b>34,144</b>
YP1	0,762		
YP2	0,744		
SM4	0,681		
SM1	0,657		
EL3	0,643		
YP3	0,634		
EL2	0,588		
SM3	0,561		
SM2	0,531		
<b>Healthy Menus</b>		<b>0,867</b>	<b>11,7</b>
SME4	0,849		
SME3	0,821		
SME2	0,803		
SME1	0,688		
<b>Information</b>		<b>0,781</b>	<b>6,5</b>
B2	0,755		
B3	0,7		
B1	0,709		
B4	0,669		
<b>Contactless Delivery</b>		<b>0,836</b>	<b>5</b>
TT1	0,756		
TT2	0,750		
TT3	0,722		
<b>Hygiene of Food Delivery Service</b>		<b>0,708</b>	<b>4,09</b>
YTH1	0,749		
YTH3	0,711		

How well the model explains the data obtained using SEM is determined by the goodness of fit indices and threshold values. The stage in which the decision to accept or reject the model is made is goodness of fit tests and the threshold values are not exceeded (Ayyıldız & Cengiz, 2006). For this purpose, Chi-square, CMIN/DF, NFI (normed fit index), TLI (Tucker-Lewisindex), CFI (comparative fit index) and RMSEA (approximate root mean square error) indices are used.

These findings suggested that the hypothesized model fitted the data well and the model had an appropriate fit SEM analysis confirmed that the sample was large enough for the structural model and that the relevant model was statistically significant. The next step is to test the hypotheses by interpreting the magnitudes of the correlation degrees based on the path coefficients showing the degree of relations between the latent variables.

**Table 6. Goodness of Fit Values**

Criteria	Results	Acceptable Fit
X <sup>2</sup>	521,8	
RMSEA	0,041	0≤RMSEA≤0.05
CFI	0,96	0.90≤CFI≤1.00
TLI	0,954	0.90≤TLI≤1.00
CMIN/DF	1,7	CMIN/DF≤5
NFI	0,908	0.9≤NFI≤1.00
IFI	0,906	0.9≤IFI≤1.00



**Figure 1. Path Diagram**

**Table 7. Analysis Results Regarding the Research Model**

Points	Path	Factor	$\beta_0$	S.E.	C.R.	P	Hypotheses	Hypothesis Results
Purchase Decision	<---	Healthy Menus	-0,218	0,058	-3,663	***	H4	Supported
Purchase Decision	<---	Comfort Zone	0,752	0,086	9,317	***	H1	Supported
Purchase Decision	<---	Information	0,249	0,06	3,852	***	H5	Supported
Purchase Decision	<---	Contactless Delivery	-0,018	0,048	-0,278	0,781	H3	Not Supported
Purchase Decision	<---	Hygiene of OFD Service	0,041	0,048	0,673	0,501	H2	Not Supported

According to the results of the Path Analysis in Figure 6.2 and the revised structural equation model in Table 7, the p values calculated for the significance of the relationship between the comfort zone & purchasing decision and information & purchasing decision & are less than 0.001 ( $p=*** < 0.05$ ) and the standardized regression coefficients between them are 0.75 and 0.24 respectively i.e. H1 and H5 are accepted. It is seen that the p value calculated for the significance of the relationship between healthy menus and purchasing decision is less than 0.001 ( $p=*** < 0.05$ ) with the standardized regression coefficient between healthy menus and purchasing decision (-0.21). Considering this value, there is a negative relationship between healthy menus and purchasing decision i.e. H4 is rejected. As p values calculated for the significance of the relationship between the hygiene of OFD service & purchasing decision and contactless delivery & purchasing decision are greater than 0.1 so H2 and H3 could not be supported.

### 3. DISCUSSION AND CONCLUSION

Due to the spread rate and severity of the Covid-19 Pandemic, countries have entered the struggle process by taking radical measures. The protocols followed and the measures implemented in this process have greatly changed human interaction and approach, and have caused people's daily lives to be deeply affected (Kirk and Rifkin, 2020; Laato, et al., 2020; Sheth, 2020; Yuen et al., 2020). From this change experienced, the axis of consumer behavior and consumer demands has also changed (Hussey, 2021). In this process, the procedures followed by governments have not only changed consumer behavior, but also caused businesses to adapt their business methods (Kim

et al., 2021). The food and beverage sector has also suffered heavy damage due to these sanctions. In this process, where the sector has difficulty in turning its economic wheels, OFD service has turned into a lifeline for the sector in this process (Iybar, 2020).

As a result of the SEM analysis, it has been shown that the comfort zone factor has the most and positive effect on the consumer's purchasing decision with the Covid-19 Pandemic, it was seen that it was supported in the same direction by existing studies (Brewer and Sebby, 2021; Kimes, 2011). From this point of view, it is possible to say that the opportunity of consumers to order from anywhere at any time while staying in their comfort zone has a positive effect on their decision to use OFD service. Because of this factor, which affects consumers' decision to use OFD service, it can be recommended that restaurants provide service to consumers in wider time zones, even if they are not online 24/7.

Before the Covid-19 Pandemic, mostly young consumers wanted what they wanted "when they wanted it", but with the Covid-19 Pandemic, this demand has spread to a much wider customer base. In this context, it can be recommended that businesses turn to cloud kitchens in order to respond to more OFD services requests in a wider time frame. Cloud kitchens; are kitchens where different restaurants that only accept OFD through their online apps and websites share common space to make their food and service customers through delivery (Affility, 2021). These are also known as virtual kitchens, dark kitchens, commercial kitchens, ghost kitchens and cyber kitchens, have grown rapidly due to the fact that they satisfy consumers' social distance sensitivity by keeping human interaction at a minimum level during the Covid-19 period (Affility, 2021). While cloud kitchens attract the attention of businesses due to lower costs and higher profit margins, it is predicted that most of the meals consumed at home will be prepared by cloud kitchens in the near future (Adams, 2020). It is recommended that businesses consider the cloud kitchen option in order to respond to the comfort zone sensitivity of the consumer and to catch the cloud kitchen trend that is predicted to be experienced in the near future and to get a faster reaction in possible pandemics.

As a result of the SEM analysis, it was determined that the information had a positive effect on the OFD services purchasing decision of the consumer. In this context, it is possible to say that the same conclusion has been reached with previous studies in the literature (Bagla and Khan 2017; Brewer and Shebby 2021; Kapoor and Vij, 2018; Lee et al., 2019; Praseyto et al., 2021). It is



recommended to keep the products in their online menus and their stock status, product contents, average delivery time up to date. In order to achieve this, businesses need to regularly update the information and timelines they provide. The fact that businesses keep their information up-to-date by checking frequently will both positively affect the purchasing decisions of consumers in the online environment and minimize the dissatisfaction that may arise due to erroneous information.

A negative relation was found between healthy menus and OFD services decision contrary to expectations. Contrary to the expectation of the chefs in the relevant literature that the consumers will turn to healthy products with the Covid-19 Pandemic (Bucak and Yiğit, 2021; Cömert and Yeşilyurt, 2021), one of the reasons why a negative relationship was found online may be due to the fact that most of the participants are single and young. For this reason, it is recommended that businesses whose target audience is young people in online food ordering should not include healthy menu messages in their communication strategies.

Contrary to previous literature support, the positive relationship assumptions between hygiene of OFD service & contactless delivery and purchasing decision of OFD services could not be supported statistically.

There are some limitations in the study. Future studies may be carried out with samples that may include more participants with different demographic and behavioral characteristics to obtain a more representative population, or similar studies can be repeated in other countries as cross-cultural studies are expected to contribute more valid result. Another limitation of the study is the absence of any region or city limitations. Since businesses operating in the online environment operate in certain regions, it is thought that repeating the research according to some provinces and even districts will help to better analyze consumer behavior in the target market.

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