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#### Affiliation:

Anum Ali Muhammad, Jinnah University for Women, Karachi, Pakistan. Shaista Kamal Khan, Bahria University, Karachi, Pakistan. Asad Ali, Bahria University, Karachi, Pakistan.

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## **Conflict of Interest**

The author (s) declared no conflict of interest and have not received any funds for the project.

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# Determinants of Customer Attitude and Behavioral Intention for Online Food Delivery: A Study from Karachi

Shaista Kamal Khan<sup>1</sup> Bahria University, Karachi, Pakistan

Anum Ali Muhammad Jinnah University for Women, Karachi, Pakistan

> Asad Ali Bahria University, Karachi, Pakistan

## **Abstract:**

Technology diffusion and COVID-19 pandemic have changed consumers' attitudes toward online food purchasing. At the same time, the fast food sector has also transformed to attract and retain online food customers. Thus this study, by extending TRA and TAM model, investigates the impact of "perceived usefulness, online trust, time-saving orientation, purchase orientation" on attitudes toward online food purchase intention. It also examines the impact of attitudes and purchase intention and the mediating role of attitudes. Based on the data set of the five leading universities of Karachi, the study found that "perceived usefulness, perceived ease of use, timesaving orientation, and perceived saving orientation" significantly affect attitudes toward online food purchasing. The study also found a significant association between attitudes and online food purchase intention. However, we did not find any support for the association between trust and online purchase intention. Our study supported all the mediating effects except the mediating effect of attitudes on trust and online food purchase intention.

*Keywords:* Perceived usefulness, online trust, perceived ease of use, time-saving orientation, price-saving orientation, attitude, and behavioral intention.

<sup>&</sup>lt;sup>1</sup>Corresponding Author: Shaista Kamal Khan; Email: shaistakamalbukc@gmail.com

## Introduction

Before the popularity of mobile devices and computers, people spent leisure time eating at their favorite restaurants. In that era, there was no concept of online food services (Tsai, 2021). As internet accessibility increased, online food services also increased. Roc-Woods (1995) asserts that in 1995, a business entity introduced the first online food-ordering services with the name "waiter.com." Subsequently, other business entities started similar services.

The COVID-19 pandemic brought challenges and opportunities to all business entities, including the food industry (Mohamad, Hamzah, Ramli, & Fathullah, 2020). In that era, governments globally closed most businesses but allowed the food and grocery sector to operate with strict rules and regulations (Haman, 2020). In the post-COVID-19 era, online food services through websites and apps have become popular. Despite no or little restrictions on social gatherings, consumers use them as they are convenient and efficient (Mohamed, Sawangchai, Rusli, & Borhan, 2022).

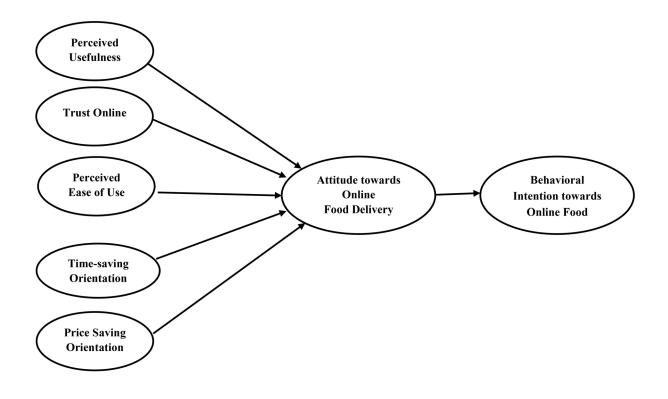
The term "online shopping intention" is an individual's perception of purchasing online. In online shopping, consumers easily and conveniently purchase goods directly from the seller. It is the type of e-commerce through which users purchase the product from the seller without any intermediaries, and frequently internet is used in online shopping (Le, Carrel, & Shah, 2022). While ordering food online, consumers need details on the food varieties and prices, the mode of delivery, delivery time, and the quality of food. Past studies have taken limited antecedents and recommended using more antecedents regarding attitudes toward online food services. Thus, the objectives of the study are: To examine the impact of perceived usefulness, online trust, perceived ease of use, time-saving orientation, and price-saving orientation on attitudes toward online food delivery service. It also examines the mediating effect of attitude on these antecedents and the intention to use online food services.

## Literature Review and Theoretical Grounding

The study used the "Technology Acceptance Model (TAM) and Theory of Reasoned Action (TRA)" to understand consumers' attitudes and behavior toward online food shopping. It also explains the processes which individuals go through while adopting new technology. The TAM model is the extension of Fishbein and Ajzen (1975), suggesting how specific external components align with the attributes such as behavior, attitudes, and different ideas (Baby & Kannamal, 2020). Many researchers have used the TAM model to understand consumers' attitudes and behaviors in domains such as e-learning, e-mobile, internet website, and online shopping (Soneka & Phiri, 2019).

Fishbein and Ajzen (1975) developed the Theory of Reasoned Action to understand consumers' attitudes and behaviors toward goods and services. The theory has four components: "behavior, behavioral intention, attitudes, and subjective norms." Attitudes is consumers enduring perception of goods and services affecting buying intention and actual behavior. Actual behavior, directly and indirectly, depends on attitudes and subjective norms. Subjective norms are cultural values, friends, and peers influencing attitudes, buying intention, and actual behavior.

Given the above theories, we have articulated a conceptual framework containing five predictors, one mediating and one dependent variable, depicted in Figure 1.



## Figure 1: Conceptual framework

#### Perceived Usefulness, Attitude, and Behavioral Intention

Perceived usefulness is an individual's subjective perception of the use of technology to improve their performance at work. This usefulness perception varies from one individual to another, depending on how comfortable they feel in using and adopting new technology (Joshi & Bhatt, 2021). While developing their web pages, online

shopping forums ensure consumers positively perceive them. They display all the necessary information that inexperienced users can retrieve easily (Jun, Yoon, Lee, & Lee, 2021). Many past studies have documented that the perceived usefulness of online food delivery technology directly affects consumers' attitudes and indirectly affects actual behavior (Abdullah et al., 2017; Wen, Pookulangara, & Josiam, 2022; Muangmee et al., 2021). Zhang et al. (2020) argue that consumers develop positive attitudes toward websites that contain useful and relevant information about food delivery mechanisms. Consequently, it directly affects attitudes toward online food delivery leading to positive behavioral intention.

H1A: "Perceived usefulness" promotes positive "attitudes toward online food delivery."

H1B: "Consumers' attitudes" mediate "perceived usefulness and behavioral intentions."

## **Online Trust, Attitude, and Behavioral Intention**

Trust is an important aspect of all transactions. It is "a belief" that both parties involved in the transactional activity will fulfill their promised obligations with honesty and benevolence (Nguyen et al., 2019; Inthong et al., 2022). Researchers believe trust is more important in online shopping as the sellers and buyers are not involved in face-to-face interaction. Also, in online buying, buyers, unlike conventional buying, have not had the opportunity to physically see or feel the goods before purchasing (Gani et al., 2021). The salesperson in conventional or online selling must be capable, honest, and expert in promoting sales. Such traits promote positive attitudes and behavioral intention (Jun, Yoon, Lee, & Lee, 2021). Muangmee et al. (2020) also stress that consumers' lack of trust adversely affects their attitudes and behavioral intention.

H2A: "Trust" positively affects "attitude towards online food delivery."

H2B: "Trust" mediates "attitude and behavioral intention."

## Perceived Ease of Use, Attitude, and Behavioral Intention

Extant literature documents that consumers' perception of ease of use encourages them to adopt new technology (Humida, Al-Mamun, & Keikhosrokiani, 2022). It also positively affects their intention regarding e-learning. Given its importance, researchers assert that online shopping forums must design web pages that are not complex and complicated for users (Unal & Uzun, 2021).

Mailizar, Burg, and Maulina (2021) observed that some websites contain unnecessary barriers, and downloading takes more time than other websites. Consequently, it motivates users to switch to other online websites, and consumers develop negative



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attitudes towards such websites. Thus, online websites must design convenient website that displays all the relevant information required by the customers (Jesuthasan & Umakanth, 2021).

H3A: "Perceived ease of use" significantly affects "attitude towards online food delivery."

H3B: "Attitudes" mediate "perceived ease of use and behavioral intention."

## Time-Saving Orientation, Attitude, and Behavioral Intention

In today's busy life, consumers cannot afford to spend considerable time waiting for food delivery (Chakraborty & Azam, 2022). Timely delivery of food promotes a positive attitude and behavior intention. Conversely, unnecessary delays stimulate negative attitudes and behavioral intentions (Rathore & Chaudhary, 2018; Prabowo & Nugroho, 2019). Consumers tend to trade off between time spent and the price of goods and services. Consumers may develop positive attitudes towards online food delivery if delivery time is less (Tan, Lim, & Yeo, 2021). Hakim and Sobari (2021) assert that consumers shop online as it is convenient, less time-consuming, and offers various discounts and deals.

H4A: "Time-saving orientation" positively affects "attitude towards online food delivery."

H4B: "Attitudes" mediate "time-saving orientation and behavioral intension."

## Price-Saving Orientation, Attitude, and Behavioral Intention

Price-saving orientation is consumers' inclination to pay less than the stipulated price using discounts and promotional coupons (Chakraborty & Azam, 2022). Price perception significantly affects consumers' attitudes and behavioral intentions. Many past studies have documented that price-saving orientation positively affects consumers' attitudes and purchase intention (Tan, Lim, & Yeo, 2021). Hakim and Sobari (2021) assert while purchasing food online, consumers, apart from other factors, are concerned about the nutritional value of the food, which also affects their attitudes and behavior towards online shopping.

H5A: "Price orientation" positively affects "attitude towards online food delivery."

H5B: "Attitudes" mediate "price-saving orientation and behavioral intention."

## **Attitude and Behavioral Intention**

Attitude can be defined as the persons liking or disliking of any object or person (Jun, Yoon, Lee, & Lee, 2021). A positive attitude is a significant predictor of behavioral

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intention (Michalikova, Blazek, & Rydell, 2022). Given the importance of attitude, firms focus on changing customers' attitudes through brands and value propositions as they know it will lead to "favorable" behavioral intention. Many TRA studies have documented that positive attitudes toward online food shopping significantly affect online behavioral intention (Al-Amin et al., 2021; Choe, Kim, & Hwang, 2021).

Extant literature has documented a significant association between "attitude and purchase intentions." Many theories, including the "Theory of Reasoned Action, the Theory of Planned Behavior, and the Theory of Repurchase Decision-Making," stress that attitudes significantly predict purchase intention (Jun, Yoon, Lee, & Lee, 2021; Mohammad, Aldmour, & Al-Hawary, 2022). For example, a study on the acceptance of e-commerce in the public sector concluded positive attitudes towards e-commerce promote the intention to adopt e-commerce (Tran, 2021). Similarly, another study based on a sample of consumers who recently purchased new technology concluded that consumers with favorable attitudes toward new technology have a high intention to purchase technology-related products (Gârdan et al., 2021).

H6: "Attitudes" positively affect the "behavioral intention of using online food services."

## **Research Methodology**

## **Population and Sampling**

We have targeted students studying at the private business universities of Karachi. The reason for selecting this segment is that the respondents in the target sample are well-versed in technology and are extensive online food shoppers. We distributed 450 questionnaires and received 435 responses, of which we had to drop 16 incomplete cases. The response rate is appropriate for large consumer-related studies. A convenience sample is desirable if the sample size is large and the sample frame is unavailable. Therefore, we used non-random sampling by targeting five leading universities for collecting the data. It includes IBA, IOBM, IQRA, Bahria, and SZABIST.

## **Scales and Measures**

The questionnaire consists of two parts. The first part consists of the respondents' demographical and personal information, including their gender, qualification, age, and occupation. Section two consists of questions related to variables used in the current study. The study has seven variables and 26 indicator variables. All the items were measured using a "7-point Likert scale, of which 1-strongly disagree to 7–strongly agree." Table 1 summarizes the scales and measures used in the study.

#### **Table 1: Summary of Measurement Scales**

Measures	Authors	ltems	Reliability
Perceived Usefulness	Van- de Heijden et al. (2003)	4	0.908
Trust Online	Van- de Heijden et al. (2003)	4	0.902
Perceived Ease of Use	Hansen et al. (2018)	3	0.846
Time-saving Orientation	Yeo et al. (2017)	4	0.902
Price saving Orientation	Escobar-Rodriguez and Carvajal-Trujillo (2013)	3	0.861
Attitude Towards Online Food Delivery	Childers et al. (2002) and Yeo et al. (2017)	4	0.915
Behavioral Intention towards Online Food Delivery	Escobar-Rodriguez and Carvajal-Trujillo (2013)	4	0.926

## **Results and Analysis**

#### **Respondents profile:**

Table 2 shows the profile of the sample. It shows that 50.8% of respondents were male and 49.2% were female. Regarding age groups, 59% were aged between 20-30 years, 29.7% were 30-40 years, and 11.3% were more than 40 years old. Educational profiles show that 49% of respondents were graduates, 27.4% were postgraduate, 16.2% were M Phil, and 7.4% were doctorate. Concerning occupation, 35.6% were employed, 20.5% were self-employed, and 43.8% were students. Finally, an individual's preference to buy food online shows that 54.6% buy from food panda, 14.6% from Eat Mubarak, 15.1% from Byker, 9% from "super.meal.pk" and 6.7% buy from Eat 360.

Category	Percentage (%)
Male	50.8%
Female	49.2%
Graduate	49%
Post Graduate	27.4%
M-Phil	16.2%
Doctorate	7.4%
20-30 Years	59%
30- 40 Years	29.7&
More than 40 Years	11.3%
Employed	35.6%
Self-Employed	20.5%
Student	43.9%
	MaleFemaleGraduatePost GraduateM-PhilDoctorate20-30 Years30- 40 YearsMore than 40 YearsEmployedSelf-Employed

#### **Table 2: Sample characteristics**

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Food Delivery Website	Food Panda	54.6%
	Eat Mubarak	14.6%
	Byker	15.1%
	Super.meal.pk	9.0%
	Eat 360	6.7%

#### **Reliability and Validity:**

Table 3 shows Cronbach's Alpha values of the constructs and indicators values. All of them are greater than 0.70. Similarly, Table 3 shows AVE values are at least 0.60, and composite reliability values are greater than 0.80. It also shows all the factor-loading values "are greater than 0.60." Thus, the results meet the reliability and Validity benchmarks (Hair et al., 2014).

#### Table 3: Reliability analysis and convergent Validity

Constructs	ltems	Loading	Cronbach's Alpha	CR	AVE
Attitude Towards Online Food Delive	ery AT1	0.879	0.915	0.940	0.796
	AT2	0.903			
	AT3	0.905			
	AT4	0.882			
Behavior Intention Towards Online	BI1	0.892	0.926	0.948	0.819
Food Delivery	BI2	0.914			
	BI3	0.910			
	BI4	0.905			
Perceived Ease of Use	PEU1	0.859	0.846	0.907	0.765
	PEU2	0.881			
	PEU3	0.885			
Price Saving Orientation	PS1	0.893	0.861	0.915	0.782
	PS2	0.876			
	PS3	0.884			
Perceived Usefulness	PUI	0.857	0.908	0.936	0.784
	PU2	0.896			
	PU3	0.910			
	PU4	0.878			
Time Saving Orientation	TS1	0.894	0.904	0.933	0.776
	TS2	0.863			
	TS3	0.902			
	TS4	0.864			



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Trust Online	T1	0.887	0.902	0.932	0.773
	T2	0.906			
	Т3	0.830			
	T4	0.893			

#### **Discriminant Validity**

The constructs used in a study must be contextually different from each other, which we assessed based on the "Fornell and Larcher (1981) criterion, Heterotrait-Monotrait ratio, and cross-loading (Confirmatory Factor Analysis) between the items" (Hair et al., 2014).

#### **Fornell-Larcker Criterion**

The criterion of Fornell and Larcker (1981) suggests that a specific variable should "show more variance within its item than other variables." The value of AVE square route should be "greater than the correlation of the variables" (AB-Hamid et al., 2017). In Table 4, the diagonal cells show the square root of AVE, and the rest are correlation values. The square roots of "AVE values are higher than the correlation values," confirming the constructs are unique and distinct as per Fornell and Larcker (1981) criterion.

	AT	BI	PE	PS	PU	TS	Т
Attitude Online Food Delivery	0.892						
Beh. Intention Online Food Delivery	0.819	0.905					
Perceived Ease of Use	0.800	0.818	0.875				
Price Saving Orientation	0.862	0.822	0.792	0.884			
Purchase Usefulness	0.775	0.807	0.812	0.786	0.886		
Time Saving Orientation	0.808	0.862	0.852	0.827	0.842	0.881	
Trust Online	0.842	0.735	0.812	0.806	0.784	0.782	0.879

#### **Table 4: Fornell-Larcker Criterion**

## Heterotrait-Monotrait Ratio (HTMT)

Many researchers believe that studies should assess discriminant validity using both HTMT ratio and Fornell and Larcher (1981) criterion, as the former is more efficient than later. Table 5 presented below shows all the HTMT values are less than 1, suggesting the data set has no issue with the discriminant validity.

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Table 5: Heterotrait-Monotrait Ratio (HTMT)									
	AT	BI	PE	PS	PU	TS	Т		
Attitude Towards Online Food Del.									
Behavioral Int. Online Food Del.	0.889								
Perceived Ease of Use	0.906	0.924							
Price Saving Orientation	0.970	0.920	0.925						
Purchase Usefulness	0.847	0.878	0.923	0.886					
Time Saving Orientation	0.887	0.941	0.974	0.936	0.926				
Trust Online	0.925	0.803	0.925	0.913	0.860	0.864			

#### **Confirmatory Factor Analysis**

One alternative method also assesses the discriminant validity by comparing cross loading of indicator variables of a construct with the indicator variables of other constructs. It should be higher than the indicator variables of other constructs. The difference between an indicator and other variables' indicators must be at least 0.10 (Hair et al., 2014; Khan et al., 2019). The results presented in Table 6 meet both criteria, confirming no discriminant validity issue.

Table (	6: Confirmatory	Factor Analysis
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	AT	BI	PE	PS	PU	TS	т
AT1	0.879	0.714	0.674	0.780	0.700	0.697	0.768
AT2	0.903	0.709	0.700	0.756	0.672	0.725	0.762
AT3	0.905	0.751	0.744	0.768	0.678	0.724	0.743
AT4	0.882	0.750	0.734	0.773	0.717	0.739	0.733
BI1	0.756	0.892	0.801	0.732	0.722	0.785	0.672
BI2	0.753	0.914	0.716	0.761	0.739	0.772	0.681
BI3	0.717	0.910	0.722	0.735	0.730	0.784	0.635
BI4	0.738	0.905	0.722	0.747	0.732	0.779	0.671
PEU1	0.699	0.704	0.859	0.708	0.685	0.711	0.760
PEU2	0.736	0.706	0.881	0.709	0.740	0.758	0.755
PEU3	0.658	0.739	0.885	0.656	0.704	0.765	0.606
PS1	0.726	0.729	0.677	0.893	0.682	0.723	0.709
PS2	0.771	0.736	0.717	0.876	0.721	0.756	0.678
PS3	0.787	0.716	0.704	0.884	0.682	0.714	0.750
PU1	0.603	0.653	0.653	0.630	0.857	0.679	0.618
PU2	0.676	0.738	0.732	0.688	0.896	0.787	0.703
PU3	0.735	0.745	0.761	0.723	0.910	0.751	0.718
PU4	0.721	0.717	0.723	0.735	0.878	0.760	0.728
T1	0.767	0.638	0.721	0.708	0.735	0.690	0.887



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T2	0.750	0.622	0.694	0.711	0.696	0.714	0.906
Т3	0.665	0.600	0.690	0.640	0.592	0.620	0.830
T4	0.773	0.721	0.750	0.771	0.723	0.723	0.893
TS1	0.720	0.777	0.749	0.752	0.756	0.894	0.701
TS2	0.649	0.737	0.760	0.679	0.694	0.863	0.639
TS3	0.722	0.749	0.757	0.745	0.753	0.902	0.726
TS4	0.750	0.770	0.736	0.733	0.757	0.864	0.685

#### **Predictive Power of the Model:**

Researchers suggest using R<sup>2</sup> which is a coefficient of determination, and Q<sup>2</sup>, which is "cross-validated redundancy" for the predictive power of the measurement model (Hair et al., 2014). A value of R<sup>2</sup> greater than 0.60 suggests high predictive power. The R<sup>2</sup> values between 0.30 and 0.60 suggest moderate predictive power. A value below 0.30 suggest low predictive power (Avkiran, 2018). The value of Q<sup>2</sup> greater than zero suggests measurement model has acceptable predictive power (Avkiran, 2018). Table 7 shows the R<sup>2</sup> and Q<sup>2</sup> values are within the acceptable ranges.

#### Table 7: The predictive power of the construct:

Construct	R Square	Q Square
Attitude Towards Online Food Delivery	0.738	0.470
Behavioral Intention Towards Online Food Delivery	0.643	0.447

#### **Hypothesis Results**

The research model of the current study consists of 11 hypotheses investigated through structural equation modeling. Table 8 shows the outcome of the tested hypotheses. The path coefficient indicates the power of relations between constructs.

#### Table 8: Path Coefficient, Direct & Indirect Effects

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Hypotheses	В	<b>T-statistics</b>	P-Value	Decision
H1: PU→A	0.118	2.625	0.004	Accepted
H2:T→A	0.013	0.272	0.393	Not Accepted
H3: PEU→A	0.310	6.923	0.000	Accepted
H4:TS→A	0.302	6.049	0.000	Accepted
H5: PS→ A	0.222	4.458	0.000	Accepted
H6: A→ BI	0.802	35.293	0.000	Accepted
H7: PU→A→BI	0.094	2.631	0.004	Accepted
H8:T→A→BI	0.011	0.273	0.392	Not Accepted
H9: PEU→A→BI	0.248	6.887	0.000	Accepted
H10:TS→A→BI	0.242	6.069	0.000	Accepted
H11: PS→A→BI	0.178	4.218	0.000	Accepted

The results support all the hypotheses except two, which are Hypothesis 2 and Hypothesis 8. Hypothesis 2 results suggest trust insignificantly affects attitude ( $\beta$ =0.013, t= 0.272, P= 0.393>0.05). Hypothesis 8 results suggest that attitude towards online food delivery insignificantly mediates trust online and behavioral intention towards online food delivery ( $\beta$ =0.011, t= 0.273, P= 0.392>0.05).

#### Discussion

The current study has several contributions. Empirical results support most of the hypotheses, enhancing the generalizability of TRA and TMA, which we have used to develop the new model.

We found perceived usefulness significantly affects attitudes toward online food ordering. And attitudes mediate perceived usefulness behavioral intention, which is consistent with Joshi and Bhatt (2021). In recent years, consumers' attitudes toward online food services have increased significantly, mainly due COVID-19, and online food vendors have improved their websites by providing relevant information to consumers. We found trust insignificantly affects attitudes toward online food services. Attitude insignificantly mediates trust and online purchase intention, which aligns with many earlier studies, including Inthong et al. (2022). Despite the conveniences, many customers have low trust in online food forums as they believe the online forums may share their personal and financial information with others. The results suggest perceived ease of use significantly affects attitudes toward online food vendors. And attitudes significantly mediate perceived ease of use and online purchase intention. In Pakistan, internet and mobile usage have increased significantly, due to which consumers have developed sufficient experience in accessing information through websites. During the COVID-19 era, consumers' hesitation in ordering food online decreased significantly (Unal & Uzun, 2021)

Time-saving is an important aspect of the present era's busy lives. We found timesaving significantly affects attitudes toward online shopping. And attitudes mediate time-saving and intention to purchase online food. Since, online food shopping saves consumers time, they use it more frequently (Chakraborty & Azam, 2022).

The study found price saving orientation significantly affects attitudes toward online buying. And attitudes mediate price-saving orientation and online food purchase intention. Consumers are also price-sensitive, realizing its importance, many online food vendors offer different types of coupons and discount to develop a sustainable relationship with the customers (Tan, Lim, & Yeo, 2021).

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## Conclusion

"Food delivery services are one of the fastest-growing segments" of e-commerce. Online food services have become popular globally. Online food delivery services deliver ordered foods to customers at the designated place. Given its importance, many restaurants have created their online apps or use services of online intermediaries like food panda (Hakim and Sobari, 2021). In recent years, consumers' buying habits and attitudes have changed significantly, and they use such facilities more frequently (Chakraborty & Azam, 2022).

This study has examined consumers' attitudes toward buying fast food forums and the mediating role of attitudes on purchase intention of online food services. We have extended the TRA and TMA to develop the model and collected the data from the five leading private universities of Karachi. The study found the quality of e-services is an important precursor of consumers' attitudes toward food forums. Online food delivery mechanisms do not allow consumers to touch, taste, or smell the foods. Thus food vendors must increase customers' trust by providing authentic and relevant information. The study proposed eleven hypotheses, of which we found support for nine.

The study found that "perceived usefulness, perceived ease of use, time-saving orientation, and perceived saving orientation" significantly affect attitudes toward online food purchasing. The study also found a significant "association between attitudes and online food purchase intention." However, we did not find any support for the association between trust and online purchase intention. Our study supported all the mediating effects of attitudes between antecedents, "perceived usefulness, perceived ease of use, time-saving orientation, and perceived saving orientation," except the mediating effect of attitudes on trust and online food purchase intention.

#### **Implications:**

This research has several important managerial implications. The fast food industry globally has become highly competitive. Therefore, online vendors must focus on the quality and hygienic factors of food. Fast food vendors must display accurate and relevant information on their webpage. Online food vendors must introduce innovative foods that have the flavor of native cultures and developed countries. Technology is an important aspect of customers. Thus, while developing the webpage, vendors must focus on making it convenient. Consumers are price sensitive; therefore, online food vendors must offer competitive prices and attract customers through discounts, coupons, and bundle pricing. The aesthetic appeal also attracts customers to the website, which the online vendor must focus. E-service is important for retaining and attracting customers. Therefore, the online vendor must take feedback from the customers on the quality

and services of the food. The online vendors must have a special department that continuously gives feedback to customers and inform the manager so they can take remedial measures.

#### Limitations and Recommendations:

The results of this research are beneficial, but it has several limitations. This study has focused on the domain of fast food online vendors, and other studies can explore other domains, including clothes, cosmetics, and medicine. Exploring other domains is important as consumers' attitudes and behaviors vary from one product category to another. The study has collected data during the COVID-19 era, and other studies may explore online food behavior during the post-COVID-19 era. The study's focus was on the Karachi students, and future researchers may extend this model to other cities in Pakistan. The study used the variables derived from TAM and TRA. Cultural aspects and demographic factors may have a varying effect on the antecedents used in the study and attitudes, which others can use as moderators or mediators in their studies.



## **Annuexure-1**

#### Constructs Items used in the questionnaire

#### Perceived usefulness

1. The process of online food purchasing through my preferable website is too fast.

2. The purchasing of food through my preferable website is very easy.

3. Food delivery websites play a vital role in buying products or services.

4. Using the internet to acquire food would allow me to purchase more efficiently.

#### **Trust Online**

5. The food delivery websites are trustworthy.

6. The food delivery websites deliver the same thing which they promise to deliver.

7. I trust all food delivery websites as it keeps my best interest in mind.

8. Food delivery websites meet my expectations.

#### Perceived Ease of Use

9. My experiences are always satisfactory with purchasing online food items.

10. I feel comfortable using online food delivery websites.

11. I have experience in using online food delivery websites.

#### **Time-Saving Orientation**

12. I believe that using online food delivery services are very useful in the purchasing process.

13. I believe that using online food delivery services helps me accomplish things more quickly in the purchasing process.

14. I believe that I can save time by using online food delivery services in the purchasing process.

15. It is important for me that the purchase of food is done as quickly as possible using online food delivery services.

#### **Price Saving Orientation**

16. I can save my money by using online food delivery websites.

17. I like to search for reasonable food deals on online websites according to my affordability.

18. Online food retailer offer better value for my money.

#### Attitude Towards Online Food Delivery

19. Purchasing food through an online food delivery website is good.

20. Using an online website to buy food seems an intelligent idea.

21. Purchasing food through online food delivery service is sensible.

22. My general opinion about the online food website is positive.

#### **Behavioral Intension Towards Online Food Delivery**

23. I intend to purchase food through an online website in the future.

24. If possible, I will try to use online food delivery value-added services.

25. I will try to use online food delivery value-added services if necessary.

26. I am willing to recommend other people to purchase food through an online website.

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