

Factors Affecting Consumer Behaviour Towards Online Food Delivery Services Providers in Delhi-NCR

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Abstract: Online Food Delivery Services Providers (OFDSPs) is a type of electronic commerce platform where consumers can buy online ready to eat food at his doorstep using Mobile or Computer. OFDSPs offer a variety of foods made available by nearest restaurant owners. The study aimed to identify the factors affecting consumer behaviour towards online food delivery services providers in Delhi-NCR. The sample of 140 were selected through a structured questionnaire with closed-ended questions and data was analysed with the help of chi-square test. The study revealed that there are 15 factors i.e. food price, service quality, packaging, advertisement, food quality, food taste, speed of food delivery, payment options, offers & discounts, hygiene, delivery tracking services, menu, number of restaurants, attitude of delivery person and convenience which affected consumer behaviour towards online food delivery services providers. The study reveals that the food price and hygiene have the most influencing factor on online food order delivery services providers followed by food quality and other factors.

Key Words: Consumer Behaviour, Online Food Delivery Services Providers, Factors, Electronic Commerce.

1. INTRODUCTION :

Today, we all are living in an era of information technology which has affected almost every aspect of human life and its surroundings. Earlier, information technology was used to share information through the Internet but now our day to day life is dependent on the internet. India is the second largest online market after China with 560 million internet users and it is estimated that there would be more than 650 million internet users in India by 2023. There is a significant impact of information technology on all service sectors including food delivery services.

Online Food Delivery Services Providers (OFDSPs) is an online platform which allows consumers to buy ready to eat food out of different food options made available online by nearest restaurant owners at his doorstep by just click of mouse on the computer or touch on the mobile. Many companies like Zommatto, Swiggy, Uber Eats, Pizza Huts, Dominos and Foodpanda are providing online food delivery services in Delhi-NCR and also provides various kinds of discounts & offers and payment options to attract, satisfy and retain consumers.

Consumer Behaviour is the study of how consumers make their purchase decision in respect of goods and services on the basis of their need, want, and desire. Consumer is someone who buys goods and services for their own consumption. Consumer behaviour is affected by several factors and it is the need of the hour to identify factors which affect consumer behaviour towards online food delivery service providers in Delhi-NCR.

2. REVIEW OF LITERATURE :

Parsharet *al.* (2017) examined customers' attitude and perception towards online digital food app services and found a significant relationship between factors considered important while selecting and ordering a food delivery app and it

was also found that the facilities offered by food delivery services providers play a major role in making a purchase from an app.

Sumathy (2017) investigated the customer perception, behaviour and satisfaction of online Food Adjure app in Coimbatore city and study found that almost all users feel safe in making payment online and did not agree with the fact that high delivery fees are charged by online websites. Almost all users feel safe paying online.

Das (2018) explored consumer perception regarding the services provided by online food delivery services in Pune area and the study revealed that Zomato has secured a positive response from most of the consumers in comparison to others and has been on top position being the fact it has better on time delivery and discounts facility.

Koulet *et al.* (2018) examined the customer's expectation, satisfaction levels and buying behaviour regarding popular online food ordering apps viz. Food Panda, swiggy, zomato, delivery chef etc. in Pune city and the study found that there is a significant relationship between Customer's Expectation and Satisfaction with online food ordering portals.

Rathore and Chaudhary(2018)analyzed the perception of consumers towards online food delivery services on the students of Indore (MP) and the study found that most of the respondents use Zomato or Uber eat for ordering snacks and dinner on a weekly basis.

Borgohain (2019) studied consumer perception towards food delivery applications in Dibrugarh Town and the research highlighted positive output of consumers' perception towards online food delivery services in Dibrugarh town due to ease and convenience of the usage of apps and found that E-commerce has opened many doors for marketing of online food delivery services.

Bonny (2019) studied customer satisfaction towards online food delivery services in Ernakulam District of Kerala and the study found that customer satisfaction towards online food delivery services are significantly influenced by factors like home delivery, efficiency, supporting factors, availability and customer relationship management but there is no significant relation between gender and satisfaction in respect of ordering food online.

Gawandeet *al.* (2019) analysed customer perception in Amravati City towards OFDs and the research concluded that OFDs is a new system in Amravati and users above 40 years are not comfortable with the system but students prefer to order food online instead of going out for lunch as it saves their time.

Angelin and Poulouse (2019) conducted a study on consumer perception towards online food ordering services Swiggy and Zomato in Chennai and the study concluded that Swiggy App has acquired positive opinion of maximum consumers as compared to other apps in Chennai due to its variety of choices offered by them.

Mistry *et al.* (2020)analyzed consumer behaviour towards online food delivery services in Gujarat and Maharashtra and the study found that consumer preference towards online food delivery services are affected by factors like gender, affordability, education, on time delivery, behaviour of peer service provider, diversity of payment options and Zomato is the most preferred online food delivering app being highest in most of the mentioned factors.

Jadeja and Singh (2021) aimed to analyse various factors that influence consumers in selecting food ordering services in Gujrat and the study revealed that most of the respondents have preferred Zomato for the fastest delivery service backed by Swiggy and also observed that respondents are influenced by offers & discounts while ordering food and they order food when they feel irrespective of breakfast, lunch or dinner.

3. OBJECTIVES OF THE STUDY

1. To analysis the demographic characteristics of consumer towards online food delivery services providers
2. To identify the factors affecting consumer behaviour towards online food delivery services providers

Hypotheses (H)

H1: There is a significant effect of Food Price on Consumer Behaviour towards Online Food Delivery Service Providers



- H2:** There is a significant effect of Service Quality on Consumer Behaviour towards Online Food Delivery Service Providers
- H3:** There is a significant effect of Packaging on Consumer Behaviour towards Online Food Delivery Service Providers
- H4:** There is a significant effect of Advertisement on Consumer Behaviour towards Online Food Delivery Service Providers
- H5:** There is a significant effect of Food Quality on Consumer Behaviour towards Online Food Delivery Service Providers
- H6:** There is a significant effect of Food Taste on Consumer Behaviour towards Online Food Delivery Service Providers
- H7:** There is a significant effect of Speed of Food Delivery on Consumer Behaviour towards Online Food Delivery Service Providers
- H8:** There is a significant effect of Payment Option on Consumer Behaviour towards Online Food Delivery Service Providers
- H9:** There is a significant effect of Offers and Discount on Consumer Behaviour towards Online Food Delivery Service Providers
- H10:** There is a significant effect of Hygiene on Consumer Behaviour towards Online Food Delivery Service Providers
- H11:** There is a significant effect of Delivery Tracking Services on Consumer Behaviour towards Online Food Delivery Service Providers
- H12:** There is a significant effect of Menu on Consumer Behaviour towards Online Food Delivery Service Providers
- H13:** There is a significant effect of Number of Restaurant on Consumer Behaviour towards Online Food Delivery Service Providers
- H14:** There is a significant effect of attitude of delivery person on Consumer Behaviour towards Online Food Delivery Service Providers
- H15:** There is a significant effect of Convenience on Consumer Behaviour towards Online Food Delivery Service Providers

4. RESEARCH METHODOLOGY :

The data for study is collected from primary as well as secondary sources. The area of the study is Delhi-NCR and 140 samples are collected using a structured questionnaire online with close-ended questions. The secondary data is collected from journals, books and various online websites. It is a descriptive type of research and a convenience sampling method is used for this research. To analyse the factors affecting consumer behaviours towards online food delivery services providers, 5-point Likert Scale ranging from strongly agree (5), agree (4), neutral (3), disagree (2) and strongly disagree (1) were used in the structured questionnaire with a total of 15 factors. The data collected from primary sources was analysed with the help of MS Excel and the Chi-Square Test was used as a statistical tool to know the effects of factors on consumer behaviour.

5. DATA ANALYSIS AND INTERPRETATION :

Table 1: Demographics of Respondents

Demographic Characteristics		Count	Percent
Age	20-30 Years	107	76.43%
	30-40 Years	26	18.57%
	40-50 Years	3	2.14%
	50-60 Years	3	2.14%
	Above 60 Years	1	0.71%
	Total	140	100%
Gender	Male	99	70.71%
	Female	41	29.29%
	Other	0	0%
	Total	140	100%

Marital Status	Single	98	70%
	Married	41	29.29%
	Divorced	1	0.71%
	Widow	0	0%
	Total	140	100%
Education Qualification	Did not complete Intermediate	1	0.71%
	Intermediate	11	7.86%
	High School	11	7.86%
	Graduation	89	63.57%
	Post Graduation	27	19.29%
	Doctoral/Postdoctoral	1	0.71%
	Total	140	100%
Employment Status	Student	73	52.14%
	Self Employed	5	3.57%
	Employed	53	37.86%
	Unemployed	9	6.43%
	Total	140	100%
Monthly Income (in Rs.)	<20000	91	65%
	20000-40000	30	21.43%
	40000-60000	8	5.71%
	60000-80000	4	2.86%
	80000-100000	0	0%
	>100000	7	5.00%
	Total	140	100%
Source: Primary Data			

According to Table-1, most (76.43%) of the respondents belonged to the age between 20 to 30 years followed by respondents belonging to the age between 30 to 40 years (18.57%) and the elder people above 60 years were very few (0.71%) only. Most of the respondents who participated in the research study were male (70.71%) as compared to the females (29.29%). Most of the respondents who participated in research were single (70%) followed by married (29.29%) and divorcee are very few (0.71%) only whereas there is no widows respondent. The result also showed that most of the respondents are Graduate (63.57%) followed by Post Graduate (19.29%), Intermediate (7.86%) and High School (7.86%). The respondents who did not complete intermediate (0.71%) or completed Doctoral/Postdoctoral (0.71%) are very few. Most of the respondents were students (52.14%) followed by employed (37.86%) and some of them were unemployed (6.43%) and self-employed (3.57%). As per the income status of the respondent, most of the respondents earns less than 20,000 per month (65%) followed by who earns Rs.20000-40000 per month (21.43%), Rs.40,000-60,000 (5.71%) and more than Rs.1 Lakh (5%). The result also showed that respondents earning Rs.60,000-80,000 are very few (2.86%) only whereas there is no respondent earning Rs.80,000-1,00,000.

Table 2: Effect of Food Price on Consumer Behaviour towards online food delivery services providers

SD	D	N	A	SA	Total	χ^2 (Cal.)	χ^2 (Tab.)	df	P
3	4	20	38	75	140	127.64	9.488	4	0.05

χ^2 (Cal.) = 127.64, df=4, χ^2 (Tab.) at 0.05 level of significance = 9.488. Since the calculated value of χ^2 is greater than the table value of χ^2 , we reject the null hypothesis. This implies that there is a significant effect of **food price** on Consumer Behaviour towards Online Food Delivery Services Providers.



Table 3: Effect of Service Quality on Consumer Behaviour towards online food delivery services providers

SD	D	N	A	SA	Total	χ^2 (Cal.)	χ^2 (Tab.)	df	P
5	7	15	40	73	140	118.14	9.488	4	0.05

χ^2 (Cal.) = 118.14, df=4, χ^2 (Tab.) at 0.05 level of significance = 9.488 Since the calculated value of χ^2 is greater than the table value of χ^2 , we reject the null hypothesis. This implies that there is a significant effect of **service quality** on Consumer Behaviour towards Online Food Delivery Services Providers.

Table 4: Effect of Packaging on Consumer Behaviour towards online food delivery services providers

SD	D	N	A	SA	Total	χ^2 (Cal.)	χ^2 (Tab.)	df	P
7	10	22	34	67	140	84.21	9.488	4	0.05

χ^2 (Cal.) = 84.21, df=4, χ^2 (Tab.) at 0.05 level of significance = 9.488. Since the calculated value of χ^2 is greater than the table value of χ^2 , we reject the null hypothesis. This implies that there is a significant effect of **packaging** on Consumer Behaviour towards Online Food Delivery Services Providers.

Table 5: Effect of Advertisement on Consumer Behaviour towards online food delivery services providers

SD	D	N	A	SA	Total	χ^2 (Cal.)	χ^2 (Tab.)	df	P
9	11	20	42	58	140	64.64	9.488	4	0.05

χ^2 (Cal.) = 64.64, df=4, χ^2 (Tab.) at 0.05 level of significance = 9.488. Since the calculated value of χ^2 is greater than the table value of χ^2 , we reject the null hypothesis. This implies that there is a significant effect of **advertisement** on Consumer Behaviour towards Online Food Delivery Services Providers.

Table 6: Effect of Food Quality on Consumer Behaviour towards online food delivery services providers

SD	D	N	A	SA	Total	χ^2 (Cal.)	χ^2 (Tab.)	df	P
6	6	18	28	81	140	138.46	9.488	4	0.05

χ^2 (Cal.) = 138.46, df=4, χ^2 (Tab.) at 0.05 level of significance = 9.488. Since the calculated value of χ^2 is greater than the table value of χ^2 , we reject the null hypothesis. This implies that there is a significant effect of **food quality** on Consumer Behaviour towards Online Food Delivery Services Providers.

Table 7: Effect of Food Taste on Consumer Behaviour towards online food delivery services providers

SD	D	N	A	SA	Total	χ^2 (Cal.)	χ^2 (Tab.)	df	P
9	4	17	34	76	140	121.35	9.488	4	0.05

χ^2 (Cal.) = 121.35, df=4, χ^2 (Tab.) at 0.05 level of significance = 9.488. Since the calculated value of χ^2 is greater than the table value of χ^2 , we reject the null hypothesis. This implies that there is a significant effect of **food taste** on Consumer Behaviour towards Online Food Delivery Services Providers.

Table 8: Effect of Speed of Food Delivery on Consumer Behaviour towards online food delivery services providers

SD	D	N	A	SA	Total	χ^2 (Cal.)	χ^2 (Tab.)	df	P
4	6	26	43	61	140	84.93	9.488	4	0.05

χ^2 (Cal.) = 84.93, df=4, χ^2 (Tab.) at 0.05 level of significance = 9.488. Since the calculated value of χ^2 is greater than the table value of χ^2 , we reject the null hypothesis. This implies that there is a significant effect of **speed of food delivery** on Consumer Behaviour towards Online Food Delivery Services Providers.

Table 9: Effect of Payment Options on Consumer Behaviour towards online food delivery services providers

SD	D	N	A	SA	Total	χ^2 (Cal.)	χ^2 (Tab.)	df	P
15	8	23	40	54	140	50.50	9.488	4	0.05

χ^2 (Cal.) = 50.50, df=4, χ^2 (Tab.) at 0.05 level of significance = 9.488. Since the calculated value of χ^2 is greater than the table value of χ^2 , we reject the null hypothesis. This implies that there is a significant effect of **payment options** on Consumer Behaviour towards Online Food Delivery Services Providers.

Table 10: Effect of Offers and Discounts on Consumer Behaviour towards online food delivery services providers

SD	D	N	A	SA	Total	χ^2 (Cal.)	χ^2 (Tab.)	df	P
5	7	22	29	77	140	121.71	9.488	4	0.05

χ^2 (Cal.) = 121.71, df=4, χ^2 (Tab.) at 0.05 level of significance = 9.488. Since the calculated value of χ^2 is greater than the table value of χ^2 , we reject the null hypothesis. This implies that there is a significant effect of **offers and discounts** on Consumer Behaviour towards Online Food Delivery Services Providers.

Table 11: Effect of Hygiene on Consumer Behaviour towards online food delivery services providers

SD	D	N	A	SA	Total	χ^2 (Cal.)	χ^2 (Tab.)	df	P
4	4	18	38	76	140	130.57	9.488	4	0.05

χ^2 (Cal.) = 130.57, df=4, χ^2 (Tab.) at 0.05 level of significance = 9.488. Since the calculated value of χ^2 is greater than the table value of χ^2 , we reject the null hypothesis. This implies that there is a significant effect of **hygiene** on Consumer Behaviour towards Online Food Delivery Services Providers.

Table 12: Effect of Delivery Tracking on Consumer Behaviour towards online food delivery services providers

SD	D	N	A	SA	Total	χ^2 (Cal.)	χ^2 (Tab.)	df	P
7	11	34	30	58	140	59.64	9.488	4	0.05

χ^2 (Cal.) = 59.64, df=4, χ^2 (Tab.) at 0.05 level of significance = 9.488. Since the calculated value of χ^2 is greater than the table value of χ^2 , we reject the null hypothesis. This implies that there is a significant effect of **delivery tracking** on Consumer Behaviour towards Online Food Delivery Services Providers.

Table 13: Effect of Menu on Consumer Behaviour towards online food delivery services providers

SD	D	N	A	SA	Total	χ^2 (Cal.)	χ^2 (Tab.)	df	P
10	7	23	42	58	140	67.36	9.488	4	0.05

χ^2 (Cal.) = 67.36, df=4, χ^2 (Tab.) at 0.05 level of significance = 9.488. Since the calculated value of χ^2 is greater than the table value of χ^2 , we reject the null hypothesis. This implies that there is a significant effect of the **menu** on Consumer Behaviour towards Online Food Delivery Services Providers.

Table 14: Effect of the Number of Restaurants on Consumer Behaviour towards online food delivery services providers

SD	D	N	A	SA	Total	χ^2 (Cal.)	χ^2 (Tab.)	df	P
9	12	37	33	49	140	41.57	9.488	4	0.05

χ^2 (Cal.) = 41.57, df=4, χ^2 (Tab.) at 0.05 level of significance = 9.488. Since the calculated value of χ^2 is greater than the table value of χ^2 , we reject the null hypothesis. This implies that there is a significant effect of the **number of restaurants** on Consumer Behaviour towards Online Food Delivery Services Providers.

Table 15: Effect of the attitude of delivery person on Consumer Behaviour towards online food delivery services providers

SD	D	N	A	SA	Total	χ^2 (Cal.)	χ^2 (Tab.)	df	P
6	5	28	40	61	140	80.21	9.488	4	0.05

χ^2 (Cal.) = 80.21, df=4, χ^2 (Tab.) at 0.05 level of significance = 9.488. Since the calculated value of χ^2 is greater than the table value of χ^2 , we reject the null hypothesis. This implies that there is a significant effect of the **attitude of delivery person** on Consumer Behaviour towards Online Food Delivery Services Providers.

Table 16: Effect of convenience on Consumer Behaviour towards online food delivery services providers

SD	D	N	A	SA	Total	χ^2 (Cal.)	χ^2 (Tab.)	df	P
8	7	25	34	66	140	83.21	9.488	4	0.05

χ^2 (Cal.) = 83.21, df=4, χ^2 (Tab.) at 0.05 level of significance = 9.488. Since the calculated value of χ^2 is greater than the table value of χ^2 , we reject the null hypothesis. This implies that there is a significant effect of **convenience** on Consumer Behaviour towards Online Food Delivery Services Providers.

Table 17: Impact of factors on consumer behavior towards online food delivery services providers

S.No.	Factors	N	Mean	Standard Deviation
1	Food Price	140	4.271	3.858
2	Service Quality	140	4.207	3.821
3	Packaging	140	4.029	3.684

4	Advertisement	140	3.921	3.592
5	Food Quality	140	4.237	3.865
6	Food Taste	140	4.171	3.815
7	Speed of Food Delivery	140	4.079	3.688
8	Payment Options	140	3.786	3.499
9	Offers and Discounts	140	4.186	3.812
10	Hygiene	140	4.271	3.866
11	Delivery Tracking	140	3.864	3.531
12	Menu	140	3.936	3.602
13	No. of Restaurant	140	3.721	3.404
14	Attitude of Delivery Person	140	4.036	3.663
15	Convenience	140	4.021	3.676

Interpretation: As per the study of the above table, it is found that the food price and hygiene are the most influencing factors on online food order delivery services providers with a mean of 4.271. The next influencing factor is the food quality with a mean of 4.237 followed by service quality with mean of 4.207, offers & discounts with a mean of 4.186, food taste with a mean of 4.171, speed of food delivery with mean of 4.079, attitude of delivery person with a mean of 4.036, packaging with a mean of 4.029, convenience with a mean of 4.021, menu with a mean of 3.936, advertisement with a mean of 3.921, delivery tracking with a mean of 3.864, payment options with a mean of 3.786 and number of restaurants with a mean of 3.721.

6. FINDINGS AND CONCLUSIONS :

The study was undertaken to identify the factors affecting consumer behaviour towards online food delivery services providers in Delhi-NCR. The study revealed that there are 15 factors like food price, service quality, packaging, advertisement, food quality, food taste, speed of food delivery, payment options, offers & discounts, hygiene, delivery tracking services, menu, number of restaurants, attitude of delivery person and convenience which affected consumer behaviour towards online food delivery services providers. The study also revealed that these factors have a significant effect on consumer behaviour towards online food delivery services providers.

The study reveals that the food price and hygiene have the most influencing factor on online food order delivery services providers. The next influencing factor is the food quality followed by service quality, offers & discounts, food taste, speed of food delivery, attitude of delivery person, packaging, convenience, menu, advertisement, delivery tracking, payment options and number of restaurants.

The study concluded that most of the respondents are male followed by female, single followed by married, student followed by employed, between the age group of 20-30 years followed by age group of 30-40 years, graduate followed by post graduate and earning less than Rs.20,000/- per month followed by earning Rs.20,000-40,000 per month.

The study might also be helpful for the online food delivery service providers in Delhi-NCR to work on their strategies to attract, satisfy and retain consumers by considering all these factors which affect consumer behaviour.

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