

# A Comparative Study of Online Food Delivery App Usage Across Different Demographic Groups

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**Abstract:** The rapid expansion of smartphones, internet connectivity, digital payments, and technology-enabled services has significantly transformed consumer food-purchasing behaviour. Online food delivery applications have emerged as an important digital channel, offering consumers convenience, time savings, wider food choices, promotional offers, and easy payment facilities. However, consumers belonging to different demographic groups may demonstrate varying patterns of adoption, frequency of usage, application preferences, and spending behaviour. Against this background, the present study, titled “A Comparative Study of Online Food Delivery App Usage across Different Demographic Groups,” examines consumer usage patterns and preferences and analyses the influence of demographic characteristics on online food delivery app usage and choice. The study adopts a quantitative and descriptive research design and is based primarily on primary data collected through a structured questionnaire. For the proposed analysis, data from 200 respondents are considered, covering demographic variables such as age, gender, education, occupation, income, and place of residence. Usage-related variables include frequency of ordering, preferred application, payment preference, and factors influencing app usage. The collected data are analysed using SPSS through descriptive statistics, Cronbach’s Alpha, Exploratory Factor Analysis, Chi-square test, independent-samples t-test, one-way ANOVA, and multiple regression analysis. The illustrative findings indicate that convenience and time saving are the major factors motivating consumers to use online food delivery applications. The analysis further suggests significant differences in usage associated with age, income, and place of residence, while gender shows comparatively limited influence. Factor analysis identifies convenience and value/choice as major dimensions underlying consumer usage behaviour. The study concludes that demographic characteristics contribute significantly to variations in online food delivery usage and that service providers should adopt demographic-specific strategies, personalized promotions, improved delivery coverage, and user-friendly digital services to enhance customer engagement and satisfaction.

**Keywords:** Online Delivery, Delivery Apps, Consumers, Demographic Factors

## I. INTRODUCTION

The rapid growth of digital technology and internet connectivity has significantly transformed the way consumers purchase goods and services. One of the most visible changes in the food and restaurant industry is the increasing popularity of online food delivery applications. Mobile applications and digital platforms have made it possible for consumers to browse restaurant menus, compare prices, place orders, make digital payments, and track deliveries from the convenience of their homes, workplaces, or other locations. Platforms such as Swiggy, Zomato, and other online food delivery services have therefore become an important component of the modern food-service ecosystem. The increasing use of smartphones, affordable internet services, digital payment facilities, and changing consumer lifestyles has further accelerated the adoption of these applications.



Online food delivery apps provide several advantages to consumers, including convenience, time savings, wider restaurant choices, promotional offers, personalized recommendations, and easy access to different cuisines. At the same time, consumers may differ considerably in their perceptions and usage patterns depending on their demographic characteristics. Factors such as age, gender, educational qualification, occupation, income level, and place of residence can influence how frequently individuals use food delivery applications, the type of food they order, their preferred payment methods, their spending patterns, and the factors they consider important while selecting an app. For instance, younger consumers may demonstrate greater familiarity with mobile applications and digital payments, whereas older consumers may place greater emphasis on ease of use, reliability, and security. Similarly, income and occupation may influence the frequency of ordering and expenditure on online food delivery, while urban and semi-urban consumers may experience differences in availability and delivery accessibility.

The food delivery industry has also evolved beyond merely providing restaurant-to-consumer delivery. Applications increasingly use artificial intelligence, personalized recommendations, customer reviews, loyalty programmes, discounts, digital wallets, and real-time tracking to improve customer engagement and retention. These developments have intensified competition among food delivery platforms and made understanding consumer behaviour increasingly important for businesses. However, differences among demographic groups suggest that a single approach may not be equally effective for all consumers.

Against this background, the present study, “A Comparative Study of Online Food Delivery App Usage across Different Demographic Groups,” seeks to examine variations in the usage patterns and preferences of consumers belonging to different demographic categories. The study focuses on understanding whether demographic characteristics significantly influence the frequency of app usage, ordering behaviour, spending patterns, preferred platforms, payment methods, and factors affecting consumers’ choice of online food delivery applications. A comparative assessment of these groups can provide useful insights into changing consumer preferences and the factors driving digital food-ordering behaviour. The findings may be valuable for online food delivery companies, restaurants, marketers, and policymakers in developing more effective, consumer-oriented strategies for the rapidly expanding digital food-delivery market.

## **II. REVIEW OF LITERATURE**

**Ray et al. (2019)** examined the factors influencing consumers’ intention to use online food delivery services. The study highlighted the importance of perceived usefulness, convenience, ease of use, and trust in shaping consumers’ willingness to order food through digital platforms. The findings indicated that consumers increasingly preferred online food delivery because it reduced the time and effort involved in purchasing food. The study also suggested that technological familiarity and consumer characteristics could influence adoption patterns, providing a basis for examining differences in online food delivery usage across demographic groups.

**Yeo et al. (2017)** investigated consumer acceptance and continuance intention towards online food delivery services. The study found that convenience motivation, price-saving orientation, and perceived usefulness were important factors influencing consumers’ intention to use food delivery platforms. The researchers observed that online food ordering offered flexibility and convenience, particularly for consumers with busy lifestyles. The study provides useful insights into how lifestyle and individual characteristics may contribute to differences in the frequency and nature of online food delivery usage.

**Cho et al. (2019)** studied consumer attitudes and behavioural intentions towards online food delivery services. Their findings indicated that convenience, perceived value, and service-related factors significantly influenced consumers’ attitudes toward online food ordering. The study further emphasized that consumers evaluate online food delivery services not only on the basis of food quality but also on delivery efficiency, price, reliability, and overall service experience. These findings are relevant to comparative studies because consumers belonging to different demographic categories may assign different levels of importance to these factors.



**Kapoor and Vij (2018)** examined the role of electronic word-of-mouth and online reviews in influencing consumers' decisions regarding food delivery services. The study found that customer reviews, ratings, recommendations, and information available on digital platforms can substantially affect consumers' perceptions and purchase intentions. Consumers often depend on online feedback when selecting restaurants and food items. The study demonstrates the importance of digital information in the food delivery decision-making process and indicates that demographic characteristics may influence consumers' reliance on online reviews and recommendations.

**Alalwan (2020)** investigated the determinants of customers' intention to use online food delivery applications. The study identified factors such as performance expectancy, hedonic motivation, price value, habit, and social influence as important determinants of behavioural intention. The findings suggested that consumers use food delivery applications not merely for functional convenience but also because of their familiarity with digital technology and influence from their social environment. This supports the need to examine demographic differences in application usage, as technology familiarity, income, age, and social exposure may vary among consumer groups.

**Kimes (2011)** examined the potential of online technologies in the restaurant industry and highlighted how digital ordering systems could improve customer convenience and operational efficiency. The study observed that online ordering provided consumers with greater control over menu selection, ordering time, and transaction processes. It also suggested that technological developments were changing traditional restaurant-consumer interactions. The findings provide an early foundation for understanding the development of online food ordering and the growing importance of technology in consumer food-purchasing behaviour.

**Pigatto et al. (2017)** examined online food ordering and the changing relationship between consumers and food-service providers. The study emphasized that digital platforms provide consumers with increased access to restaurant information, menus, prices, and ordering facilities. The authors noted that technological convenience and the availability of multiple alternatives encourage consumers to adopt online food-ordering services. Their findings are particularly relevant to demographic comparisons because access to technology and familiarity with digital platforms may differ between younger and older consumers and between urban and less urban populations.

**Annaraud and Berezina (2020)** examined consumers' attitudes towards online food delivery and the factors affecting their willingness to use such services. The study highlighted the importance of convenience, perceived value, service quality, and technology-related factors in shaping consumer behaviour. It also demonstrated that online food delivery services can satisfy consumers' need for flexibility and convenience. The study suggests that differences in consumer characteristics can affect expectations and perceptions of online food delivery services, supporting the importance of demographic analysis.

**Sthapit et al. (2019)** examined customer experiences and satisfaction in the context of online food delivery. The study emphasized that successful food delivery depends on several dimensions of service quality, including delivery speed, reliability, food quality, accuracy of orders, and customer support. Positive experiences can encourage customers to continue using digital food delivery services, whereas poor delivery experiences may reduce customer loyalty. The findings indicate that demographic groups may differ in their expectations and evaluation of service quality, making comparative analysis important for understanding consumer usage patterns.

**Prasetyo et al. (2021)** investigated consumer behaviour towards online food delivery applications during the COVID-19 pandemic. The study observed that health concerns, safety, convenience, and restrictions on physical movement encouraged consumers to increasingly depend on food delivery platforms. Digital payment facilities and contactless delivery also contributed to the growth of online food ordering. The study demonstrated that external circumstances can significantly alter food-ordering behaviour and highlighted the importance of demographic characteristics in understanding differences in consumer adoption, frequency of usage, and preferences for online food delivery applications.



**Objectives of the Study**

- To examine the usage patterns and preferences of consumers towards online food delivery applications across different demographic groups.
- To analyse whether demographic factors such as age, gender, education, occupation, income, and place of residence significantly influence the usage and choice of online food delivery applications.

**Research Gap**

Existing studies on online food delivery applications have primarily focused on consumer adoption, perceived convenience, service quality, customer satisfaction, purchase intention, trust, and continuance intention. While these studies provide valuable insights into the factors influencing online food ordering, limited attention has been given to a comparative analysis of usage patterns across different demographic groups. Many studies examine consumers as a homogeneous population and do not sufficiently explore how age, gender, educational qualification, occupation, income, and place of residence influence the frequency and nature of online food delivery app usage.

Furthermore, previous research has often concentrated on the determinants of intention to use rather than examining actual usage behaviour, such as frequency of ordering, expenditure, preferred applications, preferred payment methods, and reasons for selecting particular platforms. There is also a need to understand whether the factors considered important by consumers differ significantly across demographic categories. In particular, comparative evidence regarding younger and older consumers, different income groups, and urban and semi-urban/rural consumers remains relatively limited. Therefore, the present study attempts to address this gap by systematically comparing online food delivery app usage across different demographic groups and identifying whether demographic characteristics significantly influence consumers' usage patterns and preferences.

**III. RESEARCH METHODOLOGY**

The present study adopts a quantitative and descriptive research design to examine the usage patterns and preferences of consumers towards online food delivery applications and to determine whether demographic characteristics influence their usage and choice. The study is based on primary data collected from consumers through a structured questionnaire. The questionnaire consists of two sections: the first section collects demographic information such as age, gender, educational qualification, occupation, monthly income, and place of residence, while the second section measures online food delivery usage patterns, application preferences, frequency of ordering, payment preferences, and factors influencing usage using a five-point Likert scale. The study may employ convenience sampling to select respondents who have experience using online food delivery applications. For the proposed analysis, a sample of 200 respondents is considered. Secondary information is obtained from research articles, journals, books, reports, and credible online sources related to digital consumer behaviour and online food delivery services. The collected data are analysed using SPSS. Descriptive statistics such as frequency, percentage, mean, and standard deviation are used to examine consumer usage patterns and preferences. Cronbach's Alpha is applied to assess the reliability of the measurement scale. Exploratory Factor Analysis (EFA) is used to identify the underlying dimensions influencing online food delivery usage. To examine demographic differences and associations, Chi-square tests, independent-samples t-test, and one-way ANOVA are employed. Multiple regression analysis is used to assess the combined influence of demographic factors on overall online food delivery usage. Statistical significance is evaluated at the 5% significance level ( $p < 0.05$ ). The methodology enables a systematic comparison of consumer behaviour across different demographic groups and provides empirical evidence regarding the role of demographic characteristics in online food delivery app usage.



#### IV. DATA ANALYSIS AND INTERPRETATION

##### 1. Demographic Profile of Respondents

**Table 1: Demographic Characteristics of Respondents (N = 200)**

| Demographic Variable | Category                 | Frequency | Percentage |
|----------------------|--------------------------|-----------|------------|
| Age                  | Below 25 years           | 72        | 36.0       |
|                      | 25–35 years              | 58        | 29.0       |
|                      | 36–45 years              | 42        | 21.0       |
|                      | Above 45 years           | 28        | 14.0       |
| Gender               | Male                     | 94        | 47.0       |
|                      | Female                   | 106       | 53.0       |
| Education            | Higher Secondary/Diploma | 28        | 14.0       |
|                      | Undergraduate            | 76        | 38.0       |
|                      | Postgraduate             | 72        | 36.0       |
|                      | Other                    | 24        | 12.0       |
| Occupation           | Student                  | 61        | 30.5       |
|                      | Salaried                 | 71        | 35.5       |
|                      | Business/Self-employed   | 39        | 19.5       |
|                      | Other                    | 29        | 14.5       |
| Monthly Income       | Below ₹25,000            | 54        | 27.0       |
|                      | ₹25,000–₹50,000          | 69        | 34.5       |
|                      | ₹50,001–₹75,000          | 45        | 22.5       |
|                      | Above ₹75,000            | 32        | 16.0       |
| Residence            | Urban                    | 119       | 59.5       |
|                      | Semi-urban               | 51        | 25.5       |
|                      | Rural                    | 30        | 15.0       |

##### Interpretation

The demographic profile indicates that the largest proportion of respondents belongs to the **below-25 age group (36%)**, followed by respondents aged 25–35 years (29%). Female respondents constitute 53% of the sample, while males account for 47%. In terms of education, undergraduate respondents represent the largest group at 38%, followed by postgraduates at 36%. Salaried respondents constitute the largest occupational category at 35.5%, while students account for 30.5%. Regarding monthly income, 34.5% of respondents fall within the ₹25,000–₹50,000 category. A majority of respondents reside in urban areas (59.5%). The demographic composition therefore represents consumers with different socioeconomic and demographic characteristics, providing an appropriate basis for comparative analysis.

##### 2. Usage Pattern of Online Food Delivery Applications

**Table 2: Frequency of Online Food Delivery App Usage**

| Frequency        | Frequency | Percentage |
|------------------|-----------|------------|
| Daily            | 18        | 9.0        |
| 2–3 times a week | 47        | 23.5       |
| Once a week      | 55        | 27.5       |



| Frequency         | Frequency  | Frequency Percentage |
|-------------------|------------|----------------------|
| 2–3 times a month | 52         | 26.0                 |
| Rarely            | 28         | 14.0                 |
| <b>Total</b>      | <b>200</b> | <b>100.0</b>         |

#### Interpretation

The findings indicate that online food delivery applications are regularly used by a substantial proportion of respondents. About 27.5% use food delivery applications once a week, while 26% use them two to three times a month. A further 23.5% use these applications two to three times a week. Only 14% reported rare usage. This suggests that online food delivery has become an established purchasing channel among a considerable section of consumers.

### 3. Preferred Food Delivery Application

**Table 3: Preferred Online Food Delivery Application**

| Application        | Frequency  | Frequency Percentage |
|--------------------|------------|----------------------|
| Swiggy             | 91         | 45.5                 |
| Zomato             | 82         | 41.0                 |
| Other applications | 27         | 13.5                 |
| <b>Total</b>       | <b>200</b> | <b>100.0</b>         |

#### Interpretation

The results show that **Swiggy is the most preferred application**, selected by 45.5% of respondents, followed by Zomato at 41%. Other applications account for 13.5%. The relatively small difference between the two leading platforms suggests strong competition in the online food delivery market. Consumers appear to have considerable exposure to more than one platform, with preferences potentially influenced by discounts, restaurant availability, delivery charges, user experience and service quality.

### 4. Descriptive Statistics of Usage Factors

Respondents may be asked to rate major usage factors using a **five-point Likert scale**, where 1 = Strongly Disagree and 5 = Strongly Agree.

**Table 4: Mean and Standard Deviation of Online Food Delivery Usage Factors**

| Usage Factor                 | Mean        | Std. Deviation | Rank |
|------------------------------|-------------|----------------|------|
| Convenience                  | 4.21        | 0.76           | 1    |
| Time saving                  | 4.15        | 0.81           | 2    |
| Variety of food choices      | 4.08        | 0.84           | 3    |
| Discounts and offers         | 3.96        | 0.91           | 4    |
| Ease of digital payment      | 3.94        | 0.88           | 5    |
| Easy app navigation          | 3.89        | 0.86           | 6    |
| Delivery tracking            | 3.82        | 0.93           | 7    |
| Customer reviews and ratings | 3.78        | 0.97           | 8    |
| <b>Overall Mean</b>          | <b>3.98</b> | <b>0.86</b>    | —    |

#### Interpretation

The descriptive analysis shows that **convenience records the highest mean score (4.21)**, indicating that convenience is the most important factor associated with online food delivery usage. Time saving follows with a mean score of 4.15, while variety of food choices has a mean of 4.08. Discounts, digital payment facilities and application navigation also



receive relatively high scores. The overall mean of 3.98 indicates a generally positive perception of online food delivery applications among respondents.

## 5. Reliability Analysis

**Table 5: Reliability Statistics**

| Scale                              | Number of Items Cronbach's Alpha |
|------------------------------------|----------------------------------|
| Online Food Delivery Usage Factors | 8 0.891                          |

### Interpretation

The Cronbach's Alpha value of **0.891** indicates a high level of internal consistency among the items measuring online food delivery usage factors. Since the value is substantially above the commonly accepted threshold of 0.70, the scale can be considered reliable for further statistical analysis.

## 6. Factor Analysis

As an advanced technique, **Exploratory Factor Analysis (EFA)** can be employed to identify the underlying dimensions influencing online food delivery usage.

**Table 6: KMO and Bartlett's Test**

| Test                                               | Value   |
|----------------------------------------------------|---------|
| Kaiser-Meyer-Olkin (KMO) Measure                   | 0.846   |
| Bartlett's Test of Sphericity – Approx. Chi-square | 824.631 |
| df                                                 | 28      |
| Sig.                                               | 0.000   |

### Interpretation

The KMO value of **0.846** indicates that the sample is adequate for factor analysis. Bartlett's Test of Sphericity is statistically significant at the 5% level ( $p < 0.001$ ), indicating that the correlation matrix is significantly different from an identity matrix. Therefore, factor analysis is appropriate for identifying the underlying dimensions of consumers' online food delivery usage.

## 7. Factors Extracted through Factor Analysis

**Table 7: Rotated Factor Matrix**

| Variable                       | Factor 1: Convenience | Factor 2: Value & Choice |
|--------------------------------|-----------------------|--------------------------|
| Convenience                    | 0.842                 | 0.214                    |
| Time saving                    | 0.817                 | 0.236                    |
| Easy app navigation            | 0.761                 | 0.298                    |
| Delivery tracking              | 0.724                 | 0.341                    |
| Discounts and offers           | 0.243                 | 0.823                    |
| Variety of food choices        | 0.291                 | 0.804                    |
| Customer reviews               | 0.317                 | 0.746                    |
| Digital payment                | 0.425                 | 0.691                    |
| <b>Eigenvalue</b>              | <b>3.21</b>           | <b>2.18</b>              |
| <b>Variance Explained (%)</b>  | <b>40.13</b>          | <b>27.25</b>             |
| <b>Cumulative Variance (%)</b> | <b>40.13</b>          | <b>67.38</b>             |



### Interpretation

The factor analysis identifies two major dimensions underlying online food delivery app usage. The first factor, **Convenience**, includes convenience, time saving, application navigation and delivery tracking and explains approximately 40.13% of the variance. The second factor, **Value and Choice**, includes discounts, variety, reviews and digital payment facilities and explains 27.25% of the variance. Together, the two factors explain approximately **67.38% of the total variance**, indicating that these dimensions provide a meaningful representation of consumer perceptions towards online food delivery applications.

### 8. Age and Usage Frequency – Chi-Square Test

**Table 8: Association between Age and Online Food Delivery Usage**

| Age Group    | High Usage | Moderate Usage | Low Usage | Total      |
|--------------|------------|----------------|-----------|------------|
| Below 25     | 38         | 25             | 9         | 72         |
| 25–35        | 29         | 21             | 8         | 58         |
| 36–45        | 13         | 20             | 9         | 42         |
| Above 45     | 5          | 12             | 11        | 28         |
| <b>Total</b> | <b>85</b>  | <b>78</b>      | <b>37</b> | <b>200</b> |

**Chi-square = 20.847; df = 6; p < 0.001**

### Interpretation

The Chi-square test indicates a **statistically significant association between age and online food delivery app usage** ( $\chi^2 = 20.847$ ,  $p < 0.001$ ). Younger respondents demonstrate a greater tendency towards high-frequency usage compared with older respondents. This may be attributed to greater familiarity with smartphones, digital platforms and online payment systems among younger consumers. Therefore, age appears to be an important demographic factor influencing usage patterns.

### 9. Gender and Usage Score – Independent Samples t-Test

**Table 9: Gender-wise Comparison of Usage Score**

| Gender | N   | Mean | Std. Deviation |
|--------|-----|------|----------------|
| Male   | 94  | 3.87 | 0.68           |
| Female | 106 | 4.05 | 0.64           |

**t = -1.91; p = 0.058**

### Interpretation

The mean usage score of female respondents (4.05) is higher than that of male respondents (3.87). However, the t-test result indicates that the difference is **not statistically significant at the 5% level** ( $p = 0.058$ ). Thus, although female respondents demonstrate slightly higher usage scores in the illustrative data, gender may not have a statistically significant influence on overall online food delivery usage.

### 10. Income-wise Comparison – One-Way ANOVA

**Table 10: ANOVA of Usage Score across Income Groups**

| Source of Variation | Sum of Squares | df         | Mean Square | F     | Sig.  |
|---------------------|----------------|------------|-------------|-------|-------|
| Between Groups      | 8.426          | 3          | 2.809       | 6.214 | 0.001 |
| Within Groups       | 88.554         | 196        | 0.452       |       |       |
| <b>Total</b>        | <b>96.980</b>  | <b>199</b> |             |       |       |



### Interpretation

The ANOVA results indicate a **statistically significant difference in online food delivery usage across income groups** ( $F = 6.214$ ,  $p = 0.001$ ). This indicates that consumers belonging to different income categories do not demonstrate identical usage levels. Higher-income consumers may have greater purchasing capacity and may therefore use online food delivery services more frequently. A post-hoc test such as Tukey's HSD can subsequently be used to identify the specific income groups between which significant differences exist.

### 11. Residence and Usage – Chi-Square Test

**Table 11: Association between Place of Residence and Usage Level**

| Residence    | High Usage | Moderate Usage | Low Usage | Total      |
|--------------|------------|----------------|-----------|------------|
| Urban        | 58         | 46             | 15        | 119        |
| Semi-urban   | 20         | 21             | 10        | 51         |
| Rural        | 7          | 11             | 12        | 30         |
| <b>Total</b> | <b>85</b>  | <b>78</b>      | <b>37</b> | <b>200</b> |

Chi-square = 14.672; df = 4;  $p = 0.005$

### Interpretation

The Chi-square result indicates a **significant association between place of residence and online food delivery usage** ( $\chi^2 = 14.672$ ,  $p = 0.005$ ). Urban respondents show a higher proportion of high usage compared with rural respondents. This difference may be associated with greater restaurant availability, wider delivery coverage, better internet connectivity and greater exposure to digital services in urban locations. Thus, place of residence appears to influence consumers' online food delivery usage patterns.

### 12. Multiple Regression Analysis

To examine the combined influence of demographic variables on online food delivery usage, **multiple regression analysis** can be employed.

**Dependent Variable:** Overall Online Food Delivery Usage Score

**Independent Variables:** Age, Gender, Education, Occupation, Income and Residence

**Table 12: Model Summary**

| R     | R <sup>2</sup> | Adjusted R <sup>2</sup> | Std. Error |
|-------|----------------|-------------------------|------------|
| 0.642 | 0.412          | 0.393                   | 0.528      |

### Interpretation

The regression model produces an  $R^2$  value of **0.412**, indicating that approximately **41.2% of the variation in online food delivery usage** can be explained collectively by the demographic variables included in the model. The adjusted  $R^2$  of 0.393 indicates that the model retains substantial explanatory power after adjusting for the number of predictors. This suggests that demographic characteristics collectively contribute to explaining differences in consumers' online food delivery usage.

### 13. Regression Coefficients

**Table 13: Regression Coefficients**

| Predictor | Beta ( $\beta$ ) | t-value | Sig.  |
|-----------|------------------|---------|-------|
| Age       | -0.284           | -4.217  | 0.000 |
| Gender    | 0.071            | 1.126   | 0.261 |
| Education | 0.118            | 1.874   | 0.062 |



| Predictor  | Beta ( $\beta$ ) | t-value | Sig.  |
|------------|------------------|---------|-------|
| Occupation | 0.096            | 1.531   | 0.127 |
| Income     | 0.247            | 3.821   | 0.000 |
| Residence  | -0.216           | -3.347  | 0.001 |

#### Interpretation

The regression results indicate that **age, income and place of residence significantly influence online food delivery usage**. Age has a negative coefficient ( $\beta = -0.284$ ), suggesting that usage tends to decrease as age increases. Income has a positive coefficient ( $\beta = 0.247$ ), indicating higher usage among consumers with higher income levels. Residence also has a significant effect, reflecting differences in usage associated with urban and less urban locations. In contrast, gender, education and occupation do not demonstrate statistically significant effects at the 5% significance level in the illustrative model.

#### 14. Summary of Objective-wise Findings

**Table 14: Statistical Summary of the Objectives**

| Objective                              | Statistical Tool       | Major Result                             |
|----------------------------------------|------------------------|------------------------------------------|
| Examine usage patterns and preferences | Frequency & Percentage | Weekly and monthly usage are predominant |
| Examine important usage factors        | Mean & SD              | Convenience ranked first                 |
| Validate usage scale                   | Cronbach's Alpha       | $\alpha = 0.891$                         |
| Identify underlying factors            | EFA                    | Two factors explaining 67.38% variance   |
| Age and usage                          | Chi-square             | Significant, $p < 0.001$                 |
| Gender and usage                       | t-test                 | Not significant, $p = 0.058$             |
| Income and usage                       | ANOVA                  | Significant, $p = 0.001$                 |
| Residence and usage                    | Chi-square             | Significant, $p = 0.005$                 |
| Combined demographic influence         | Multiple Regression    | $R^2 = 0.412$                            |

#### Overall Interpretation

The overall analysis suggests that online food delivery applications are widely used among consumers, with **convenience, time saving, food variety and promotional offers** emerging as important usage factors. The advanced statistical analysis further indicates that demographic characteristics do not influence consumer behaviour uniformly. In the illustrative results, **age, income and place of residence have significant effects on usage**, whereas gender, education and occupation have comparatively weaker effects. The factor analysis identifies convenience and value/choice as the major dimensions underlying consumers' perceptions of online food delivery applications. The regression model further demonstrates that demographic characteristics collectively explain a meaningful proportion of variation in usage behaviour. These findings highlight the importance of **demographic segmentation** for online food delivery companies when designing promotional strategies, personalized offers, service coverage and customer engagement programmes.

#### V. FINDINGS OF THE STUDY

Based on the **illustrative analysis of 200 respondents**, the major findings of the study are:

**Younger consumers constitute a major user group**, with respondents below 25 years representing the largest age category (36%), indicating greater participation of younger consumers in online food delivery services.

**Female respondents slightly outnumber male respondents**, accounting for 53% of the sample compared with 47% male respondents.



**Online food delivery is used regularly** by a considerable proportion of consumers. Weekly and monthly ordering constitute the predominant usage patterns.

**Swiggy emerged as the most preferred food delivery application**, accounting for 45.5% of respondents, followed closely by Zomato at 41%.

**Convenience is the most important factor** influencing online food delivery usage, with the highest mean score of 4.21.

**Time saving is another major reason** for using food delivery applications, recording a mean score of 4.15.

**Variety of food choices** is an important consideration, with a mean score of 4.08, indicating that consumers value the availability of multiple restaurants and cuisines through digital platforms.

**Discounts and promotional offers** also influence consumer usage, although convenience and time saving are relatively more important.

The **Cronbach's Alpha value of 0.891** indicates that the scale used to measure online food delivery usage factors has high internal consistency and reliability.

**Factor analysis identified two major dimensions**—Convenience and Value & Choice—which together explained approximately 67.38% of the total variance.

**Age has a significant relationship with online food delivery usage** ( $p < 0.001$ ). Younger consumers demonstrate higher levels of usage than older consumers.

**Gender does not have a statistically significant influence** on overall online food delivery usage in the illustrative analysis ( $p = 0.058$ ), although female respondents recorded a slightly higher mean usage score.

**Income significantly influences usage behaviour** ( $p = 0.001$ ), indicating differences in online food delivery usage among different income groups.

**Place of residence significantly influences usage** ( $p = 0.005$ ). Urban consumers demonstrate higher usage compared with semi-urban and rural consumers.

**Education and occupation show comparatively weaker influence** on online food delivery usage when compared with age, income, and residence.

The multiple regression model indicates that demographic characteristics collectively explain approximately **41.2% of the variation in online food delivery usage** ( $R^2 = 0.412$ ).

The study therefore indicates that **consumer behaviour towards online food delivery applications is not homogeneous** and varies according to selected demographic characteristics.

## VI. CONCLUSION

Online food delivery applications have become an important part of contemporary consumer purchasing behaviour because of their convenience, time-saving benefits, wide variety of food choices, promotional offers, and digital payment facilities. The present study examined the usage patterns and preferences of consumers and assessed whether demographic characteristics influence their usage and choice of online food delivery applications.

The findings indicate that convenience and time saving are the strongest motivations for using online food delivery applications. The study also demonstrates that demographic characteristics play an important role in explaining variations in consumer behaviour. In particular, age, income, and place of residence were found to have significant relationships with usage patterns, whereas gender, education, and occupation showed comparatively limited influence in the illustrative analysis. Younger and urban consumers tend to demonstrate greater engagement with online food delivery platforms, while differences in income are also associated with variations in usage.

The study further highlights that consumers evaluate food delivery applications based on multiple dimensions, particularly **convenience and value/choice**. Therefore, food delivery companies should adopt demographic-specific marketing strategies rather than treating all consumers as a single market segment. Personalized discounts, improved delivery coverage, user-friendly interfaces, reliable digital payments, wider restaurant choices, and targeted promotional campaigns can help platforms attract and retain different categories of consumers.



Overall, the study concludes that **demographic characteristics significantly contribute to differences in online food delivery app usage**, while convenience remains the central factor driving consumer adoption and continued usage. Understanding these demographic variations can help food delivery platforms and restaurant partners develop more effective customer-oriented strategies and improve the overall digital food-ordering experience.

**Note:** Since the previous statistical tables used illustrative data, the findings and conclusion above are also based on those illustrative results. They should be revised after analysis of your actual respondent data.

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