

Association between Online Food Delivery App Use and Dietary Quality among Working Adults in Urban India-An Analytical Cross Sectional Study

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ABSTRACT

Background: Online food delivery applications (OFDAs) have been a major feature of the urban food ecology in India, especially among working adults who tend to have hectic schedules. Even though these platforms are convenient, there are fears about the effect they have on the quality of diets. The subject of this study was to examine the patterns of using of the OFDA, its perceived availability of healthy food choices and their correlation with the quality of the dietary choices among the working adults in Indian cities.

Methods: A cross-sectional web-based study was undertaken and was carried out between January and March 2025 among the working adults living in Tier-1 Ahmedabad. Students over the age of 25 years who had used OFDAs at least once a month were enlisted. There were convenient and snowball methods of sampling. A validated and structured questionnaire that measured sociodemographics, patterns of using OFDA, quality of diet with a modified Healthy Eating Index and perceptions of healthy food availability and safety were used to collect data. Descriptive statistics, Chi-square tests, MannWhitney U tests and Kruskal-Wallis H tests were used. A p-value below 0.05 was found to be statistically significant.

Findings: 472 people took part in the survey, and 52.3% were frequent users of OFDA. More often than not, frequent users were older, lived alone and had higher incomes ($P < 0.05$). The most ordered was fast food (84.7%). Whereas 66.8 percent of them stated that they had tried to find healthier choices, most of the people struggled to find them (54.3%). An increased use of OFDA was linked with the poorer quality of the diet and higher snacking behaviour. Food choice was heavily influenced by price (74.1%), and food appearance (63.4%). Categorization of hygiene, packaging and temperature of meal played a big role in determining who would make an order.

Conclusion: The frequent use of OFDA by working adults might be the contributor of poor quality in food and unhealthy eating habits. Healthier food options and better health outcomes would be facilitated through increasing the visibility, affordability, and attractiveness of healthy foods on OFDAs.

KEYWORDS: Online food delivery, dietary quality, working adults, digital food environment, India.

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INTRODUCTION

Applications that enable the food delivery to metropolitan areas in India have become ubiquitous. Adults with a busy schedule often have limited time and are unavailable on the same schedule; these types of platforms such as Zomato and Swiggy offer people a wide variety of dishes with minimal effort. By 2030, over 38.5 percent of all adults across the world will be rated as either overweight or obese [1], ascending the ladder to chronic illness, particularly cardiometabolic disease [2], multiple cancers [3], issues with the muscles and joints [4], depression [6], cognitive impairment [5], The built environment, which encompasses items such as transportation and infrastructure, is a macro-environmental factor such as the food environment (accessibility, availability, and advertising of food) [7]. Technology is a part and parcel of the contemporary life and ought to be mentioned in the list of factors that cause obesity. One of the ways in which technology has been used is in the marketing of obesogenic vectors, where AI is used to influence the eating patterns of consumers compromising them to unhealthy choices [8]. The increase in the mobile application of meal delivery services has helped the consumerist culture to promote the ever-easy consumption, overconsumption, and wastage of food since it is now affordable and available at the convenience of the finger [9]. The key elements of healthy diet include fruits, vegetables, whole grains, fiber, low-fat dairy, seafood, legumes, nuts, polyunsaturated fatty acids, sugar, processed carbs, and salt [10]. The physical space was minimal during the epidemic, and physical activity decreased, as well as food advertising via online delivery and promotion. This has consequently increased the prevalence of obesity. Consumers are increasingly becoming dependent on online services and social media especially the younger population. The COVID-19 epidemic has significantly increased an online order of food because of the fear of hygiene and that the process

was not accompanied by personal communication when delivering food [11]. Online meal delivery applications may have both negative and positive effects depending on the user. The application allows users to choose and buy food items very fast and conveniently depending on their needs. Eating properly, in terms of quantity and in terms of quality, can positively influence health. This has made many restaurants and other commercial food business establishments to concentrate on delivery and takeout [12]. These meal delivery apps are also referred to as Mobile Food Ordering Applications (MFOA). The marketing strategies such as pictures, offers, free delivery, and a combination of discounted food and beverage items are heavy in online meal delivery services [13]. There is a possibility that one day digital ordering of meals can be achieved by a restaurant application or even a third-party food service, and then the customer has access to menus and reviews of restaurants located nearby. At the time of its initial launch in 2004, GrubHub was the preferred service when it came to third-party delivery of food. By 2020, over 44 million Americans will be using meal delivery applications, and the same amount of individuals will be using these applications in India in the nearest future [14]. Restaurant foods are not as healthy or less calorie and sodium-filled as those prepared at home. Overeating was also linked with gaining weight. Ready-prepared foods bought in restaurants and other food service outlets are gradually constituting a significant part of the overall caloric intake of people. The online meal ordering business in India is increasing at an astronomical rate. The young people are the best patrons of online meal delivery companies due to the convenience and the ubiquity of technology equipment in their lives[15].

REVIEW OF LITERATURE

Gavaravarapu et al. (2022) examined, the 'infodemic' caused by unchecked COVID-19 news, hype, and misinformation caused widespread concern and a lack of scientific rigor. India had 22.3 million social media COVID-19 searches by March 2020, the most internet-connected nation. COVID-19-related food and nutrition news searches by Indian internet users from 27 January 2020 to 30 June 2021 were evaluated in this study. In the first wave (April–August 2020), the change in Relative Search Volume (RSV) on Google Trends (GT) and 34 popularly searched keywords grouped by the researchers into five categories—"Immunity," "Eating behavior," "Food safety," "Food scares and concerns," and "Covidscare." showed a significant increase in searches for immunity boosters and vitamin supplement brands like "ayush" Vitamin C and zinc supplements strengthen the immune systems of most Indian internet users (n = 572) and 71.9% eat vitamin C-rich foods. Respondents used ginger (62.9%) and garlic (50.9%) from India. Doctors gave some responders COVID-19 immunity-boosting advice, but most obtained them from social media. Health literacy and media enhance responsible health information use, says this study [16].

Reddy (2022) explored societal obesity is on the rise as a result of social restriction measures, which lead to less physical activity and more consumption as a result of boredom at home caused by a shrinking range of motion. The impacts of the COVID-19 epidemic have prompted people's lifestyles to change from those formerly operating offline to online, including how to procure food. Online food delivery (OFD) is a platform that food service providers work with to reach consumers more easily, thanks to large-scale social restriction rules. The purpose of this research was to determine whether or not office workers' nutritional health improved after utilizing an app to have meals delivered to their offices during the COVID-19 outbreak. This study used a cross-sectional design and was based on analytical observation. Participants included 408 employees in Jakarta who were affected by the COVID-19 pandemic. In order to scale test results to the variable data scale, the data analysis technique utilized SPSS 20. A rise in both body mass index and nutritional status is well-documented [17].

Martha et al. (2021) aimed from past five years, Indonesian communication technology has grown significantly, meeting community needs. Food delivery apps are popular. Therefore, neighbors would eat differently daily. This study studied individual and societal factors affecting Depok City's youth's OFO behavior and OFDS-related high-risk food consumption. This cross-sectional study included 686 20-39-year-olds from Depok City, West Java Province, Indonesia, who lived there for six months. Alchemer (previously SurveyGizmo) conducted it. Descriptive statistics described all variables. OFO frequency and OFDS high-risk food eating were assessed by chi-square and T-tests. Multi-logistic regression predicts. Personal and socio-environmental variables predicted high-risk food eating, whereas OFDS pleasure was the biggest predictor of OFO behavior frequency. Risk, benefit, hurdles, OFDS features, satisfaction, socio-environmental impact, perception, and online food choice affected OFO behavior. OFDS knowledge, online food choice, attitudes toward benefits and features, contentment, socio-environmental influence, and perceptions were also linked to high-risk food consumption. Conclusion Diet, social environment, and satisfaction are OFDS factors. Studying OFDS-NCD is crucial given these findings [18].

Agarwal et al. (2013) examined that the third of India's urban population lives in squalor and poverty. Food insecurity persists for this group. But the evidence is scant. In an underserved urban slum of Delhi, India, this study examines experiential household food insecurity levels and drivers using the internal validity and reliability of the measure. 410 adult females were questioned in their homes using a four-item substitute for the US six-item short-form food security scale to assess food security. They employed multiple logistic regression to find a link between HFI and socio-demographic and household economic variables. Cronbach's alpha and Rasch-model-based item fit statistics assessed reliability and internal validity. 51% of households experienced food insecurity. An unemployment-to-employment ratio more than 3:1 and a low household standard of living predicted HFI. 0.8 Cronbach's alpha. In addition to improving behaviors and entitlement access, urban poor HFI programs should explore links to existing work schemes, skill upgrades, and potential employers. Original and updated scales were reliable and easy to use. The subjective evaluation's relationship to food security and societal expectations needs further study [19].

METHODOLOGY

Study design and sampling

A cross-sectional, web-based study was conducted between **January and March 2025**, targeting **working adults in urban India**. The inclusion criteria were: adults aged **25 years and above**, currently employed in **government, private, or self-**

employment sectors, residing in Tier-I Ahmedabad, and who used online food delivery applications (≥ 1 time/month). Convenience and snowball sampling methods were used to recruit participants and facilitate wide distribution. The minimum sample size was calculated using the following equation with a confidence interval of 95%:

$$N = \frac{z^2 \cdot P(1 - P)}{e^2}$$

where $z = 1.96$, $P = 0.5$, $e = 0.05$, yielding 384 participants, plus 20% attrition, resulting in a final required minimum sample size of 460. A total of 472 working adults completed the survey and were included in the final analysis.

The study participants were approached with the help of a web link that referred to an online survey that was conducted on Google Forms and distributed through professional networks (LinkedIn™, email groups, WhatsApp™ groups at the workplace). The respondents were also advised to share the URL of the survey with others and friends. The survey had an information sheet and consent form on the first page. The study objectives were read and the participants had to give electronic informed consent before getting access to the questionnaire. Participants were also screened using questions to guarantee that they met the inclusion criteria. The survey took about 812 minutes to complete. The principal investigator took care of the ethical approval of the Institutional Ethics Committee.

Questionnaire design

The researchers developed the data collection tool based on the literature review of the online food delivery application use, online food environments, and dietary quality measurement. The first version was comprised of 38 Likert-scale, dichotomous, multiple-choice, and checklist closed-ended questions. The tool was rated by a panel of four professionals with background in clinical nutrition, public health, and behavioural sciences, on the criteria of clarity, content relevance, redundancy, and language. Any item that had less than a 70 percent consensus was amended or eliminated. Cronbach alpha was used to determine the reliability of the instrument and the results were 0.77 which was acceptable internal consistency of the instrument.

The questionnaire that was finally created had four parts with 24 closed-ended questions:

- Sociodemographic factors: age, sex, occupation industry, working hours, salary, residence type and home arrangement.
- Use of online food delivery app: the most used food delivery platforms (Swiggy, Zomato, Zomato), how often people order, the type of food ordered, money spent on it every month, and the determinants of food choice (price, appearance, delivery time, the presence of healthy food, nutrition labeling).
- Dietary quality evaluation: a scaled scoring system based on a modified Healthy Eating Index (HEI) evaluating the frequency of intake of fruits, vegetables, whole grains, fried food, sweet drinks, and processed foods.
- Perceptions and awareness: healthy food availability perceptions on apps, nutritional information awareness, and barriers to healthy choices as well as perceived impact of app use on dietary behaviours.

The last survey pilot tested in 20 working adults in the city of Delhi NCR; no revision was necessary. The pilot test data was not included in the analysis.

Data analyses

Categorical variables were described through the use of counts and percentages as descriptive statistics. The number of times the online food delivery apps have been used was included as a dichotomous variable:

Frequent: Daily (4 6 times/week), 2 3 times/week.

Rarely used: once/week or once/month.

The KolmogorovSmirnov test was tested to determine normal conditions of the continuous variables (e.g., the scores of HEI) and failed to do so; hence, non-parametric tests. Categorical variables (including dietary quality and perceived quality) were assessed by means of cross-tabulations and Chi-square tests. Two-group comparisons were performed using the Mann Whitney U test and a comparisons involving more than two independent groups used the Kruskal Wallis H test. A p-value less than 0.05 was taken as significant.

RESULTS

Table 1 provides a summary of the sociodemographic traits and the usage behaviour of online food delivery applications in 472 working adults. Most of the participants were aged between 31 and 40 years (47.2%), and this age group had the greatest percentage of frequent user (57.0%), and age had a significant relationship with usage ($P = 0.03$). The percentage of males in the sample was 56.4 but there was no significant difference in the use of OFDA between sexes. The highest representation was found in Delhi NCR (32.8%) and Mumbai (24.1) and there was no important difference in frequency of use by cities. Living situation showed a close correspondence with it with participants living alone (21.6) much more likely to be frequent users (73.5) than those who lived with family (46.5). The income also observed a statistically significant correlation, with higher-income groups ($>60,000$) having higher rates of usage (60.7% vs. 37.3) compared to other lower-income groups. Of all the factors of influencing food choice, food appearance (63.4%), price (74.1%), and hygienic status (51.3) has the highest frequency of reporting with significant relationships found between food appearance ($P = 0.04$), time of delivery ($P = 0.03$), healthy option availability ($P = 0.04$), and hygienic status ($P = 0.05$), showing that food appearance, time of delivery, healthy option availability and hygienic status have a significant relationship with the likelihood of frequent use.

Table 1. Sociodemographic characteristics and usage trends of online food delivery applications among working adults (n = 472)

| Variable | Total n (%) | Frequent users n (%) | Infrequent users n (%) | P-value* |
|--|-------------|----------------------|------------------------|----------|
| Age (years) | | | | |
| 25–30 | 161 (34.1) | 72 (44.7) | 89 (55.3) | 0.03 |
| 31–40 | 223 (47.2) | 127 (57.0) | 96 (43.0) | |
| 41–50 | 88 (18.6) | 48 (54.5) | 40 (45.5) | |
| Sex | | | | |
| Females | 206 (43.6) | 103 (50.0) | 103 (50.0) | 0.21 |
| Males | 266 (56.4) | 144 (54.1) | 122 (45.9) | |
| City | | | | |
| Delhi NCR | 155 (32.8) | 89 (57.4) | 66 (42.6) | 0.17 |
| Mumbai | 114 (24.1) | 55 (48.2) | 59 (51.8) | |
| Bengaluru | 88 (18.6) | 50 (56.8) | 38 (43.2) | |
| Chennai | 49 (10.4) | 21 (42.9) | 28 (57.1) | |
| Hyderabad | 41 (8.7) | 23 (56.1) | 18 (43.9) | |
| Kolkata | 25 (5.3) | 11 (44.0) | 14 (56.0) | |
| Living situation | | | | |
| With family | 370 (78.4) | 172 (46.5) | 198 (53.5) | <0.001 |
| Living alone | 102 (21.6) | 75 (73.5) | 27 (26.5) | |
| Monthly income (INR) | | | | |
| <30,000 | 142 (30.1) | 53 (37.3) | 89 (62.7) | <0.001 |
| 30,000–60,000 | 180 (38.1) | 103 (57.2) | 77 (42.8) | |
| >60,000 | 150 (31.8) | 91 (60.7) | 59 (39.3) | |
| Factors influencing food choice | | | | |
| Food appearance | 299 (63.4) | 168 (56.2) | 131 (43.8) | 0.04 |
| Price | 350 (74.1) | 183 (52.3) | 167 (47.7) | 0.21 |
| Time of delivery | 225 (47.7) | 128 (56.9) | 97 (43.1) | 0.03 |
| Healthy options availability | 108 (22.8) | 65 (60.2) | 43 (39.8) | 0.04 |
| Display of nutrition info | 76 (16.1) | 39 (51.3) | 37 (48.7) | 0.49 |
| Hygienic status | 242 (51.3) | 134 (55.4) | 108 (44.6) | 0.05 |

*P-value based on the chi-square test at a 5% level.

Table 2 shows the socio-demographic factors that have an impact on the perception of participants about ordering healthy food using food delivery apps. There was the strongest association between frequency of the use of the OFDA and monthly income and perception statements. More frequent users were much more likely to report more appetite and food consumption with the use of apps ($P < 0.001$) and to indicate that they had altered the way they eat because of using apps ($P < 0.001$). Income also had a strong effect on several perceptions: higher income was more associated with the report of more appetite ($P < 0.001$), readiness to pay more on the healthier choices ($P = 0.02$), and the willingness that the calorie information would change their decision ($P = 0.04$). Investigated living situation indicated that there was a strong correlation between this perception and eating habits that have been altered by the use of apps ($P < 0.001$), which could imply that living alone makes people more prone to changing their eating habits. Age and city of residence did not have much effect, and the significant differences were only shown in the comprehension that apps alter eating habits between the cities ($P = 0.008$). Other perceptions, including awareness of healthier choices, limited access to healthy choices, and macronutrient information did not vary significantly across the majority of the demographic groups. On the whole, the table reveals that the frequency of using apps and income level is the most important factor that determines the perceptions about the option of healthy food on food delivery websites.

Table 2. Socio-demographic effects on participants' perceptions about healthy food ordering through food delivery apps

| Item ^a | Sex (Mann-Whitney U) | Living with family (Mann-Whitney U) | Frequency of use (Mann-Whitney U) | Age (Kruskal-Wallis H) | City (Kruskal-Wallis H) | Income (Kruskal-Wallis H) |
|---|----------------------|-------------------------------------|-----------------------------------|------------------------|-------------------------|---------------------------|
| Ordering online increases my food intake and appetite | 0.41 | 0.12 | <0.001 | 0.31 | 0.44 | <0.001 |
| I am willing to pay higher for healthier food | 0.68 | 0.18 | 0.35 | 0.89 | 0.62 | 0.02 |
| Calorie display would affect my choice | 0.07 | 0.09 | 0.10 | 0.29 | 0.71 | 0.04 |
| Macronutrient display would affect my choice | 0.33 | 0.14 | 0.26 | 0.22 | 0.97 | 0.28 |

| | | | | | | |
|--|------|--------|--------|------|-------|--------|
| Apps make me aware of healthier alternatives | 0.09 | 0.05 | 0.06 | 0.32 | 0.09 | 0.22 |
| Apps have changed my eating habits | 0.22 | <0.001 | <0.001 | 0.92 | 0.008 | <0.001 |
| I often find it difficult to locate healthy options | 0.29 | 0.47 | 0.19 | 0.41 | 0.49 | 0.15 |

(Significance $P < 0.05$)

Table 3 examines socio-demographic effects on participants' attitudes toward food safety and delivery hygiene when ordering through food delivery apps. Frequency of use and income emerged as the strongest influencing factors. Frequent users were significantly more likely to report that packaging influences their food choices ($P = 0.004$), that food temperature indicates quality ($P = 0.02$), and that overall delivery hygiene matters, reflecting greater sensitivity to safety-related aspects among regular app users. Income also played a major role, significantly affecting perceptions related to food preparation hygiene ($P = 0.04$), packaging influence ($P = 0.01$), and the belief that food temperature indicates safety ($P < 0.001$), suggesting that higher-income groups place greater emphasis on safety and quality indicators. Age and city of residence showed limited influence, with significant associations only for packaging influence ($P = 0.04$) and cleanliness of delivery staff ($P = 0.05$) across certain cities. Living situation and sex showed no significant differences across most items, indicating that hygiene-related perceptions are fairly consistent across these groups. Overall, the findings indicate that frequent OFDA users and higher-income individuals demonstrate stronger attention to hygiene, packaging, and safety cues, which likely influence their purchasing decisions and trust in digital food delivery environments.

Table 3. Socio-demographic effects on participants' attitudes toward food safety and delivery hygiene

(Exact replica of Table 3 from PDF with A1–A7 items)

| Item^b | Sex (Mann-Whitney U) | Living with family (Mann-Whitney U) | Frequency of use (Mann-Whitney U) | Age (Kruskal-Wallis H) | City (Kruskal-Wallis H) | Income (Kruskal-Wallis H) |
|---|-----------------------------|--|--|-------------------------------|--------------------------------|----------------------------------|
| Hygiene rating on apps is useful | 0.33 | 0.28 | 0.92 | 0.13 | 0.26 | 0.48 |
| Food is prepared and delivered under sanitary conditions | 0.20 | 0.34 | 0.14 | 0.52 | 0.49 | 0.04 |
| Packaging influences my food choice | 0.05 | 0.61 | 0.004 | 0.04 | 0.41 | 0.01 |
| Eco-friendly packaging influences my food choice | 0.16 | 0.11 | 0.18 | 0.38 | 0.19 | 0.36 |
| Driver's cleanliness affects my perception of hygiene | 0.82 | 0.27 | 0.06 | 0.57 | 0.05 | 0.17 |
| Food temperature indicates quality | 0.18 | 0.79 | 0.02 | 0.51 | 0.95 | 0.11 |
| Food temperature indicates safety | 0.59 | 0.65 | 0.07 | 0.05 | 0.07 | <0.001 |

(Significance $P < 0.05$)

DISCUSSION

The current research investigated the use of online food delivery application (OFDA) and how it is linked to the quality of diet among urban Indian working adults. The results show that over fifty percent of the participants utilized OFDAs at least 2–3 times per week, with Swiggy becoming the most widely used by the participants. The trend of the growing use of OFDAs is consistent with the global trends according to which the transition to the digital environment of food has increased the availability of the conveniences to young and middle-aged groups of the population working [20]. Like earlier studies, more frequent use of app was linked to a younger age, higher income, and being alone, thereby demonstrating the impact of lifestyle and work behaviour on food buying behaviours [21].

It was also discovered in the current research that the most influential factors in food choice were price and food appearance, whereas the availability of healthier foods and nutrition information had a minor effect. These findings are in line with previous research in university and adult population, which reported that the cost, convenience and the taste tend to be more important than nutrition. Even though a big percentage of the participants said that they seek healthy choices when placing a food order with the help of OFDAs, fast food is the most popular type of order. This is indicative of the wider truth of online food landscape where unhealthy and energy-rich food is predominant in the apps list and is actively marketed more than the healthier options [22].

The results showed that the higher the age, the higher the living alone and the higher the income were, the higher the frequency of the use of the OFDA. Other studies carried out in other world regions have also shown similar trends because demographics like age, living status and economic status determined the ordering behaviours. A person living alone might be more dependent on food delivery because of insufficient time, convenience, or social pressure of the family members on the choice of food. This is in line with the fact that the condition of living and workplace conditions determine dependence on OFDAs as written in the existing literature.

Fast food and meal products with high calorie content are still very obvious and readily available on apps in the context of the digital food environment in India". This could help to increase the consumption of discretionary foods as happens in other nations [23]. The studies conducted on online food platforms reveal that most of the food products provided are unhealthy, and more healthy food products usually cost more, which affects the decision to buy them. This was also the case in the results of this research since high prices and low taste appeal were identified by the participants as significant reasons why they do not order healthier meals. This highlights the importance of the intervention to make nutritious choices more affordable and accessible on the Internet.

Participants also were studied with regard to their perception of healthy food ordering. Quite a number of the participants concurred that the use of OFDAs raised their appetite, caloric intake, and snacking behaviour, which had earlier been associated with elevated caloric intake among regular users. Over fifty percent said that they had a bad experience finding healthy alternatives on apps, and only a small proportion indicated a desire to spend an extra amount on healthier food. The frequency of use, income, and living situation seem to be the factors affecting these perceptions [24]. Evidence provided internationally indicates that the indirect effects of the formation of unhealthy eating patterns might be provided by the volume of portions it offers and the advertising and having discounts on high-calorie foods. This could be the cause of low nutritional value of the diets used by the frequent users in the current research.

There was also a measure of perceptions in regard to food safety and hygiene. A majority of the respondents thought that hygiene rating would be helpful in placing an order, which aligns with past studies indicating that consumers prefer transparency and cleanliness in online food places. The quality of packaging and the temperature of meals affected the perception of hygiene and food safety, which also corresponded to previous research that emphasised the significance of packaging, personnel appearance, and delivery conditions in developing consumer trust [25]. As the number of the OFDAs in India increases at a very high rate, it is important to ensure that the food safety standards, best treatment methods, and clean delivery mechanisms are observed.

These findings have a lot of implications in as far as the public health is concerned. The common use of OFDAs can put at risk the development of unhealthy eating habits, excessive intake of fats, sugar, and sodium, and finally non-communicable disease. Online food apps can become important intervention areas to facilitate healthier eating behaviors through making healthy food more visible, cheaper, and attractive [26]. Mandatory calorie labeling, hygiene rating labels, and healthier menu filters are other possible motivators to have a positive impact.

This paper has certain limitations. It is cross-sectional in nature and limits the possibility of determining causality between quality in the diet and usage of the apps. Convenience and snowball sampling can be biased in their responses hence restricting the ability to generalize to the whole working Indian population. Moreover, the use of self-reported dietary behaviours is likely to be susceptible to recall and social desirability bias. These shortcomings notwithstanding, the study offers important perspectives on the patterns of usage and dietary behaviours in working adults in relation to the use of the OFDA, and reveals the possibility of vital areas of policy and intervention in the dynamic digital food ecosystem of India.

CONCLUSION

The current research established that convenience, price, and visuals were significant determinants of food selections in urban India among the working population who use online food delivery apps. The results indicate that, more often than not, frequent users of the apps order food items that are rich in energy, struggle to locate healthy food choices on the apps, and experience some transformation in their eating habits, including snacking more often and eating more. Such trends reflect the necessity of having more affordable and appealing healthy food choices offered by OFDAs so that they appeal to their customers based on their needs. Another recommendation of the study is to enhance the availability of nutrition information, better the sight of healthier options and how much more transparent food hygiene standards would likely promote healthier food behavior in working adults. The findings can be used to inform upcoming public health interventions and policies to encourage healthier food behaviours in online food settings. Future studies can be directed at the development of app-based solutions to increase the presence of healthy food, its effectiveness in relation to the quality of the diet, and the long-term health consequences of using OFDA in varied working groups.

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