

“Customer Perception About Eating Street Food In Pune City After Unlock Phase -3”

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Abstract:

this research paper measures the perception of eating street food in Pune city after unlock phase 3 of COVID-19. This pandemic affected the hospitality industry worst as this was the first industry to close and it opened in phases street food is major part of the hospitality industry yet it is the unorganized sector as Street food is important in developing countries to meet the needs of millions of urban dwellers, who daily consume a wide variety of foods that are relatively cheap and easily accessible (Chen et al. 2008).customers were asked a structured questionnaire in the multiple-choice format using Google forms as a tool.

Key word: COVID-19, Street Food, FSSAI, NASVI, PUNE, Customer Perception.

Objectives:

1. To understand the driving factors to eat street food
2. To study the impact of COVID -19 on food choices of customers in reference with street food

Hypothesis

H₁ - COVID -19 has an impact on frequency of eating street food.

H₂ - Driving factors to choose street food vendors have changed due to COVID-19.

Yatmo, 2008 cited in Sangwan &Boora, 2015) the definition of street food is food which is sold on streets near colleges, hospitals, schools, markets, cinema halls, busy public places, they are often served or cooked or prepared on a pushcart or small kiosks. Customers prefer street food they are readily available for immediate consumption they can be eaten without further processing. Or preparation is brought at home or place where the consumer wants to eat later. They are comparatively cheap over the restaurant food.

(Cuneo, 1998; Madran, 1999 cited in Sezgin&Şanlier, 2016) people prefer to eat outside or street food because they have less time to cook at home, the lifestyle of people have changed drastically in cities where people have fast-moving life, the contribution of women working outside the home is also changed, migration of people from rural life to urban cities also increased the demand of selling street food as well as eating street food as it is easily available at a lower cost, in developing countries. (Holy&Makhoane, 2006; Muzaffar et al.,2009; Steyn et al.,2011 cities in **Sezgin & Şanlier,2016**)The most popular street food is very convenient beverages.

(Barro et al., 2002; Buscemi et al.,2011; Kok and Balkaran, 2014 cities in Sezgin & Şanlier 2016)street food is an essential part of any country’s cuisine, it reflects the country’s culture, the way people eat, use local ingredients, and sometimes fusion food where flavours are mixed with local and international flavours, Street food contributes to the tourism industry greatly, where it attracts domestic as well as international tourist, food tourism has taken a new form and its new trend where people would take street food tours and explore the food from streets to authentic cuisine. The popularity of street food has

increased over the years as it contributes to the employment generation and earns profits for local people, therefore, lot of people would want to sell the street food, these food are highly in demand for the dominant reasons like their tastes, ease of availability, low cost, social and cultural values are attached its habit of people to eat street food.

Growth of Street Vending

(Sharit&Bhowmik, 2005) street vending can be classically defined as a person who sells the goods to the customer on the street without a permanently build structure like a shop or hotel. Vending on streets is very common in Asian countries it is a part of the culture the growth of vending on street is categorically increased in 1998 due to financial crises specifically as there was a sharp rise in street vending from food to clothes in countries like India, Thailand, Singapore, and the Philippines. Workers who lost their jobs in formal sectors due to the financial crises ended up becoming street vendors to make their living. the synonym for street vendors are often termed as Hawker. In India, the National Policy for Urban Street Vendors/Hawkers explains that street vendors represent approximately 2 percent of the population of a metropolitan area. The total number of street vendors in the country is estimated at around 10 million. It is very important that to highlight the fact that how these street vendors survive or gained popularity over the period and sustained the huge competition at all level, the main reasons were they contribute to the economy through generating employment for the people. they cater to the needs of people from a different class of economy such as poor, urban poor, middle class. On the contrary, they are often termed as illegal, and the vendors are often termed as criminals. They are often harassed by the local authorities such as the police. , it is often considered that they do not have legal authority for the business. They are popular because they cater to the needs of the urban population which is neither provided by municipalities and retailers.

(Pilz, Gengaiyah&Venkatram, 2015) India is a country where one can say it is a unity in diversity from culture to population to the economy. It's having the world's largest young population. India's labor markets divide into two categories which are a formal economic sector with an organized labor sector and an unorganized sector that informally contributes to the economy. This economic sector and the labor market is very large by international standards, and Indian policymakers cannot afford to ignore it in terms of training and labor market policy (ILO 2002; King 2007)so the government has taken initiative to organize this sector by regulating the street vendors.

Indian Government initiative for street vendors policies and laws: according to the PIB of Gov. of India published on22sept 2020 Delhi Street Vendors Act, 2014 Implemented by Respective States/Union Territories by Framing of Rules and Schemes Number of Street Vendors Identified, so far, is 18, 25,776.all over India and in state of Maharashtra street vendors are numbered as 1, 10,708. The Street Vendors (Protection of Livelihood and Regulation of Street Vending) Act, 2014 is implemented by the respective States/ Union Territories by framing of Rules and Schemes. For the upliftment of the street vendors GOI has launched a scheme where street vendors can take the loan, Ministry of Housing and Urban Affairs has, on June 01, 2020, launched Prime Minister Street Vendor's Amta Nirbhar Nidhi Scheme (PM SVANidhi). It aims at facilitating collateral-free working capital loans up to Rs 10,000 of 1-year tenure, to about 50 lakh street vendors across the country. It also provides for incentives in the form of interest subsidy @ 7% per annum on regular repayment of loan and cash-back up to Rs. 100 per month on undertaking prescribed digital transactions. The government has understood the importance of the safety of eating street food with the help of FSSAI form 2011under the program of “clean street food hub program” this program creates awareness and educates the street food vendors on safety and hygiene standards to be followed. Clusters are formed across India in one cluster 50 street food vendors are there they are trained and audited. This program now has 144 clusters which cover approximately 2 million Streets food vendors.

NASVI: is a National Federation of street vendor organization working for the protection of the Live hood vendors across the country beginning as a network in 1998 it was registered in 2003 under the societies regulation act of 1816 the main objective behind establishing NASVI Is to bring together the

street vendors organization in India to collectively struggle for micro-level changes which had become imminent to support put the lives of around 10 million vendors which stood severely threatened due to outdated laws and changing policies practices and attitudes of the powers that be. Creating awareness among the street vendors and assisting the state government and multiple bodies in implementing the law and conduct a national convention and annual general meeting every year with vendor leader across the country also an executive committee meeting is conducted twice a year to review and plan strategies for the future reference.

FSSAI: FSSAI: FOOD SAFETY AND STANDARDS ACT, 2006 is established by the Ministry Of Law And Justice(Legislative Department)New Delhi, the 24th August 2006/Bhadra2, 1928(Saka)The Act of Parliament received the assent of the President on 23rd August 2006. The government's objective to include FSSAI is to confirm that the food products that are being delivered to the consumers are wholesome and acceptable for human consumption. FSSAI is in control of protecting and promoting public health. And therefore the authorized body to penalize non-compliant businesses. This act establishes for the safety of food which is mandatory for all the food sellers from street food vendors to the 5 star hotel and food manufacturing industry all must have a license issued from the FSSAI Under this act food safety officer is appointed and local levels the officer is responsible of the duties to do safety audits, food manufacturing, selling units, take samples to examine them if they found any wrong practices are administered, companies, manufacturing units, and vendors are charges with fine depending upon the severity of the case it may lead to closing down of the outlet.

COVID-19 pandemic co-relation of selling street food and eating street food:

Corona is the name of a virus group. These viruses are already known to India. SARS disease found in 2003 or MARS disease found in 2012 are also diseases caused by a corona virus. But the corona virus that was detected in the outbreak in Wuhan, China, in December 2019, is different from the previous corona virus. Therefore, it is called Novel, the new corona virus. The World Health Organization has named the disease Covid-19.

Origin of Corona:

Corona virus is passed on from Animals to humans. It is found mainly in the bats. Due to innumerable deforestation, increasing urbanization, raw meat-eating habits, etc., microorganisms in the animal world enter the human body.

Preventive Measures to control the Disease: WHO declares this as pandemic therefore all the countries in the world announced lockdown as preventive measures in India first lockdown announced on 23rd march and implemented on 25th march 2020 for 15 days. Later on according to the cases in states its norms were lifted. In-state of Maharashtra it was till august from September 3rd government started lifting rules under the campaign named "Mission Begin Again" where they permitted the hotel to run on 50%occupancy.but stand-alone restaurants and street food vendors were still not allowed to sell the food over the counter only home deliver were allowed

Literature review:

1. WHO COVID-19 report on food safety report published on 21 Feb. 2020 the International Food Safety Authorities Network (INFOSAN), national food safety authorities are finding out more information on the possible presence of covid-19 on foods trade internationally as well as potential transmission of virus form this food, they are finding out how long it will survive on it and generals rules for the eating and consuming raw food, undercooked animal product, milk, and milk products how it has to be handled to avoid cross-contamination as well as Covid -19 virus risk following safety points they have displayed on the manual of WHO for safe food For consumption in hotels and selling of the food. Those key points are

- keep clean during transportation
- separate raw and cooked food while storing and during transportation from one place to another place
- cook thoroughly while cooking and serving the food, hot food hot cold food cold

- Keep food at safe temperatures.

Use safe water and raw materials while cooking and serving the food

2. (On the press release from NASVI29/9/20) organization “Campaign “Bring Them Back” to bring thousands of street food vendors back to their livelihood” NASVI will train and provide access to COVID-19 protection kit to Street vendors in India. For this cause NASVI raised funding from common people from all across the world donated from Rs 10 to Rs 10,000/- to support the vendors and bring them back on their feet after the lockdown which affected lacks of street vendors across the country. Ms. Sangeeta Singh – Head Street food Program gave the introduction and informed the vendors about their hygiene & safety. Ms. Siya Mishra – gave training to street food vendors informing them about the hygiene practices they have to follow during and post COVID – 19 pandemic. The campaign aims to provide training and access to hygiene. Celebrity chef MR. Ranvir Brar in association with NASVI and Food Safety and Standards Authority of India (FSSAI) decided to conduct online training workshops for street-food vendors to show them the best practices of preparing food safely during a pandemic. The idea is not only to provide these vendors with the equipment they need—gloves, sanitizers, hygiene kits—to restart their businesses but also to give them the skill-set to run their ventures healthily and safely, At the same time it will help them come out from the suffering financial condition by instilling public confidence in street vending. On successful completion of the training modules, Participants would be certified by FSSAI, giving a boost to their businesses.

3. (NASVI Press release 06 Oct'20) In a first of its kind initiative, the Ministry has coordinated with the key stakeholders including Municipal Corporations, FSSAI, Swiggy, and GST officials to ensure that necessary prerequisites are completed for this initiative, Govt Partners Swiggy to Take Street Vendors Online the initiative is part of PM SVA Nidhi Scheme introduced on June 01, 2020, to help street vendors impacted by the Covid-19 pandemic resume livelihood activities. Swiggy has partnered with the Housing and Urban Affairs Ministry (MoHUA) to enable street vendors to go online. As part of the partnership, Swiggy will be onboarding 250 street food vendors in Delhi, Ahmadabad, Chennai, Indore, and Varanasi. Later, it will be rolled out in other parts of the country. This platform will give Street foods vendor’s online access to its consumers and help these vendors grow their businesses

4. According to Akash Chandrashekhar Gulankar June 2020 article named “Hit by lockdown, Pune’s food joints, trinket shops turn green grocers” most of the street food vendors have changed the business they have started selling groceries and fruits and vegetables upon interview with Mr. Ismail Bagwan, owner of popular mutton joint Khwaja Garib Nawaz (KGN) in Pune city has turned his joint into a vegetable shop after his sales drooped because of the nationwide lockdown triggered by the corona virus pandemic. Bagwan isn't the sole one to shift from a trade, established over years, to another to create ends meet. Reasons to maneuver to the selling fruits and vegetable during the lock down as only essentials services were allowed and fruits and vegetable comprise that category.

5 May 12, 2020 Sanjana Shenoy from curly tails writes in her article about street food vendors are undergoing E-training on hygiene, protective and safety measures to be adopted so as to fight COVID-19 in association with The National Association of Street Vendors of India (NASVI) they're going to train 500 street food vendors in partnership with FSSAI it will assist street food vendors in earning their livelihood by strictly following certain safety measures. As an element of the primary phase, vendors got training on Saturday. They informed and educated about the various sorts of precautionary measures which include food, safety, health and hygiene. They were also taught about the utilization of disposal plates, glasses and therefore the safe use of alcohol-based hand sanitizers. Except for this, the importance of social distancing and hand wash was also explained to them. Upon interview with Mr. Bhaskar from NASVI he said street food vendors are most affected because of lockdown as most of the street food vendors are self employed, they often borrow money from money lenders, he mentions that NASVI has appealed to the Ministry of Urban Development and National Livelihood Mission to grant interest-free loans to those street vendors.

6. (Ranka.S, 2020) Research paper titled “How Corona Virus could affect the Culture of Eating Special respect to Street Food: THE NEW NORMAL” “this research paper talks about how food industry will accept the new normal for the food and restaurant industry specifically street food vendors will adopt the new changes which are totally supported the hygiene factor, sanitation, social distancing. This study was conducted to judge the requirement of food sanitation, food safety knowledge and practices to cope up with COVID-19 so people can eat street food with assurance. Findings presents that street food is a very important a part of the food supply chain management, they generate good employment in addition as contribute to the economy, they're facing challenges in COVID-19 as people are paying more attention to the security and hygiene standards. lastly research note that consumer will still eat form street food vendors they're trying to find food which is prepaid in additional hygiene and sanitize conditions together with the private hygiene followed like wearing caps and aprons , and following social distancing norm.

7. (Reddy. A, Ricart.S & Cadman T, 2020) Research paper titled “Driving factors of food safety standards in India: learning from street-food vendor’s behavior and attitude”. This research paper talks about safety standards followed by the road food vendors in Delhi, and Hyderabad survey was conducted in numerous socioeconomic sectors for Delhi and Hyderabad 200 street food vendors. In findings it's been noted that about one third of the street food vendors don’t follow the protection norms while selling and manufacturing food, they need not registered themselves to run the food shops or kiosks this norms laid by the FSSAI in India. It’s also noticed that they lack in personal hygiene standards. The results shows that street food vendors who are located in higher economic spending area. Street food vendors do follow safety norms also as personal hygiene standards. Key finding from the paper is food safety and hygiene standards laid by the governments at par with the developed countries but actual implementation by street vendors isn't very assuring a number of them follow where others don't follow them in the slightest degree in Delhi city where as Hyderabad street food vendors were more tuned in to food safety, both in registering with the FSSAI and in terms of visits from food inspectors. The results of the research also suggested that street-food vendors in Hyderabad were more concerned about obtaining a food safety license or registering with an office than street-food vendors in Delhi. In suggestion research suggest that The FSSAI and street-food vendors associations, along with local administrations, should collaborate in registration procedures, and basic amenities should be made available to street vendors to enable them to extend their awareness about, and practice of, good food hygiene

8. 21 June 2020 article by Krishnankutty. P published in the online newspaper named the Print “Street Food Vendors Are Back After Covid Safety Training, Now Hoping For Business to Return” street food vendors are struggling to urge the business back though they're following norms of food safety and social distancing, regardless of the very fact that they stand call at the heat all day and it's the peak of summer, they're conscientious about wearing their masks and gloves and have even taken on additional costs to confirm food hygiene. Varma tells The Print. Varma is one in every of 1,500 street food vendors across India who has completed digital training on Covid-19 food safety guidelines, facilitated by the Food Safety and Standards Authority of India (FSSAI) in partnership with the National Association of Street Vendors of India (NASVI). Many like Varma have received food safety training and certification (FOSTAC) that they display on their carts or stalls. According to Sangeeta Singh, head of the street food program at NASVI, the certification is the first step toward providing good food and safe food to boost the morale of the street food vendors and consumers “The training, began during lockdown so it occupied street food vendors and that they had 100 street food vendors per day for the training which incorporates two- to three-hour Zoom sessions spread over two days, focuses on food hygiene and Covid precautions. It’s already given vendors confidence and that they are getting a decent response. upon an interview with Mr.Jain who is that the owner of the Bengali sweet cart running from 1963 said his business suffered lots as most of the worker went home they didn't return, having said this NASVI said that they're in talks with Swiggy & Zomato and other food delivery platforms to deliver the street food at home, on the other hand, Mr.Jain raised the question about why people would pay extra on home deliver? As people favor eating street food on the street that’s enjoyment. Further, he adds whether street food is going to be redefined in a very post-Covid world.

9. (Sabbithi. A, et al,2017) Research paper titled “Identifying critical risk practices among street food handlers “this research paper explain the way to prioritize food safety practices by street food vendors which can deliver more safe food to eat and can avoid microbial contamination through street food .the study was conducted in the city of Hyderabad in India. The conclusion of the study notes that food safety training programs must conduct on the regular basis.

10. (Sezgin, & Şanlier. N,2016) this research paper titled “Street food consumption in terms of the food safety and health” explains street food and its consumption in correlation to hygiene and sanitation, researcher highlight /focused on why customers prefer street food over restaurant food when it's safer to eat or safety and hygiene is more followed within the restaurant, street food is preferred over a home-cooked food or restaurant the most dominant reasons were it is easily available, and priceless money than the restaurant. Studies also show that where street food's sold they don't follow any safety and hygiene guidelines, in many countries, there aren't any legal rule and safety implementations don't seem to be set. Studies also rule that street food carry a lot of food and hygiene risk, like illegal food substitutes, a lot of chemicals, additives are being employed besides microbial food contamination. Studies also revealed that the majority of the road food vendors don't follow basic hygiene standards and procedures, while preparing, storing food, therefore they have to travel for educational training programs particularly on hygiene standards and basic safety procedures.

11 (Sangwan.V & Boora.P, 2015) this research paper titled “A Study of the security Consumer Perception and Consumption of the street Foods Sold in Hisar City, Haryana” particularly talks about consumers' perception, preference, safety aspects and consumption of street foods. The research was conducted in Hisar city of Hariyana. Findings were from the chosen sample most of the working men (64%) preferred street food as their just the once lunch. it's been also found that girls student frequently consume street food over male students their frequency of to consume the street were alternate days. Most of the working men weren't bothered about food hygiene and food quality of street food vendors. Working women were more bothered about food hygiene and food quality. Students were more drawn to the street food for the taste they were ignorant of the food hygiene followed by the street food vendors. Street food vendors were lacking a lot of personal hygiene standards they were handling money with the identical hand from they were serving food with bear hand this might be the most dominant reason for food contamination. Researcher suggests that there's a strong need for food safety and private hygiene for street food vendors.

12 (Pilz.M, Gengaiyah.U&Venkatram.R., 2015) Research paper titled “Skills development in the informal sector in India”: The case of street food vendors. Research has studied the 49 street vendors across New Delhi and Coimbatore India for skill development. The research mentions that India has a large informal sector that contributes to the Indian formal economy where these street food vendors have not received any formal training to be street food vendors. This training is known as formal vocational education and training (VET). The author's findings show that though street vendors have not received formal training they have exceptional and expertise to sell the food to prepare the food they know what customers want, who their competitors are. They acquire these skills through observation and from the family. In an interview with them when asked about why they did not seek any formal education or training, they said that the main obstacle to learn is they are busy with the business that they run, the business is also uncertain as a lot of problems like t inadequate capital, licensing difficulties, no permanent location and soon hey deal while doing business on day to day basis. In suggestions authors suggest that government and NGO should develop the formal training program for the street food vendor to enhance the skill.

13 (Mahadevia. D, Vyas. S&Mishra.A March 2014) Research paper titled “Street Vendors in Ahmadabad, India”. In the present study, a survey was carried in Ahmadabad city on street vendors. In this research, the paper researcher proves that there are large sectors of informal workers that contribute

to the formal economy of India. In developing countries, 80% of the population makes their livelihoods by doing jobs in the informal economy. For the data 75 focus group participants per sector, plus another 75 workers for a total of 150 in each city-sector was chosen. They have been asked for information on the household profile and income sources of the workers. In conclusion, the researcher concludes that street vendors have a lot of competition to sell the goods, and the perishability of the good is also a problem because of storage space.

14. (Gadi. C, Bala. K, Kumar.A.,2013) Research paper titled “Study of Hygienic Practices of Street Food Vendors in Allahabad city, India and Determination of Critical Control Points for Safe Street Food”. This research paper mainly talks about personal hygiene and food handling practices followed by street food vendors in Allahabad city, for the study 30 street food vendors have been chosen as the sample for the study. 52 food samples were also collected for safety and checking any contamination which will have any potential for the food poisoning or coli and salmonella bacteria particularly, after studying the samples carefully tested in laboratories it has found that most of the food has the risk of salmonella and coli, due to un-purified water has been used while cooking the food, most potential food which caused the risk of food poisoning was sugar cane juice and pani poori. Contamination reason was poor personal hygiene, poorly maintained premises and poorly cleaned pots and pans, it has been also found that they do perpetration of food much before cooking and this unprepared food is exposed to pollution and dust which is more harmful to health. Researchers suggest that street food vendors need strong training towards following HACCP as well as personal hygiene so that it will minimize the risk of food poisoning and increase food quality.

15 (Garode.A&Waghode, 2012) Research paper titled “Bacteriological status of Street-Vended foods and Public Health Significance: A Case study of Buldana District” Research carried out in Buldana district of Maharashtra state, a total of 100 street food vendors were selected from the 60 food samples were collected. Out of which Pani poori and Rgada petice were found high bacterial load, named specifically E. coli and S.typhi the reason for this is the food was prepared in unhygienic conditions. In suggestions, authors suggest that standards of control measures needs to be improved for the street food vendors

16.(Tambekar. H, Kulkarni. V, Shirsat.S &Bhadange.D, 2011) Research paper titled “Bacteriological Quality of Street Vended Food Panipuri: A Case Study Of Amravati City (Ms) India” in present study survey was carried out in Amravati city, 11 locations were selected to collect the sample particularly Panipuri. As Pani Puri is the most popular street food as well it is preferred by different age groups also, on the study it is found that out of collected samples 93% of the paniporri carried the risk of bacterial pathogens such as Escherichia coli (41%), Staphylococcus aureus (31%), Klebsiella sp. (20%), Pseudomonas sp. (5%) and yeast (3%). These pathogens are highly responsible for food poisoning. For the contamination of the street food personal hygiene of vendors is also responsible. As they lack in food safety procedures while handling food such as they don't wear the chef's cap while serving food, they touch the food with bare hands and with the same hands they touch the floor or soiled dishes they do not wash with soaps or cleaning running water. The researcher suggests that local government should take cognizance of this and impose a strict rule on the street vendors to follow the hygiene as well as to train them on food safety and hygiene standards.

17.(Choudhury.M & et.al, 2010) Research paper titled “Socio-economic profile and food safety knowledge and practice of street food vendors in the city of Guwahati, Assam, India” Street food is an essential part of society, food culture in all countries. In the present study, a survey was carried out in Guwahati city. Surveyed included 80 street food vendors on the knowledge of hygiene standards, they were asked particularly are they aware of hygiene standard, food safety methods of procuring safe raw material to follow while preparing and serving food. 80% of the respondent Saied they are aware of the food and hygiene standards to be followed but they are not aware of the biological cross-contamination

that happens if these hygiene practices are not followed. Findings suggest that though street food vendors are aware of the food safety and hygiene standards they do not follow them. Study shows that they need strong training on food safety and hygiene standards, as the food that has been sold in the city by street food vendors are far from hygiene, the place where they manufacture food is way to unhygienic, the storing and buying raw material by the food vendors are far from satisfactory, personal hygiene standards were very poor of street food vendors. In the suggestion, the researcher suggests that street food vendors need good infrastructure which can be provided by local government, along with food safety and hygiene standards of training because food safety and hygiene cannot be achieved without providing good infrastructure. Capacity training also very important to increase knowledge and will create awareness about food safety training. The government should conduct audits for safety standards for street food vendors promptly.

18.(Bhowmik.S, 2005) Research paper titled Street Vendors in Asia mainly focuses on the scale of street food vendors in different countries, along with government norms for them, in different countries in Asia, in India they have conducted studies in cities like Pune, Mumbai, Hyderabad, Bangalore, Kolkata this research paper also talks about the unionization and unorganized industry of street food vendors, in research, it also shows that street food vendors face the problem of capital, they mainly depend on loan from their family friends and moneylenders to support for capital. They do not approach financial institutes like a bank as too much paperwork involved and lots of paper work. Street food vendors in Asia contribute a good amount of money to the economy through its unrecognized sector provides services to the urban population. Why urban population prefers street food because it's cheap, readily available at all places like near busy streets, colleges, schools, hospitals, working offices, where people don't have much time to eat. In conclusion, research denotes that though street food vendors make a good contribution to the economy government looks at them as encroachment or criminals.

Research Methodology

Sample: Total 165 participated in the survey out of which 108 were male and 57 were female. The questionnaire was filled by the participants for the research paper on “customers perception about eating street food in Pune city after unlock -3”

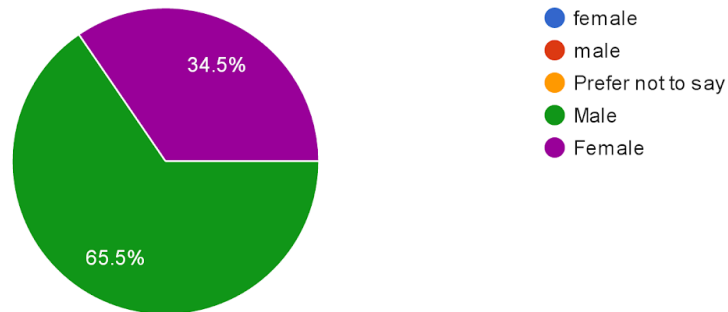
Questionnaire: A structured questionnaire which consists of MCQ to record the perception of participants towards eating street food in Pune city after unlock-3. The perception of participants was recorded on a likert five point scale in which 5 was scored as Strongly Agree, 4 as Agree, 3 as Neutral/Not Sure, 2 as Disagree and 1 as Strongly Disagree

Secondary Data: was gathered from the literature previously written through research papers, government reports, news articles etc.

Data interpretation: Demographic profile of respondents is elaborated by pie diagram. Data given in pie diagram indicate that 64.5% of respondents were male, and 34.5% female.

2. Gender

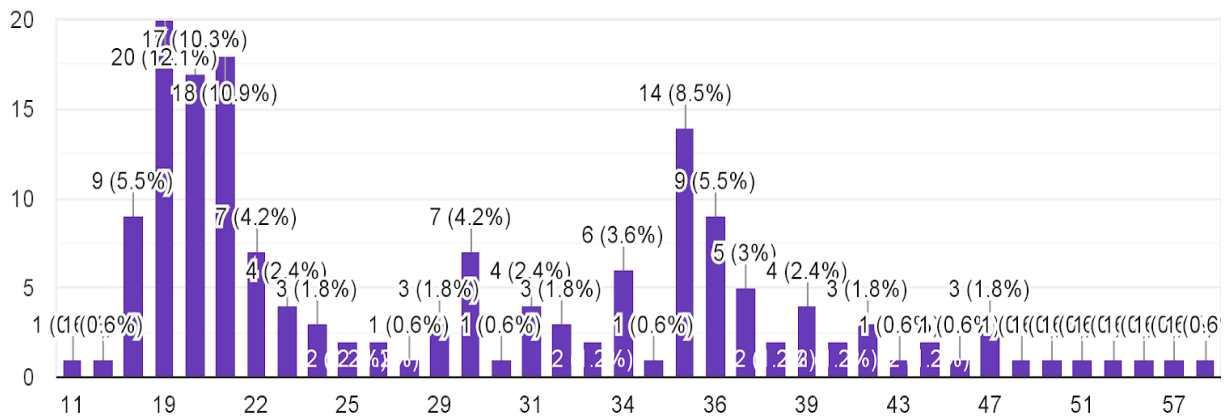
165 responses



Maximum numbers of respondents 66 were between in the age group of 11 years 21 to be followed by of 37 respondents falls between in the age group of 22-32 years, 49 respondents falls between in the age group of 33 to 43, 10 respondents falls between in the age group of 44 to 54, 3 respondents falls between in the age group of 55 to 65,

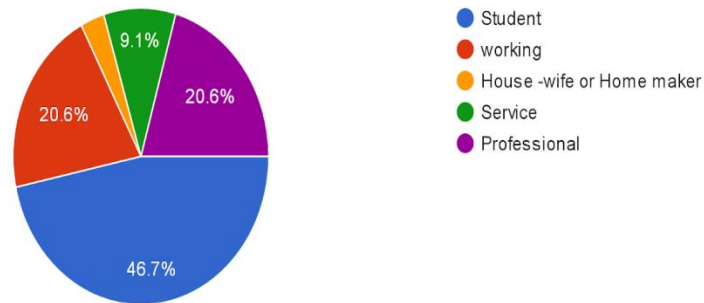
3. Age

165 responses



4. Qualification

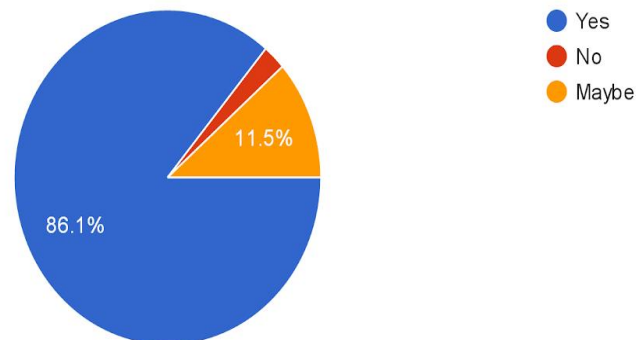
165 responses



Data given in pie diagram indicate that out of 165 respondents 77 that is 46.7% were student, 34 were professional which is 20.6%, 34 were working that is 20.6%, 15 were from service profession that is 9.1%, 5 were house wife or home maker which is 3%

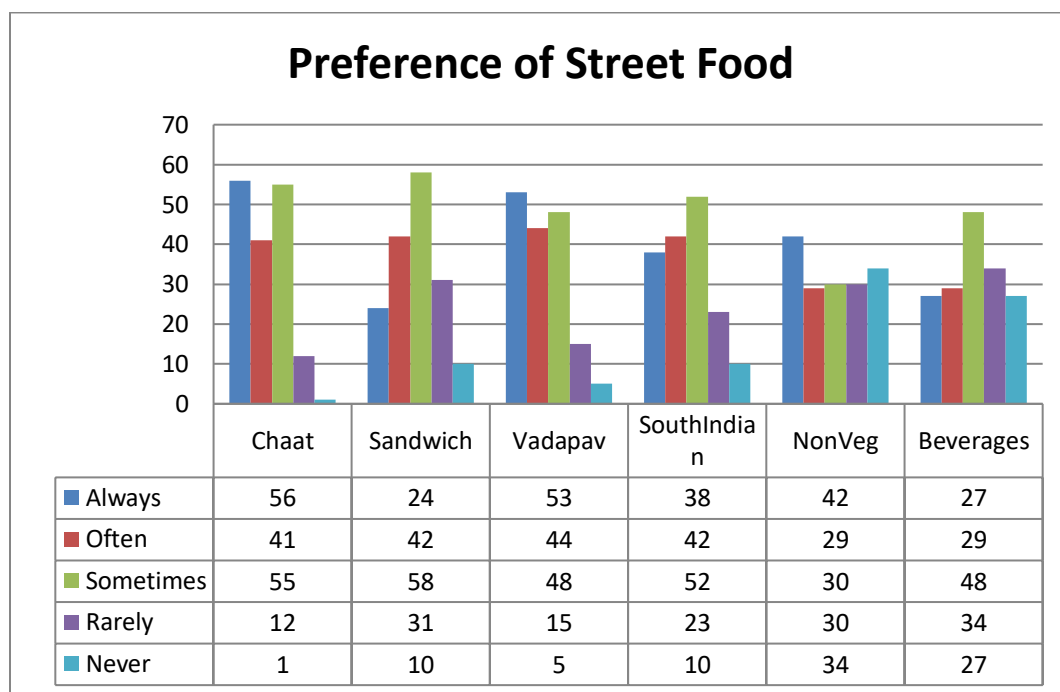
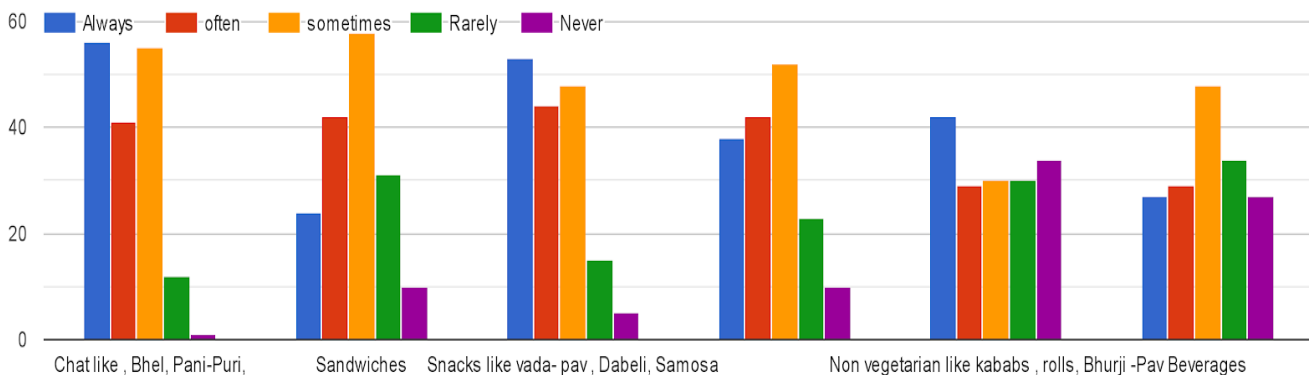
5. Do you like to eat street food

165 responses



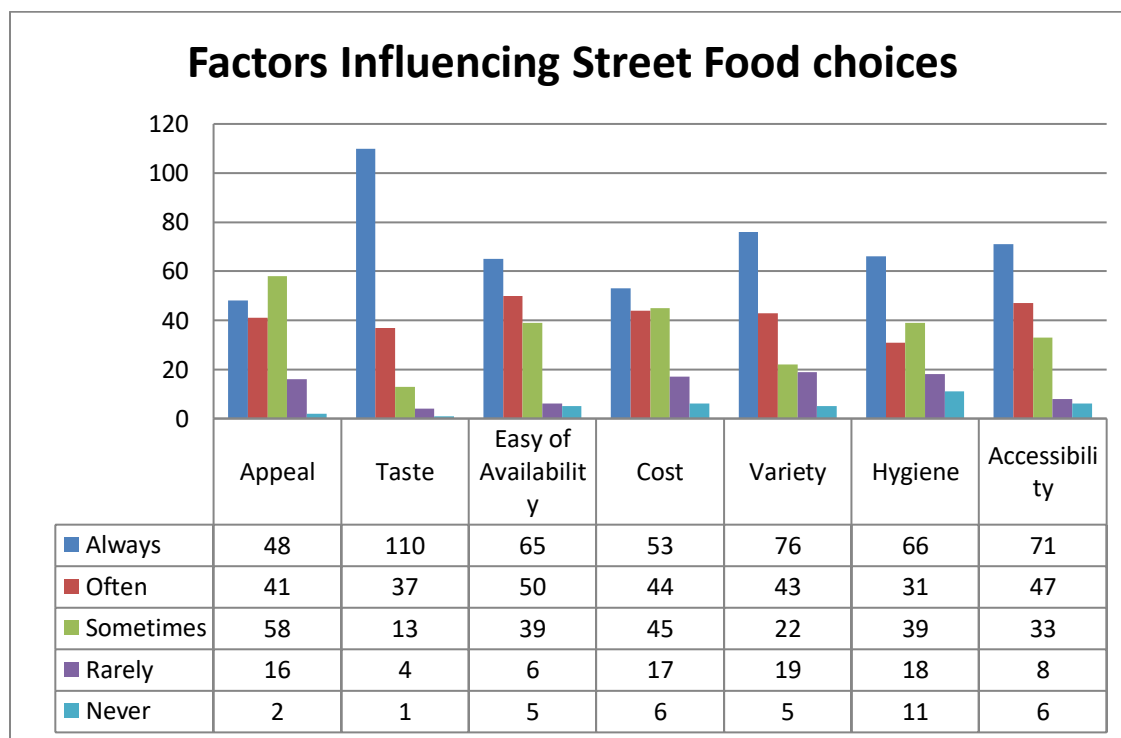
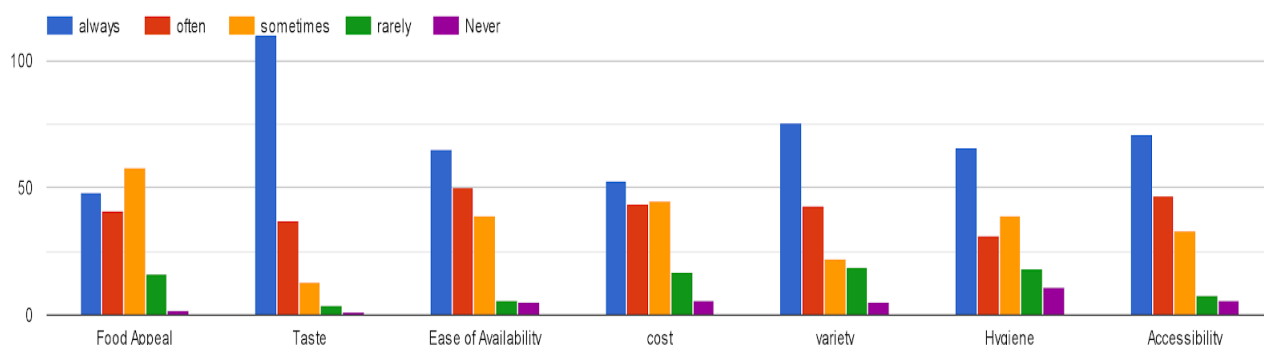
Data given in pie diagram indicate that out of 165 respondents 142 that is 86.1% said they do like to eat street food. 19 that is 11.5% they may be like to eat street food and, 4 that is 2.4% said no they do not like to eat street food.

6. What kind of street food you eat



Data given in chart diagram indicate that out of 6 options 56 respondents always prefers to eat chaat items such as Bhel, Pani-Poori, followed by 53 respondents snacks prefers to eat vadapav, Dabeli, followed by 42 respondents prefers Non-Vegetarian options such as kebabs, rolls Bhurji-Pav, followed by 38 respondents prefers south Indian food items such as Idli, Dosa. Followed by 27 respondents prefers Beverages such as Tea, Coffee.

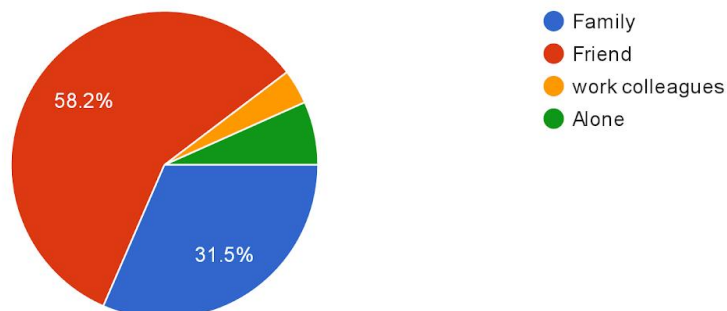
7. What drives you to eat street food



Data given in chart diagram indicate that out of 165 respondents 110 respondents prefers taste as drawing factor to eat street food or taste is the factors that attracts respondents to eat street food. Followed by 76 respondents gave preference to variety that is offered by street food vendors which attracts them to eat street food, followed by 71 respondents gave preference to Accessibility that drives them to eat street food, then followed by 66 Respondent gave hygiene factors followed by street vendors drives them to eat street food, 65 respondent preferred easy of availability drives them to eat street food, 53 respondent prefer cost as driving factor to eat street food, 48 respondents prefers appeal factor to eat street food.

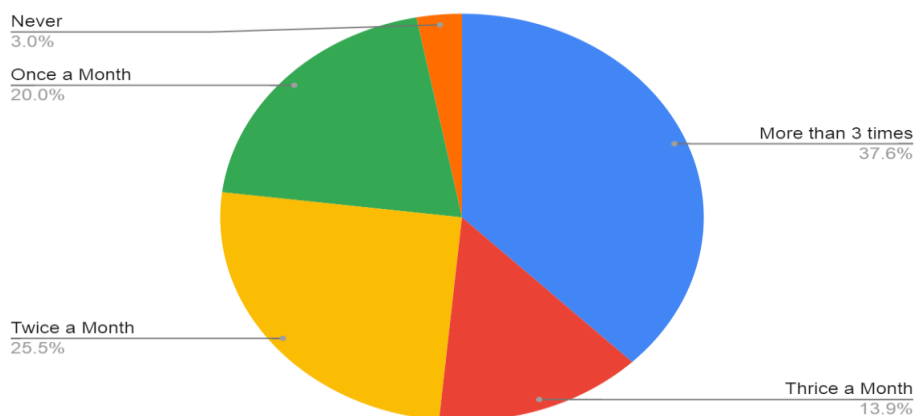
8. Who accompanies you most of the time while eating street food

165 responses



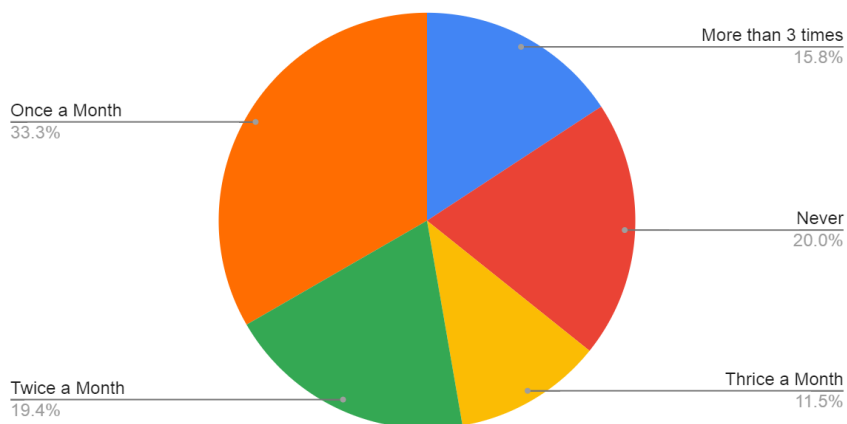
Data given in pie diagram indicate that out of 165 respondents 96 respondents that is 58.2% said while eating street food most of the time friends accompanies them, followed by 52 respondents which is 31.5% said most of the time family accompanies them while eating street food, followed by 11 respondents which is 6.7% said most of the time they eat alone .followed by 6 respondent said most of the time work colleagues accompanies them while eating street food.

Count of 9. How often did you eat street food before lockdown



Data given in pie diagram indicate that out of 165 respondents 62 respondents that is 37.6% said they use to eat street food before lock down **more than 3** times, followed by 25.5% which is 42 respondents said before lock down they use to eat street food **twice a month**, followed by 20% which is 30 respondent said they use to eat street food **once a month**, followed by 23 respondents which is 13.9 said they use to eat street food **thrice a month**, followed by 5 respondents which is 3.0% said they **never** ate street food before lockdown.

Count of 10. How often do you eat street food after unlock phase 3



Data given in pie diagram indicate that out of 165 respondents 55 respondents that is 33.3% said they eat street food after unlock 3 **once a month**, followed by 19.4% which is 32 respondents said after unlock 3 they eat street food **twice a month**, followed by 20% which is 33 respondent said they **never** ate street food after unlock 3 followed by 15.8% which is 26 respondents said they eat street food after unlock 3 **more than 3** times, followed by 11.5% which is 19 respondents said they ate street food thrice a month after unlock-3 .

H_0 - COVID -19 has no impact on frequency of eating street food.

H_1 - COVID -19 has an impact on frequency of eating street food.

To find out whether the frequency of eating street food has affected due to COVID-19 T test was conducted to analyze the impact it.

H_1

Difference Scores Calculations

Treatment 1

N_1 : 165

$df_1 = N - 1 = 165 - 1 = 164$

M_1 : 3.63

SS_1 : 258.45

$s_1^2 = SS_1 / (N - 1) = 258.45 / (165 - 1) = 1.58$

Treatment 2

N_2 : 165

$df_2 = N - 1 = 165 - 1 = 164$

M_2 : 2.7

SS_2 : 294.85

$s_2^2 = SS_2 / (N - 1) = 294.85 / (165 - 1) = 1.8$

T-value Calculation

$$s2p = ((df1/(df1 + df2)) * s21) + ((df2/(df2 + df2)) * s22) = ((164/328) * 1.58) + ((164/328) * 1.8) = 1.69$$

$$s2M1 = s2p/N1 = 1.69/165 = 0.01$$

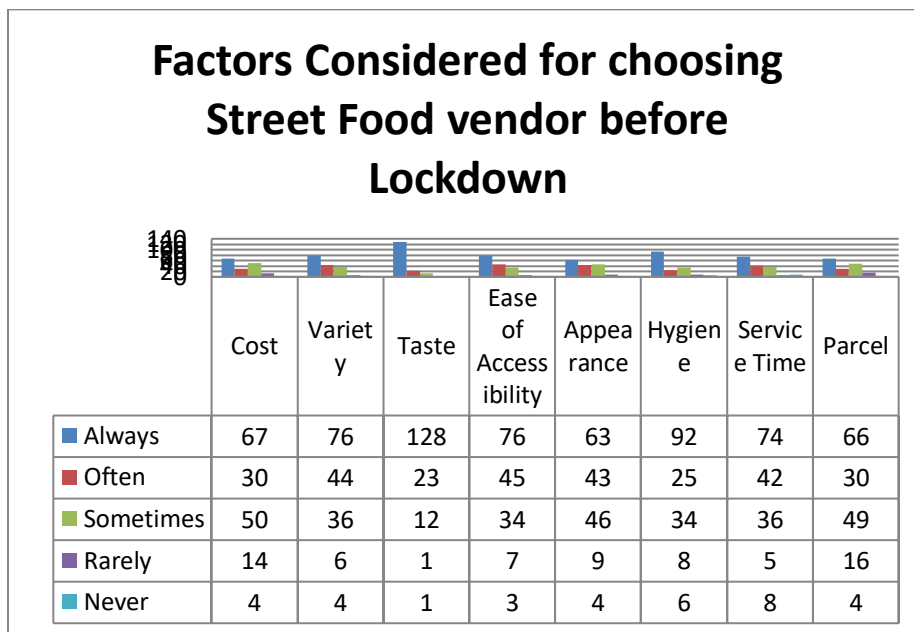
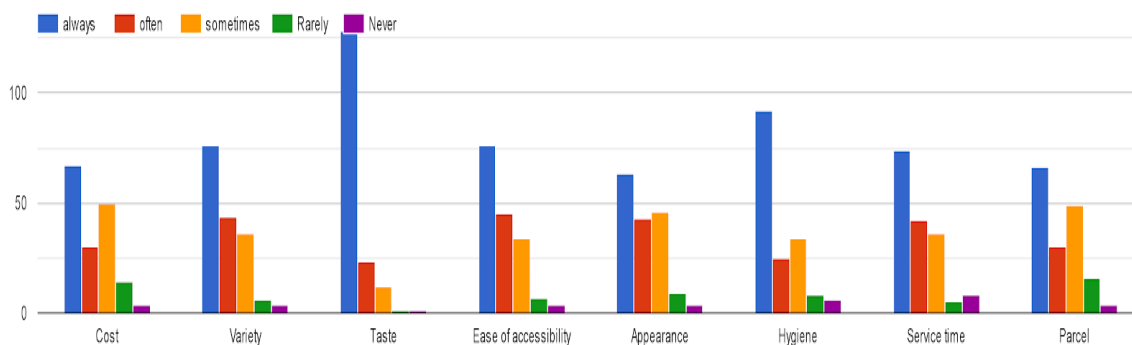
$$s2M2 = s2p/N2 = 1.69/165 = 0.01$$

$$t = (M1 - M2)/\sqrt{(s2M1 + s2M2)} = 0.93/\sqrt{0.02} = 6.53$$

The t-value is 6.52712. The p-value is < .00001. The result is significant at p < .05.

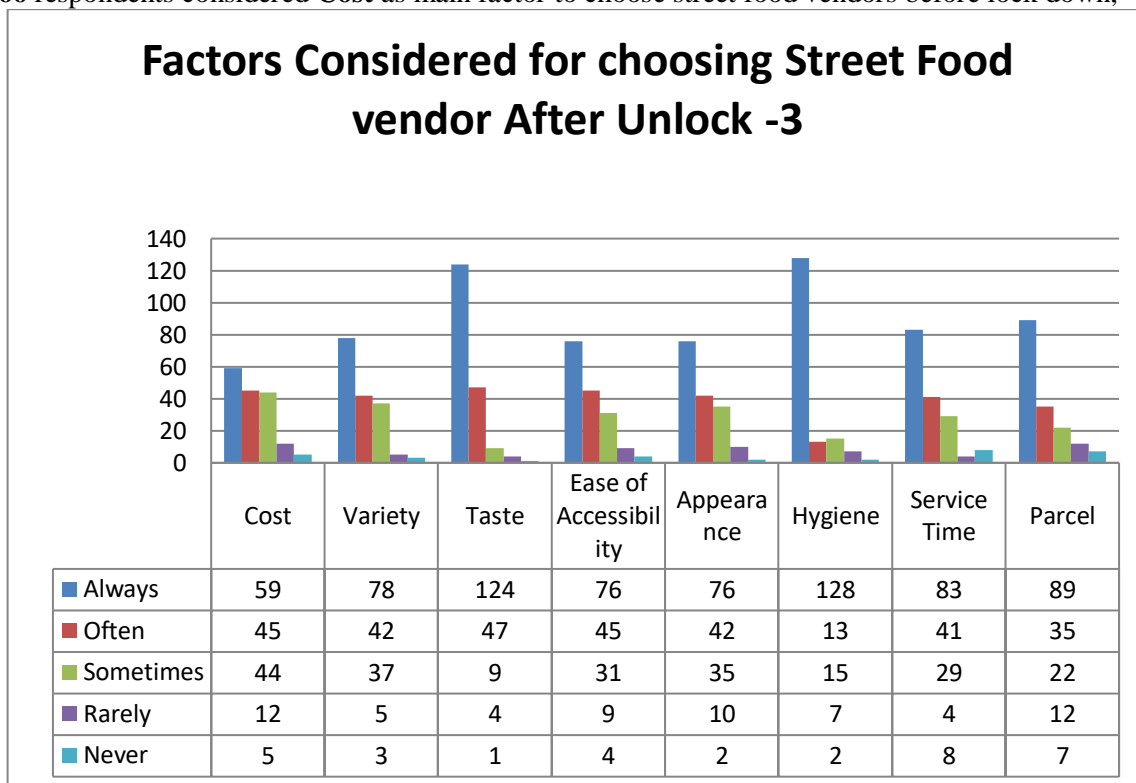
Results indicate that frequency of eating street food before lock down and after unlock-3 has changed hence the null hypothesis has been rejected and alternate hypothesis has been accepted.

11. What are the factors considered while choosing a street food vendor before lockdown

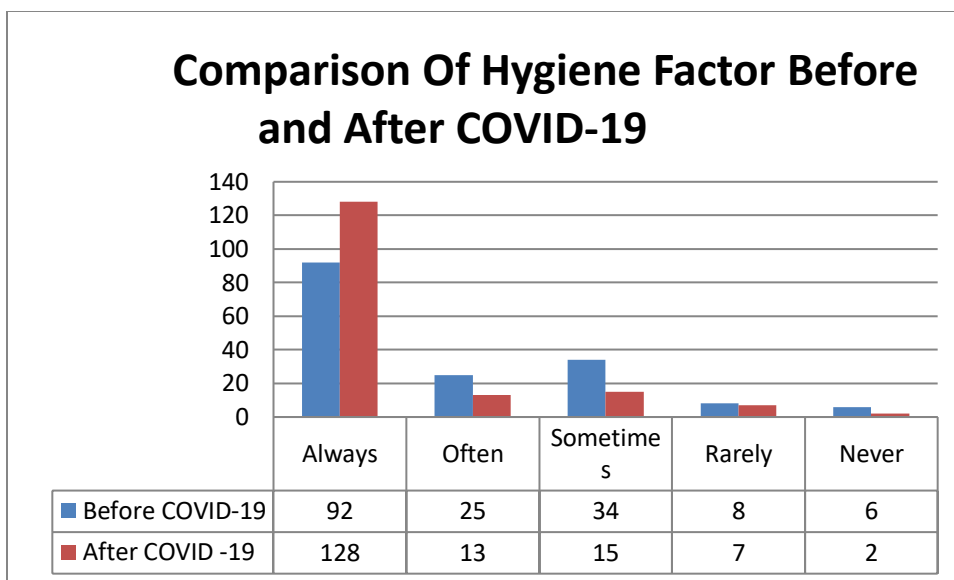


Data given in chart diagram indicate that **128** respondents considered **Taste** as main factor to choose street food vendor before lock down , followed by **92** respondents considered **Hygiene** as main factor to choose street food vendors before lock down, followed by **76** respondents considered **Variety** as main factor to choose street food vendors before lock down, followed by **76** respondents considered **Ease of Accessibility** as main factor to choose street food vendors before lock down, followed by **74** respondents

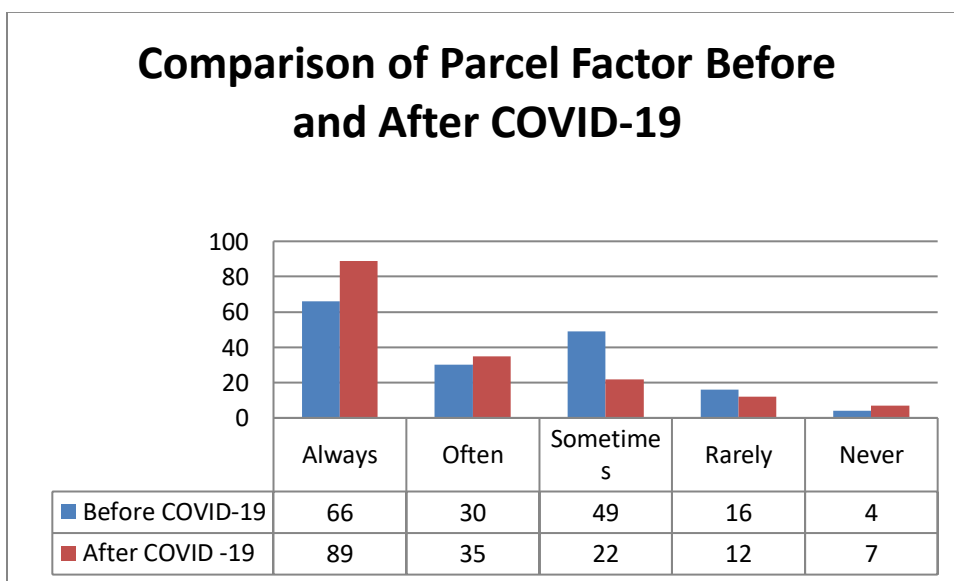
considered **Service Time** as main factor to choose street food vendors before lock down, followed by **67** respondents considered **Parcel** as main factor to choose street food vendors before lock down, followed by **66** respondents considered **Cost** as main factor to choose street food vendors before lock down,



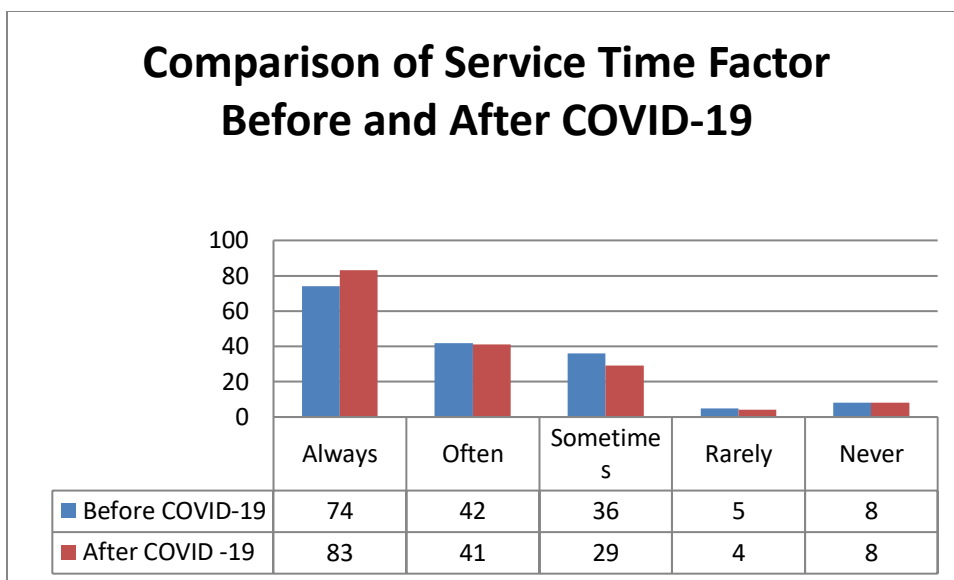
Data given in chart diagram indicate that **128** Respondents considered **Hygiene** as main factor to choose street food vendor after Unlock-3. followed by **124** Respondents considered **Taste** as main factor to choose street food vendor after Unlock-3 followed by **89** Respondents considered **Parcel** as main factor to choose street food vendor after Unlock-3 followed by **83** Respondents considered **Service Time** as main factor to choose street food vendor after Unlock-3 followed by **78** Respondents considered **Variety** as main factor to choose street food vendor after Unlock-3 followed by **76** Respondents considered **Easy of Accessibility** as main factor to choose street food vendor after Unlock-3 followed by **76** Respondents considered **Appearance** as main factor to choose street food vendor after Unlock-3 followed by **59** Respondents considered **cost** as main factor to choose street food vendor after Unlock-3



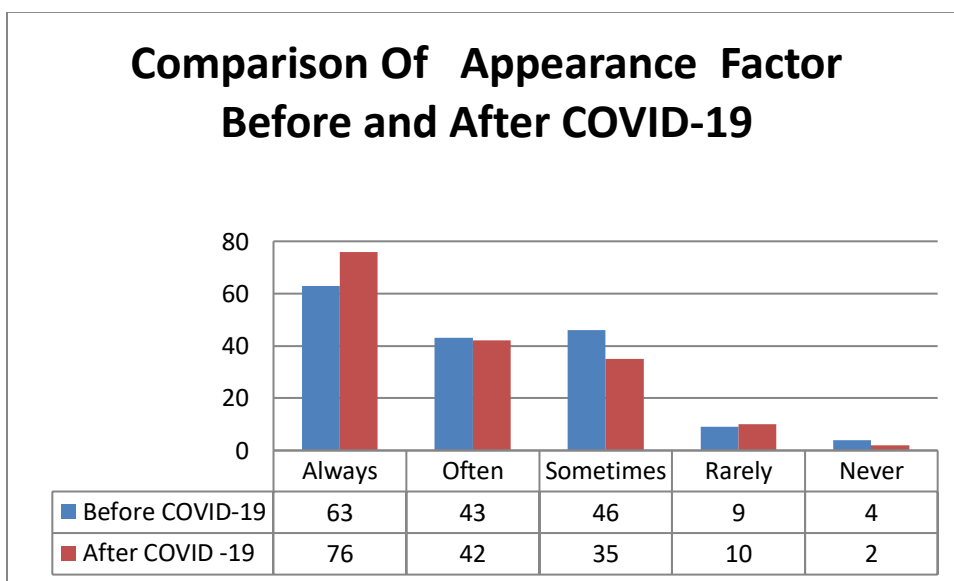
Data given in the above comparison chart clearly shows that respondents considered **Hygiene** as main factor to choose street food vendors before covid-19 it was **55.75%(92)** respondents who gave **Hygiene** as a main factor but after COVID-19 it has increased to **21.82% (77.57% (128))**



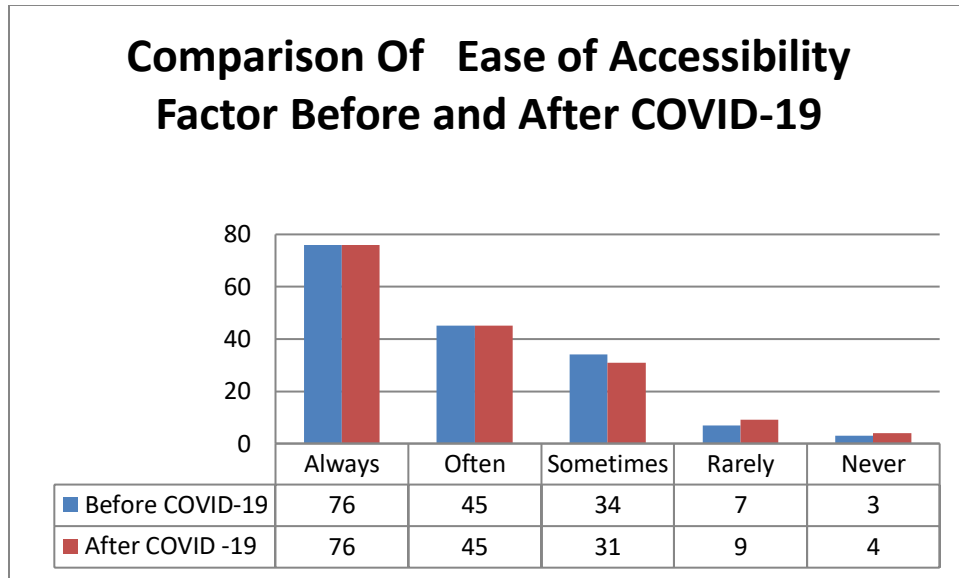
Data given in the above comparison chart clearly shows that respondents considered **Parcel** as main factor to choose street food vendors before covid-19 it was **40%(66)** respondents who gave **Parcel** as a main factor but after COVID-19 it has increased to **37.57% (77.57% (89).)**



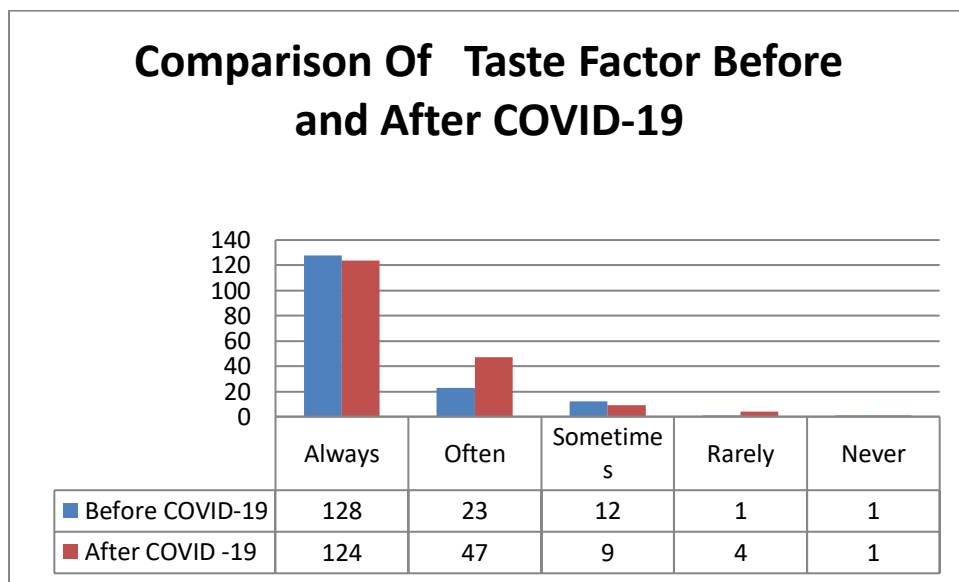
Data given in the above comparison chart clearly shows that respondents considered **Service Time** as main factor to choose street food vendors before covid-19 it was **44.84%(74)** respondents who gave **Service Time** as a main factor but after COVID- 19 it has increased to **5.46% (50.30% (83))**.



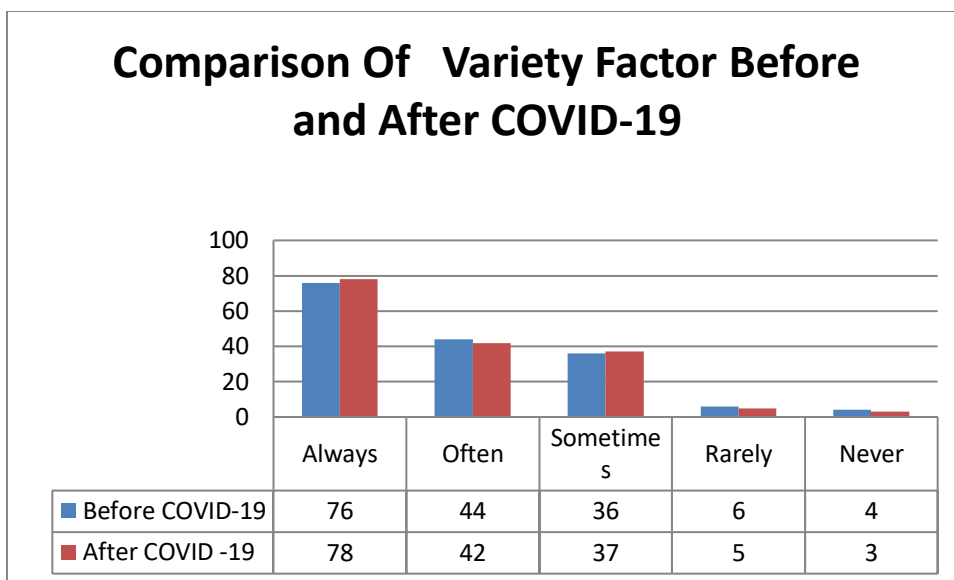
Data given in the above comparison chart clearly shows that respondents considered **Appearance** as main factor to choose street food vendors before covid-19 it was **38.18%(63)** respondents who gave **Appearance** as a main factor but after COVID- 19 it has increased to **7.88% (46.06% (76))**.



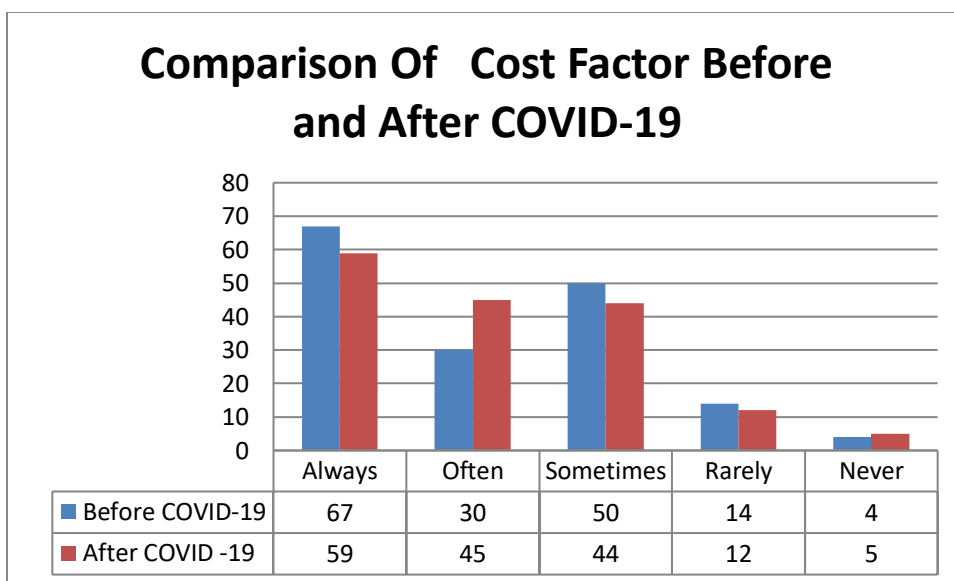
Data given in the above comparison chart clearly shows that respondents considered **Ease Of Accessibility** factor remained same as it did not see any increase to choose street food vendors before covid-19 it was **46.06%(76)** after COVID- 19 **Ease Of Accessibility** remained same **46.06% (76)**.



Data given in the above comparison chart clearly shows that respondents considered **Taste** as main factor to choose street food vendors before covid-19 it was **77.57%(128)** respondents who gave **Taste** as a main factor but after COVID- 19 it has decreased to **2.42% (75.15% (124))**.



Data given in the above comparison chart clearly shows that respondents considered **Variety** as main factor to choose street food vendors before covid-19 it was **46.06%(76)** respondents who gave **Variety** as a main factor but after COVID- 19 it has increased to **1.21%(47.27% (78))**.



Data given in the above comparison chart clearly shows that respondents considered **Cost** as main factor to choose street food vendors before covid-19 it was **40.60%(67)** respondents who gave **Cost** as a main factor but after COVID- 19 it has decreased to **4.85%(35.75% (59))**.

To find out whether the Driving Factors to choose street food has changed due to COVID-19 T test was conducted to analyze the impact it.

H₀- Driving factors to choose street food vendors have not changed due to COVID-19

H₂- Driving factors to choose street food vendors have changed due to COVID-19.

H₂

Difference Scores Calculations

Treatment 1

N1: 165

df1 = N - 1 = 165 - 1 = 164

M1: 4.15

SS1: 208.51

$s21 = SS1/(N - 1) = 208.51/(165-1) = 1.27$

Treatment 2

N2: 165

$df2 = N - 1 = 165 - 1 = 164$

M2: 4.56

SS2: 136.58

$s22 = SS2/(N - 1) = 136.58/(165-1) = 0.83$

T-value Calculation

$s2p = ((df1/(df1 + df2)) * s21) + ((df2/(df2 + df2)) * s22) = ((164/328) * 1.27) + ((164/328) * 0.83) = 1.05$

$s2M1 = s2p/N1 = 1.05/165 = 0.01$

$s2M2 = s2p/N2 = 1.05/165 = 0.01$

$t = (M1 - M2)/\sqrt{(s2M1 + s2M2)} = -0.42/\sqrt{0.01} = -3.7$

Significance Level:

One-tailed or two-tailed hypothesis

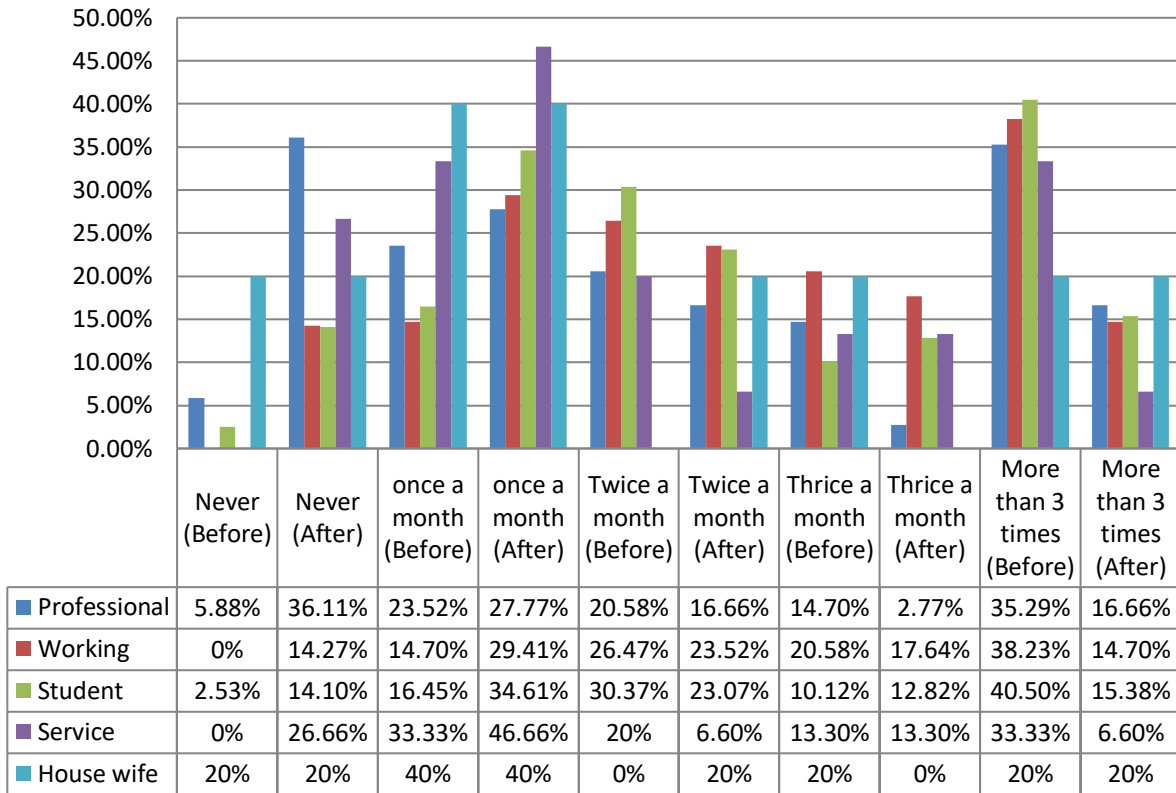
The t-value is -3.70307. The p-value is .00025. The result is significant at $p < .05$.

Results indicate that deriving factors to choose street food vendors have changed after Unlock -3 hence the null hypothesis has been rejected and alternate hypothesis has been accepted.

Findings: key finding from the research paper are as follows:

- Data collected from 165 respondent shows that people do like to eat street food irrespective of their gender and age.
- Most favorite or preferred street food amongst the respondent were chaat items such as Pani Pooori , followed by snacks item such as vadapav and Debeli , followed by non-vegetarian item like rolls and kebabs.

Qualification based frequency of opting for street food (Per month)



From the chart it shows that the frequency of eating street food before and after the lock-down is based on the qualification. It interprets that professionals who never used to eat street food before the lock-down were in 5.88%, which has increased to 36.11%. Further, it can be seen that other frequencies for the same group have gone down but not as steeply as for people who never opt for any street food. A little increase can be seen in the people who opt for street food once a month, which increased by 18% in the second group of working people who used to opt for street food before the lock-down, has changed from 0% to 14.27%. Working people said they will not eat street food after the lock-down. Further, it can be seen that other frequencies for the same group for eating **once a month** have gone up by 100%, **twice a month** has decreased by 11.14%, **thrice a month** has decreased by 14.28%, and **more than three times** has decreased by 61.54%. In the third group of students who **never** used to eat street food before the lock-down were in 2.53%, which has increased to 14.10%. A little increase can be seen in the students who opt for street food **once a month**, which has increased by 14.28%. **Twice a month** has decreased by 24.03%, **thrice a month** has increased by 26.67%, and **more than three times** has decreased by 62.02%. Frequency for the group of service professionals said they never eat street food before the lock-down, now eat street food after the lock-down. The percentage is 26.66%. Further, it can be seen that other frequencies for the same group of service professionals who used to eat once a month has increased from 33.33%. Twice a month has decreased by 67%, thrice a month remained the same, and more than three times has decreased by 80%. Frequency for the group of housewives remained the same for never eating street food and once a month and more than once a month. Street food for twice a month increased to 20%, thrice a month it decreased to 20%.

- After COVID-19 **Hygiene** factor has increased to **21.82%**
- After COVID-19 **Parcel** factor has increased to **37.57%**

- After COVID- 19 **Service Time** factor has increased to **5.46%**
- After COVID- 19 **Appearance** factor has increased to **7.88%**
- After COVID- 19 **Ease of Accessibility** remained same at **46.06%**
- After COVID- 19 **Variety** factor has increased to **1.21%**
- After COVID- 19 **Taste factor** has decreased to **2.42%**
- After COVID- 19 **Cost** factor has decreased to **4.85%**

Limitations: This study is limited to perception about eating street food before and after unlock. Future scope of this study can be from point of view of street food vendors. This research was conducted within the geographical boundaries of Pune city. No psychological aspect of choosing street food has been studied.

Suggestions: street food vendors can give more importance towards Hygiene factor and food safety which will increase the business as well as it will give more assurance to customers while eating and ordering street food. They can advertise more on social media platforms such as facebook, Pune eat out about how they are following hygiene standards while preparing and serving food .they can have tie-up with delivery partners like Swiggy, Zomato, Ola to reach out to maximum customers, so that social distance norm also will get followed.

Conclusion: street food is major part of Indian culture, and important aspect of food supply chain, it generates the employment and contributes in formal sector of the economy, due to pandemic people are more cautious about hygiene, as following hygiene and social distancing norm are the key factors to control infection. Due to pandemic every business got affected, and hotel industry was major amongst them as street food vendors got affected worst in hotel industry, but government and NASVI took initiative to bring them back to business by providing them online food delivery platforms such as Swiggy, in association with NASVI and celebrity chef Ranvir Brar hygiene training is given to street food vendors to cope with new normal, and give them confidence as well as assurance for the customers that they will get safe street food to eat. Delivery companies like Swiggy took an initiative to deliver the street food to boost the business.

Reference list

- Bhowmik, S. K. (2005). Street Vendors in Asia : A Review Growth of Street Vending. *Economic and Political Weekly*, 2256–2264.
- Canet, C., N'Diaye, C. (1996). Street foods in Africa. *Food Nutrition and Agriculture*, 17(18): 4-13. *Control*, 16(5): 439-444
- Ceyhun Sezgin, A., & Şanlıer, N. (2016). Street food consumption in terms of the food safety and health. *Journal of Human Sciences*, 13(3), 4072. <https://doi.org/10.14687/jhs.v13i3.3925>
- Chakravarty, I., & Canet, C. (1996). *Chakravarty and Canet (1996) Street Foods in Calcutta*. 30–37.
- Chitlangia, R., Times, H., & Delhi, N. (2020). *Street food vendors to be trained in hygiene, social distancing - delhi news - Hindustan Times*. Retrieved from <https://www.hindustantimes.com/delhi-news/street-food-vendors-to-be-trained-in-hygiene-social->

distancing/story-v1W5XZfuzFLSHKXAFxJyCP.html

- Choudhury, M., Mahanta, L., Goswami, J., Mazumder, M., & Pegoo, B. (2011). Socio-economic profile and food safety knowledge and practice of street food vendors in the city of Guwahati, Assam, India. *Food Control*, 22(2), 196–203. <https://doi.org/10.1016/j.foodcont.2010.06.020>
- FSSAI. 2011. food safety and standards authority of India. [ONLINE] Available at: https://foodlicensing.fssai.gov.in/about_fssai.aspx. [Accessed 2 December 2020]
- Gadi, C., Bala, K. L., & Kumar, A. (2013). Study of Hygienic practices of street food vendors in Allahabad city, India and Determination of Critical control points for safe street food. *The Allahabad Farmer*, 58(2), 134. <https://doi.org/10.13140/RG.2.2.22360.14080>
- Gulankar, A. (2020, June 25) Hit by lockdown, Pune's food joints, trinket shops turn green grocers. *Theedrel.com*. <https://thefederal.com/covid-19/hit-by-lockdown-punes-food-joints-trinket-shops-turn-green-grocers/>
- Hanashiro, A., Morita, M., Matte, G.R., Matte, M.H., & Torres, E.A.F.S. (2005). Microbiological important food safety behaviors. *Journal of the American Dietetic Association*, 108: 991-997.
- Krishnankutty.P, (2020, June 21). Street food vendors are back after Covid safety training, now hoping for business to return. *The Print*. <https://theprint.in/features/street-food-vendors-are-back-after-covid-safety-training-now-hoping-for-business-to-return/445694/>
- Lima, M. G. B. (2008). Street food. In *Alternatives Journal* (Vol. 34). <https://doi.org/10.4324/9781315776255>
- Mahadevia, D.; Vyas, S. and Mishra, A. (2014). *Informal Economy Monitoring Study: Street Vendors in Ahmedabad, India*. Retrieved from www.wiego.org.
- NASVI.(2020 September 9) Training given to street vendors to make them aware and ready with COVID-19 safety gears. <https://nasvinet.org/training-given-to-street-vendors-to-make-them-aware-and-ready-with-covid-19-safety-gears/>
- pib.gov.in. 2020. Street Vendors Act, 2014 Implemented by Respective States/ Union Territories by Framing of Rules and Schemes. [ONLINE] Available at: <https://pib.gov.in/PressReleaseDetail.aspx?PRID=1657802>. [Accessed 30 December 2020].
- Pilz, M., Uma, G., & Venkatram, R. (2015). Skills development in the informal sector in India: The case of street food vendors. *International Review of Education*, 61(2), 191–209. <https://doi.org/10.1007/s11159-015-9485-x>
- Pilling, V.K., Brannon, L.A., Shanklin, C.W., Howells, A.D., & Roberts, K.R. (2008). Identifying Quality of Selected Street Foods From a Restricted Area of Sao Paulo City, Brazil
- Prev, I. J., Med, S., & No, V. (2015). *A STUDY OF THE SAFETY CONSUMER PERCEPTION AND CONSUMPTION OF THE STREET FOODS SOLD IN HISAR CITY, HARYANA*. 46(1).
- Ranka, S. (2020). How Corona Virus could Affect the Culture of Eating Special Reference to Street Food : THE NEW NORMAL. *IOSR Journal of Business and Management*, 22(6), 1–7. <https://doi.org/10.9790/487X-2206060107>
- Reddy, A. A., Ricart, S., & Cadman, T. (2020). Driving factors of food safety standards in India: learning from street-food vendors' behaviour and attitude. *Food Security*, 12(6), 1201–1217. <https://doi.org/10.1007/s12571-020-01048-5>
- Sabbithi, A., Reddi, S. G. D. N. L., Naveen Kumar, R., Bhaskar, V., Subba Rao, G. M., & Rao V, S. (2017). Identifying critical risk practices among street food handlers. *British Food Journal*, 119(2), 390–400. <https://doi.org/10.1108/BFJ-04-2016-0174>
- Shenoy.S,(2020 May 12) Food Vendors Get E-Training On Hygiene And Safety Measures. *curlytail.com*. <https://curlytales.com/food-vendors-get-e-training-on-hygiene-and-safety-measures/>
- Tambekar, D., Kulkarni, R., Shirsat, S., & DG, B. (2011). Bacteriological quality of street vended food panipuri: a case study of Amravati city (ms) India. *Bioscience Discovery*, 2(3), 350–354.

Retrieved from biosciencediscovery.com/attachments/File/Vol_2_No_3/Tambekar_63_67.pdf

- TNN (2020, November 8). Business finally picks up for street food vendors in Pune after lock down triggered lull. *Times of India*. <https://timesofindia.indiatimes.com/city/pune/business-finally-picks-up-for-street-food-vendors-after-lockdown-triggered-lull/articleshow/79105604.cms>
- Waghode S. M, W. S. M., & A. M. Garode, A. M. G. (2012). Pesticides Residues P-Nitrophenol Degrading *Pseudomonas putida* from Cultivated Vegetables Soil Samples of Chikhli Tahsil of Buldana District. *International Journal of Scientific Research*, 2(5), 9–10. <https://doi.org/10.15373/22778179/may2013/4>
- WHO. (2020). World Health Organization. Coronavirus disease 2019 (COVID-19). *Situation Report*, 32., 2019(February). (2554). No Retrieved from <http://library1.nida.ac.th/termpaper6/sd/2554/19755.pdf>

ANNEXTURE:

1. Name:
2. Gender:
3. Age:
4. Qualification: student, working, house wife or home-maker, service, professional
5. Do you like to eat street food: Yes No?
6. What kind of street food do you eat? Chat like , Bhel, Pani-Puri, Sandwiches, Snacks like vada- pav , Dabeli, Samosa, south indian like , Dosa, Idli, uttapam, Non vegetarian like kababs , rolls, Bhurji –Pav, Beverages.
7. What drives you to eat street food? Food Appeal, Taste, Ease of Availability, cost, variety, Hygiene, Accessibility.
8. Who accompanies you most of the time while eating street food? Family, work colleagues, friend, alone
9. How often did you eat street food before lockdown? Once a month, twice a month, thrice a month, more than 3 times
10. How often did you eat street food after unlock-3? Once a month, twice a month, thrice a month, more than 3 times
11. What are the factors considered while choosing a street food vendor before lockdown? Cost, Variety, Taste, Ease of Accessibility, Appearance, Hygiene, Service Time, Parcel.
12. What are the factors considered while choosing a street food vendor After Unlock 3? Cost, Variety, Taste, Ease of Accessibility, Appearance, Hygiene , Service Time, Parcel

