

## ANALYSING THE RESIDENTS' FOOD (EATING OUT) BEHAVIOUR IN THE PRE & POST COVID-19 PERIOD: A STUDY OF DHARAMSHALA REGION, INDIA

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**Abstract:** The first epidemic of the modern world that has changed the course of the current civilization & turned out to be a pandemic (i.e. COVID-19) has tremendously affected several industries including that of tourism & hospitality. Due to the multilevel impact, the whole world struggled to overcome this situation but with almost two years of its co-existence, people have now managed to change their style of living & social habits including that of the food habits. One of such food habits i.e. 'Eating out/ Dining out' was bound to change in the post-pandemic period due to the health advisories & closure of several hotels, restaurants and food outlets. The present research tries to find out the changes in the Eating out behaviour of the residents of Dharamshala (H.P.) in the pre & post-pandemic period. Further, it tries to identify the factors which affect the eating out behaviour of the residents & measure their importance in different periods (pre & post pandemic). The data were collected from 286 residents of Dharamshala region, through a structured questionnaire & analysed through reliability checks (Cronbach's Alpha- $\alpha$ ), KMO & Bartlett's test, factor analysis, paired sample t-test and analysis of frequency & mean values. The results showed a significant decrease in the frequency of visits, purchasing/ordering, percentage of outside meals consumed, average spending etc, whereas the level of priority given by the residents to hygiene, food safety, quality, service & distribution etc has increased in the post-pandemic period. Hence various strategies were suggested for the restaurants/local eateries like, (1) Use of technology (automatic doors, sensor & timer enabled soap & sanitiser dispenser, online payments), (2) cost reduction tactics (controlling of food wastage, reduction in menu items), (3) training of employees (sanitisation rules, HACCP rules) etc which were if adopted will certainly help them revive from the crisis slowly & steadily over the period.

**Key words:** pandemic, Co-existence, eating out, HACCP, COVID-19

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### INTRODUCTION

With the arrival of the first Pandemic of the 21<sup>st</sup> Century i.e. COVID-19, several industries including that of tourism have been severely affected (IMF, 2020; UNWTO, 2021; Chan, 2022). One of the primary segments of tourism that is undergoing a critical situation is the Hospitality industry. With the closing of several hotels and restaurants numerous people have lost their jobs and struggled to survive after the first & second wave of the pandemic (Krishnan et al., 2020; Deloitte, 2020; Aldao et al., 2022). Today after almost two years of the arrival of this pandemic the economic slowdown is still being felt in every sector of the world. Specifically, the Indian foodservice sector, which was the most affected one amidst the pandemic (Sujood et al., 2022). According to one of the surveys of the National Restaurant Association of India, the loss is estimated to be ₹4, 23,865 Crores leaving around 700,000 employees helpless (ETO, 2020). Due to the unexpected shutdown of the hospitality industry & prolonged lockdowns, hotels & restaurants are still struggling in many parts of the world including that of India. But it is the need of the hour to motivate the entrepreneurs to take small efforts keeping in mind the present business scenario, which will help them survive in this adverse situation (Yang and Smith, 2022). If we consider Restaurants, they have always been an integral part of any modern civilization (Lang, 2021) as there are multitudes of factors that draw people closer to this embodied establishment called restaurants. Some of these factors are; Food n' drinks, Ambience, Taste, Aroma, Meeting spots, Local vibes etc (Zymeri, 2020). It is being the global pandemic scenario that has adversely impacted the restaurants and forced them to shut down for quite a long period, the question now hovers over the heads of hospitality entrepreneurs, how are they going to maneuver.

Moreover, change in residents' food behavior i.e. eating & hanging out (in their choice of restaurants) during the post-pandemic situation is certainly going to increase their challenges manifold. It is because we all view the world a little differently now (Chandwani, 2020). Things that people were earlier resistant to (like purchasing pre-packaged foods online) prefer the same nowadays. It's primarily due to the risk involved in ordering freshly prepared food from local

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restaurants, roadside vendors, fast food outlets etc. Hence the catering establishments' focus will be primarily on reinventing the business strategies to revive from this crisis. What measures have to be taken and the shifts to be made, so that a whole new approach can be developed throughout this phase to synchronize with the changing behavior and perception of residents, could be the best possible alternative (Norris et al., 2021). So it is necessary to understand the various factors (which will be considered by the consumers before eating out or ordering from a local food outlet in this pandemic situation) such as quality of food n' drinks, surroundings areas of food outlets, hygiene standards followed in those outlets, crowd management, seating arrangement (complying with the social distancing norms), etc.

India being a land of varied food culture and culinary amalgamations, people of this country possess different food habits. Such an aspect that fulfills their gastronomic satiety is "Eating Out" that may be in roadside eateries (street foods), local restaurants, fast food centers, fine dining outlets or gastro bars etc (Nusra, 2013). But due to the ongoing pandemic situation (COVID-19), it will certainly bring out several changes in the food behaviour (eating out practice) of the local people as food & water are one of the primary carriers of this deadly virus. In the above context, the present research tries to analyse the 'Eating Out' behaviour of the residents of Dharamshala in the Pre & Post COVID-19 period. Dharamshala is the winter capital of Himachal Pradesh state as well as an ecstatic Hill station situated in the lap of Dhauladhar Valley in Kangra district. This hilly region primarily consists of three different tiers: a rustic lower town, the Dalai Lama's exiled home and the busy traveler town of McLeod Ganj at the top. All are connected by steep paths, with monkeys hiding in dense trees. Mountain air and exercise combine to make a healthy appetite, which is perhaps why the highest tier boasts such a selection of restaurants and eateries. It is a very popular hangout for the residents, backpackers, foreigners and students of Buddhism (Padda, 2020).

There are dozens of restaurants and cafes to excite and sustain the locals and outsiders. Ranging from local cuisines to western, Israeli, Chinese, Indian, Punjabi and Tibetan food restaurants which itself contributes huge economic support to locals as well as government. One of the best restaurants is the simply named Tibet Kitchen which offers a wide variety of ethnic dishes like steamed vegetable dumplings, called momo; soupy noodles, called Thupka; and the golden fried baby corn. Among the others are, Woesser bakery, Namgyal Café, Jimmy's Italian Kitchen, Pizzeria, Café Illiterati, Aman Restaurant, Fast food outlets like Pizza Hut, Dominos, KFC etc (Gautam, 2015). Hence apart from hanging & dining out, the residents also have a habit of ordering food from these outlets via phone calls or online apps. But due to the ongoing pandemic situation, most of the restaurants were shut down completely though few of them have recently started their operation. These food outlets are trying to revive the crisis but one of the major challenges is the non-availability of sufficient orders from direct and online consumers. It is primarily due to the change in the 'eating out behavior' of the residents due to the COVID-19 Pandemic situation. So, the present research tries to find out the changes in the general 'Eating out' behavior of the residents of Dharamshala in the Pre & Post pandemic period, such as frequency of visits to restaurants, frequency of ordering, percentage of meals consumed, amount of money spent, types of food and meals consumed etc. Apart from this, the factors which affect their 'Eating out' behaviour was also compared (in the Pre & Post pandemic period) to find out any significant difference among them. Based on the findings certain relevant suggestions were also given for a steady revival of the food outlets in the near future.

## LITERATURE REVIEW

### Consumer preference & determinants of restaurant selection:

Bojanic (2007) stated that the selection of a restaurant by a consumer is dependent upon various attributes pertaining to hygiene & food safety. This includes the cleanliness of the restaurant & food preparation area, personal hygienic level of the food handlers, sanitization of crockery, cutlery and kitchen equipment etc (Aksoydan, 2007). Apart from this, several other factors affect the consumers' preference towards food outlets like; architecture, internal ambience (Aubert-Gamet, 1997; Auty, 1992), type of food outlet (Auty et al., 1999), occasion & values (Blöse and Litvin, 2005), demography (Aksoydan, 2007), psychology etc. Similarly, another important factor taken into consideration by the consumers while choosing a restaurant is 'Menu Price' followed by foodservice and hygiene-related factors (Baek et al., 2006). Later Bekana (2010) during his study found that the determinants which affect the consumer preferences while selecting restaurants in Ethiopia includes food safety, hygiene standards, price of the dishes, variety of items on the menu, quality and geniality of the staffs. Further Akbar and Alaudeen (2012) while analysing the factors influencing residents' selection of restaurants in Perak, Malaysia, observed that the major factors were quality of food, service standard, location, surrounding environment and trustworthiness. Another similar study by Fidan et al. (2018) in Plodiv, Bulgaria stated 'quality of food' and 'locally grown vegetables' are the two primary factors for restaurant selection by the consumers. Chua et al. (2020) tried to rank the factors in terms of 'importance given by the residents' of Klang region, Malaysia and found that "Menu Price" was given the top most priority followed by WOM publicity, past experience & menu variety etc. Further they stated that restaurant selection is also affected by 'eating out occasions' like business related dining, festivals & social occasions. In a recent research by Sarkodie et al. (2022) determined the several factors that affect the choice of the consumers in Ghana as quality & taste of food, menu varieties, price, quality of service, location of the food outlet, dining environment, popularity, speed of service, parking etc.

### COVID-19 & Changes in consumer behaviour:

Consumer behaviour strongly depends upon time, location, culture, geographies etc. But the COVID-19 pandemic has made it a bit complex to understand the exact change in consumer behaviour and the extent to which it will persist. As the change in habits and behaviour is also dependent upon the 'period of exposure' to the new situation hence it requires deeper analysis of consumer behaviour. According to research, people usually take 18 to 254 days (66 days on average) to develop a new habit. Moreover, they quickly adapt those habits which fit their routines. Hence consumers are bound to develop new habits/behaviour due to the prolonged lockdowns as a result of multiple waves of COVID-19 (Puttaiah et al., 2020).

### Residents' Food consumption behaviour & impact of the pandemic:

As from the above research, it is evident that COVID-19 will certainly bring out several changes in the food behaviour of the people, Janssen et al. (2021) studied the “changes in the food consumption pattern of the individual consumers in Denmark, Germany and Slovenia during the first lockdown of COVID-19”. The online survey of 268 residents focused upon analysing the change in consumption frequencies, (of non-perishable & fresh foods), food-related shopping & lifestyle modifications. They found that there is a substantial reduction in fresh food consumption and the frequency of food-related shopping during this pandemic. A similar kind of study was also carried out by Wachyuni and Wiweka (2020) who analysed the changes in the resident's food consumption behaviour in the pre, during & post-pandemic periods. They found that the three primary factors which affected the food behaviour of the residents of Jakarta, Indonesia are related to health, psychology & societal factors. Further, they stated that organic food consumption & self-cooking practices have increased considerably due to the increase in food safety, health & quality-related awareness among the residents.

Further Di-Renzo et al. (2020) investigated the “changes in the eating habits and lifestyle of the Italian population” due to the COVID outbreak. They surveyed around 3533 respondents (above the age of 12 years) and found that around 15% of them have started consuming organic fruits /vegetables and people from the age group of "18 to 30 years" have adhered more strictly to the Mediterranean diet in comparison to the other age groups. Among the other lifestyle changes are an increase in physical activity and quitting smoking. Again Daus et al. (2020) in their research paper “The New Normal for Restaurants: Consumer behavior in a world after COVID-19 lockdowns” compared the trends affecting the restaurant industry before & after the pandemic. They surveyed 647 consumers (visiting several restaurants) in the US through a structured questionnaire and found that “in the post-COVID period residents prefer to have 37% of their meals at home as against 33% before the pandemic”. Further when they go for eating out, most frequently visited outlets are the ‘high-quality restaurants’ serving ‘healthy foods’. Another finding was that 25% of the meals are ordered through online apps by the residents in the post-pandemic period which is 4% higher than that of pre-pandemic time. Similar kind of studies was also carried out by several researchers in various cities of India like Delhi, Chennai and Hyderabad (Karimikonda and Sankala, 2020). But as there are hardly any studies related to the change in ‘eating out’ behavior of residents of Dharamshala in the pre & post-pandemic situation, hence the present study tries to investigate the same along with the factors affecting such behaviors. So the objectives of the research are;

### OBJECTIVES

1. To compare the eating out behaviour of residents of Dharamshala during the Pre & Post Pandemic period.
2. To analyse the factors affecting the residents’ eating out behavior in the Pre & Post COVID-19 era.
3. To provide suggestive measures for the revival of the food outlets from the current crisis.

### RESEARCH METHODOLOGY

As the pandemic hasn't come to a complete end so for the purpose of research we considered the period before 27<sup>th</sup> January 2020 (when the first COVID case was cited in India) as the 'pre-pandemic period' and the time between '15<sup>th</sup> November to 18<sup>th</sup> December 2021' as the 'post-pandemic period' because during this period COVID cases were steeply decreasing in India and were at all-time low on 18<sup>th</sup> December 2021. So in order to achieve the desired results for the above-mentioned objectives, a total of 286 residents of the Dharamshala region were surveyed through a structured questionnaire between November and December 2021. The primary data were collected via the 'convenience sampling' method. The questionnaire used for collecting the data had 3 major sections. While the initial section collected the demographic variables of the residents the second component measured the general eating out behaviour of the residents in the Pre & Post Pandemic period. It had a total of 09 parallel (comparative type) questions which recorded various eating out behaviours like frequency of eating out & ordering via phone call/ application, percentage of food ordered, amount of money spent, types of food/meals preferred, type of restaurants visited etc. The third and final section of the questionnaire measured the factors affecting residents eating out behaviour' during the Pre & Post Pandemic period. It had a total of 13 questions (statements) related to factors like brand / popularity of the restaurant, location, online rating, taste, flavour, price of the food preparations, serving/ distribution methods, cleanliness & Hygiene factors etc. The responses were measured through a Likert scale based on the priority given by the residents to the above factors while eating

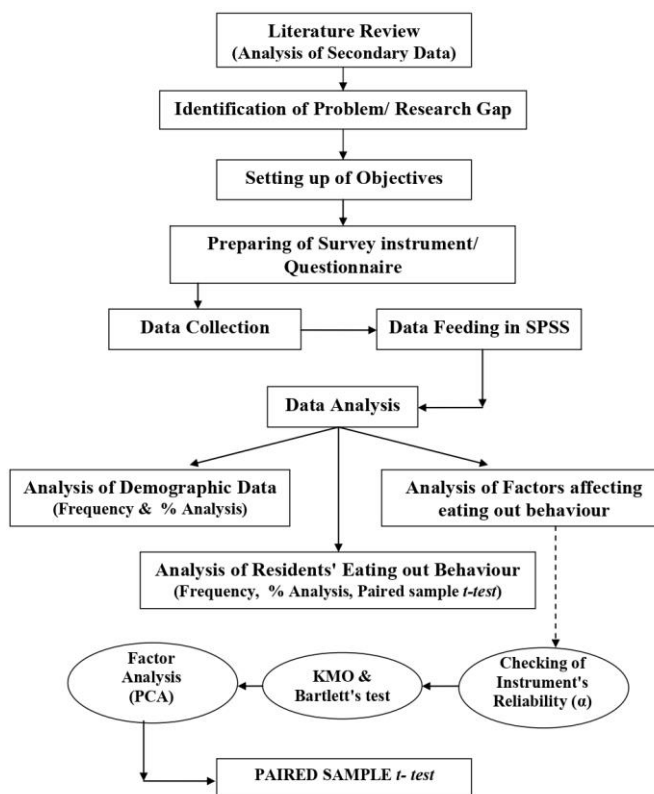


Figure 1. Flow chart of the research methodology adopted for the study

out. While '1' denoted 'not a priority'/least priority, '5' represented as the 'highest priority/ essential' requirement. The collected data were then entered into the statistical software of SPSS-20 & analysed by the use of various statistical tools like frequency & percentage analysis, reliability tests ( $\alpha$ ), sample adequacy test, factor analysis and paired sample *t-test* (Figure 1).

### DATA ANALYSIS & INTERPRETATION

To find out the eating out behaviour of residents of Dharamshala (H.P.) a total of 286 people were interviewed through a structured questionnaire and the collected data were analysed and presented below (Table 1). Initially, the demographic profiles of the respondents were given followed by their eating out behaviour and the factors affecting them.

Table1. Demographic profile of the respondents

Demographic Variables		Frequency (N)	Percentage (%)	Cumulative Percentage (%)
Age	0-20 years	22	7.7	7.7
	21-30 years	110	38.5	46.2
	31-40 years	71	24.8	71.0
	41-50 years	67	23.4	94.4
	51-60 years	14	4.9	99.3
	61 years and above	2	0.7	100.0
	Total	286	100.0	
Gender	Male	182	63.5	63.5
	Female	104	36.5	100.0
	Total	286	100.0	
Religion	Hindu	273	95.45	95.45
	Others (Islam, Christian Buddhist, Sikh)	13	4.55	100.0
	Total	286	100.0	
Marital Status	Single	152	53.15	53.15
	Married	134	46.85	100.0
	Total	286	100.0	
Education	Matriculation (10th)	10	3.50	3.50
	Intermediate (+2)	33	11.54	15.03
	Graduate (+3)	109	38.11	53.15
	PG & above	134	46.85	100.00
	Total	286	100.00	
Income per Annum in Rs.	Less than 1 lakh	113	39.51	39.51
	100000 to 300000	55	19.23	58.74
	300001 to 500000	55	19.23	77.97
	500001 to 1000000	39	13.64	91.61
	1000001 & above	24	8.39	100.00
	Total	286	100.00	
Source of Income	Agriculture	20	6.99	6.99
	Government Service	57	19.93	26.92
	Private Job	46	16.08	43.01
	Own Business	49	17.13	60.14
	Others	114	39.86	100.00
	Total	286	100.00	

#### Objective 1: Eating out behavior of residents of Dharamshala during the Pre & Post Pandemic period

For analysing the difference in the eating out behaviour of residents there were a total of ten questions out of which the initial three questions measured their frequency of visiting local restaurant/ eateries, frequency of purchasing food (physically) for home consumption and frequency of ordering via phone/ application. The responses were recorded with the help of 6 units' measuring scale namely (a) every day, (b) 2-3 times a week, (c) weekly once, (d) once in a fortnight, (e) monthly once, (f) not regularly/occasionally. The rest seven questions had different measurement scales according to the behavioural characteristics measured. The results of the analysis were presented below.

##### 1.1 Frequency of visits to local restaurants (outside eateries)

From the analysis of the collected data it was found that while 20.8% of the residents used to visit the local restaurants '2-3 times a week' in the pre-pandemic period, the number has reduced to a mere 12.1% in the present time (Figure 2). Similar is the case for weekly once goers & fortnight travelers as there is a decrease of 8.1% & 4.5% respectively. On the contrary, the number of residents who used to visit outside restaurants, 'once in a month' or 'occasionally' has increased by 9.6% and 11.2%. From the above, it can be interpreted that due to the fear of pandemic & to avoid the chances of contamination people have reduced their frequency of visit and choose to dine out only when it is very necessary or during a special occasion.

##### 1.2 Frequency of purchasing food (physically) for home consumption

Unlike the above, it was also found here that the percentage of residents who used to purchase food from local restaurants for home consumption 2-3 times a week/ weekly once / once in a fortnight, in pre-pandemic period has reduced considerably in post-pandemic time. Whereas the number of residents purchasing outside food for home consumption 'monthly once' has increased from 24.9% to 28.4 % and there is a steep increase in the number of occasional purchasers from 29.4% to 42.1% (Figure 3). This clearly depicts that, their reliance on outside food had decreased up to a great extent.

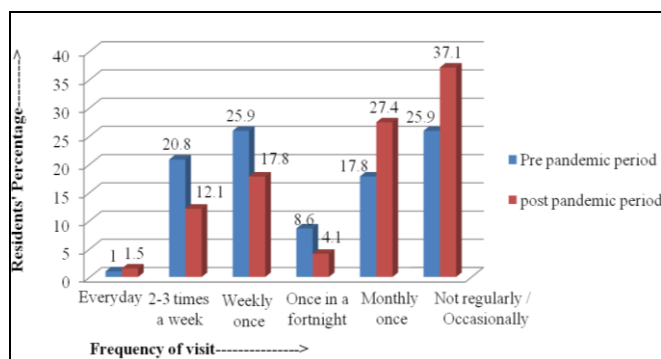


Figure 2. Frequency of visits to local restaurants / outside eateries (Source: Primary Data)

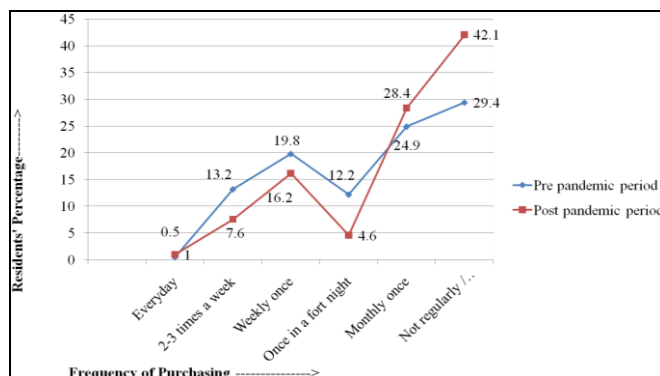


Figure 3. Frequency of purchasing food (physically) for home consumption (Source: Primary Data)

### 1.3 Frequency of ordering food from local eateries via phone call/ Apps

When the residents were enquired about their practice of ordering food from local eateries via phone call or Food Delivery Applications, similar patterns were observed just like the above two eating out behaviour (frequency of visiting & purchasing for home consumption) i.e. there has been a decrease in the frequency of ordering in post-pandemic period by the residents who used to order 2-3 times a week / weekly once / once in a fortnight. Further, though the number /percentage of the monthly practitioners hasn't changed much the percentage of people who order occasionally has increased from 43.7% to 51.3% (Figure 4). This shows the clear shifting in the behaviour of the residents while ordering via phone call/ Apps in the post-pandemic time.

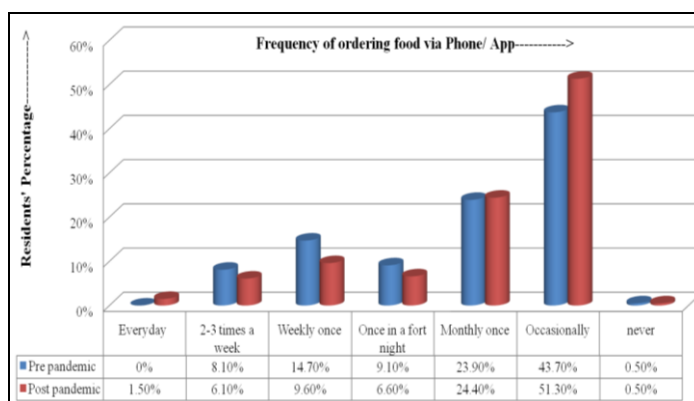


Figure 4. Frequency of ordering food from local eateries via phone call/ Apps (Source: Primary Data)

### 1.4 Significant difference in the percentage of meals consumed from outside eateries in a month (Source: Primary Data)

In order to measure the above, there were a total of two questions i.e. (1) percentage of meals consumed by the residents from outside eateries in a month & (2) percentage of meals ordered by the residents via phone call/ Apps in a month. For analysis initially, a reliability test was conducted for the above two variables & the value of Cronbach's alpha ( $\alpha$ ) was found to be 0.754 making the instrument a reliable one. Later the significant difference in the percentage of meals consumed from outside eateries (by the residents in a month) in the pre & post-pandemic period was analysed via paired sample *t-test*. From the above analysis (Table 2) it can be observed that the average (mean) percentage of meals consumed from outside in a month in the pre-pandemic period was 26.58, whereas it has reduced to 22.85 in the post-pandemic period. This difference was found to be significant as the *p-value* is 0.005 i.e. less than 0.05.

Hence it can be concluded that there is a significant decrease in the percentage of meals consumed from outside in the post-pandemic period. But no significant difference was observed in the percentage of meals ordered via phone call/App in the pre & post-pandemic period (as the *p-value* is 0.717 i.e. greater than 0.05). So from the above analysis, it can be interpreted that in post-pandemic time the residents of Dharamshala have reduced their visit to the local restaurants for dining out as well as decreased their food purchases from restaurants for home consumption.

Table 2. Paired sample *t-test* for the significant difference in pre & post pandemic period (Source: Primary Data)

		Paired Samples Statistics, N= 286		Mean difference	t-value	Sig. (2-tailed)
		Mean				
		Pre-Pandemic period	Post-Pandemic period			
Pair 1	Percentage of meals consumed from outside in a month? (Pre Vs Post Pandemic period)	26.58	22.85	3.732	2.849	0.005
Pair 2	Percentage of meals ordered via phone call / App in a month? (Pre Vs Post Pandemic period)	20.82	20.37	0.452	0.364	0.717

### 1.5 Average amount of money spent while eating out / ordering from outside eateries

When the residents were asked about the average amount of money spent by them over a single order while eating out or ordering from outside restaurants, the maximum number of people (33.92%) stated the amount to be between Rs. 101/- to Rs. 300/- during the pre-pandemic time. (Table 3) Further 31.12% of the residents mentioned that they spend between Rs. 301/- to Rs. 500/-, followed by the highest spenders (Rs. 501/- & above) i.e. 22.37%. Upon comparison of the above with the money spent in post-pandemic time, it was observed that there is a sharp increase in the percentage of low spending

group (less than Rs.100/-) from 12.59% to 20.63%, whereas the residents' percentage has decreased in case of the rest. Hence it can be clearly stated that due to the effect of COVID-19 pandemic the average amount of money spent during eating out / while ordering from outside eateries has decreased up to a great extent.

Table 3. Average amount of money spent during eating out / while ordering from outside (Source: Primary Data)

Average amount of money spent	Pre-pandemic period		Post-pandemic period	
	Frequency	Percentage	Frequency	Percentage
Less than Rs.100/-	36	12.59	59	20.63
Rs.101—Rs. 300/-	97	33.92	87	30.42
Rs.301—Rs. 500/-	89	31.12	86	30.07
Rs.501 & above	64	22.37	54	18.88
<b>Total</b>	<b>286</b>	<b>100.00</b>	<b>286</b>	<b>100.00</b>

Table 4. Type of meal preferred by the residents while consuming from outside eateries (Source: Primary Data)

Type of meal	Pre-pandemic period		Post-pandemic period	
	Frequency	Percentage	Frequency	Percentage
<b>Breakfast</b>	9	3.15	9	3.15
<b>Lunch</b>	80	27.97	61	21.33
<b>Dinner</b>	83	29.02	67	23.43
<b>Snack./ Tea/ Coffee</b>	114	39.86	149	52.09
<b>Total</b>	<b>286</b>	<b>100.00</b>	<b>286</b>	<b>100.00</b>

**1.6 Type of meal preferred by the residents while consuming from outside eateries**

Upon analysing the change in the eating out behaviour of the residents in terms of the meal preferred by them it was cited that the percentage of people preferring to have breakfast from outside has remained unchanged at 3.15%. But the number of people who used to consume lunch & dinner from outside eateries has decreased in the post-pandemic period (Table 4). Further, it was also noticed that there is a 12.23% increase in the residents choosing to have snacks/tea/coffee from outside eateries in the present time. This clearly indicates that people of Dharamshala have reduced their habit of consuming major meals (lunch & dinner) from outside and restricted themselves only to hot beverages & light snacks as the chances of contamination are lower in case of the latter.

**1.7 Type of food preferred by the residents while ordering from local eateries**

From the analysis of collected data, it can be seen that in the post-pandemic period residents have reduced their ordering of freshly prepared foods (cooked immediately & served hot) as their number has reduced from 71.1% to 64% (Figure 5). In contrary to this the percentage of residents ordering semi-perishable/packed foods (cooked & frozen curries, bread, snacks that can be reheated & eaten at home) has increased from 2% to 8.6%. Similar is the case for non-perishable foods (Oatmeal, Cornflakes, Choco flakes, broken wheat, Porridge), where 4% of residents preferred it during post-pandemic time as against 1.5% of the pre-pandemic period. But the percentage of residents choosing 'all of these' has reduced from 25.4% (pre-pandemic time) to 23.4% in the current time. Hence from the above analysis, it can be interpreted that there is certainly a shift/ change in the buying behaviour of residents due to the pandemic situation & 'hygiene and food safety factors' associated with the ordered food material.

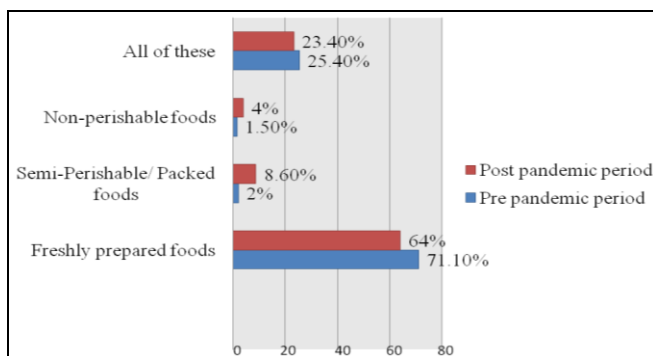


Figure 5. Type of food preferred by the residents while ordering from local eateries (Source: Primary Data)

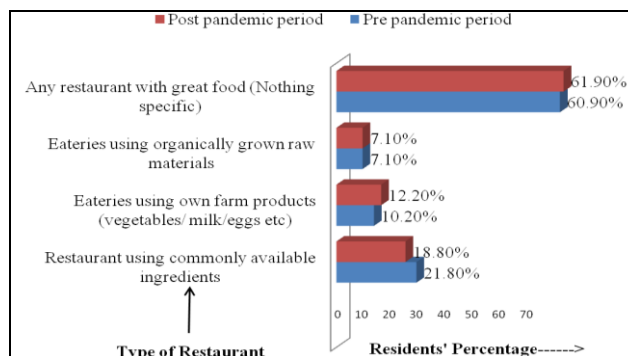


Figure 6. Type of restaurant/ eateries preferred by the residents to visit or order from (Source: Primary Data)

Table 5. Category of food preferred by the residents while consuming from local eateries (Source: Primary Data)

Category of food	Pre-pandemic period		Post-pandemic period	
	Frequency	Percentage	Frequency	Percentage
<b>Fast food</b> (Momo, Chowmein, Burger, Fries, Samosa etc)	141	49.30	103	36.01
<b>Healthy food</b> (Salads/ Cut fruits/ fruit juice/ tender coconut water etc)	35	12.24	58	20.28
<b>High-calorie diet</b> (consisting of fat, sugar, milk & milk-based products)	7	2.45	10	3.50
<b>High protein diet</b> (meat/ poultry/fish-based preparations)	29	10.14	32	11.19
<b>General diet</b> (Rice, Roti/Bread, Dal/Pulses, Vegetables etc)	74	25.87	83	29.02
<b>Total</b>	<b>286</b>	<b>100.00</b>	<b>286</b>	<b>100.00</b>

**1.8 Type of restaurant/ eateries preferred by the residents to visit/order from**

The graph (Figure 6) clearly indicates that there has not been a significant change in the eating out behaviour of residents (in the post-pandemic time) as far as selection of restaurants is concerned. That is, people still prefer 'any restaurant with great food' while eating out or ordering for home consumption. But there is a decrease in the number of residents going to restaurants using commonly available ingredients (from 21.8% to 18.8%). Similarly, there is a 2% increase in the number of residents visiting eateries using their own farm products.

### 1.9 Category of food preferred by the residents while consuming from local eateries

When the residents were asked about the change in their eating out behaviour (in the post-pandemic period) in terms of the category of food consumed by them it was observed that there is a sharp decrease in the consumption of 'fast foods' i.e. from 49.3% to 36.01% (Table 5). On the contrary, the percentage of residents consuming healthy foods has increased from 12.24% to 20.28% and similar is the case for general diet consumption. Hence it can be interpreted that, the residents have reduced their fast-food consumption in post-pandemic time & restricted themselves to healthy and general diets.

#### Objective 2: Analysing the factors affecting the residents' eating out behavior in the Pre & Post-Pandemic period

To identify and analyze the factors affecting the eating out behaviour of the residents, initially, the reliability of the questionnaire (the scale used for the survey) was checked by taking out the value of Cronbach's alpha. The obtained value of ( $\alpha$ ) was 0.880 hence it was accepted for further analysis (Tavakol and Dennick, 2011). As there were 13 items/ variables for measuring the factors affecting the eating out behaviour in the pre & post-pandemic period, factor analysis was carried to reduce the variables. But prior to that KMO & Bartlett's Test was conducted to check the samples' adequacy for factor analysis. As the value of KMO was above 0.600 (Table 6), the significance of Bartlett's Test of Sphericity was less than 0.05 hence the sample was considered adequate for factor analysis (Dumitrescu et al., 2013). Upon the application of factor analysis, the 13 items/variables resulted in 4 factors (dimensions) that affect the eating out behaviour of the residents (Table 7). The above factors explained a total variance of 61.92%. While the maximum value of factor loading was 0.834, the minimum value stood at 0.522. As the factor loading values were within the accepted range, the extracted factors were subjected to further analysis (Walker and Maddan, 2013). The four factors/dimensions which were obtained as a result of factor analysis are (a) Hygiene & food safety factors, (b) Quality of restaurant & food preparations, (c) Sale, service & distribution aspects & (d) Psychological factors.

Table 6. Reliability statistics and KMO & Bartlett's test results (Source: Primary Data)

1	Cronbach's Alpha ( $\alpha$ )	0.880
2	Kaiser-Meyer-Olkin Measure of Sampling Adequacy	0.896
3	Bartlett's Test of Sphericity (Significance)	0.000

Table 7. Extracted factors/ dimensions through PCA (Source: Primary Data)

Factors/ Dimensions	Items/ Variables	Factor Loading				Composite reliability ( $\alpha$ )
		1	2	3	4	
Hygiene & Food safety	Hygiene standard of the food serving/ delivering employees	.834				0.901
	Hygiene level maintained while serving/home delivering food items	.822				
	Cleanliness & Hygiene standard of the food outlet	.786				
	Hygiene standard of the cooks/chefs (cleanliness/ uniform/ gloves/mask etc)	.747				
Quality of restaurant & food	Name / Brand/Popularity of the restaurant/ food outlet		.659			0.857
	Taste & flavour of the food preparations		.647			
	Appearance & presentation of the food items		.536			
Sale, service & distribution	Price of the food preparations on the menu			.737		0.890
	Serving temperature of the food preparations			.589		
	Food packaging & delivery methods adopted by the restaurant			.574		
Psychological factor	Higher Crowd level of the restaurant/ eateries				.807	0.873
	Online rating of the food outlet & their dishes				.539	
	Location of the restaurant/ eateries & their surroundings				.522	

\* Note: KMO- 0.896, Bartlett-1105.665,  $p < 0.001$ . Total Variance Explained 61.92 percent

The first factor comprehended four variables whereas the rest three factors depicted three statements (variables) each. Residents giving more priority to the 'first factor' are very much aware of the importance of 'hygiene and food safety' and feel that it is of utmost importance while eating out in the present scenario (COVID-19 pandemic). Similarly, the people of Dharamshala who give a higher response to the 'second factor' are considered to be keener about the 'quality of restaurant & food' preparations while eating out. Further residents who give a higher priority to the 'sale, service & distribution' aspects while eating out are very much affected by the price of the food, serving temperature and 'packaging & delivery methods'. Finally, the respondents who valued the 'psychological factors' more while eating out are considered to be more particular about the crowd level of the restaurant, online ratings & location of the restaurant, as they feel it is an inevitable requirement for keeping them healthy & safe amidst this pandemic.

#### Priority given by the residents to the resultant factors in the pre & post-pandemic period:

To find out the priority given by the residents to the above factors while eating out or ordering from outside, their grand mean values were analysed. There it was found that, while eating out in the post-pandemic time residents are giving more priority to the hygiene and food safety factors as the mean value increased from 3.81 (in pre-pandemic time) to 4.33 (Table 8). Similarly, the level of priority for the quality of restaurant & food preparations increased from 3.62 (medium to high priority) to 3.86 (high priority). As far as sale, service & distribution aspects are concerned it too resulted in similar findings i.e. increase in the mean values from 3.65 to 3.92. Lastly, the psychological factors were also found to play a pivotal role as the resultant mean of the post-pandemic period (3.42) was higher than the pre-pandemic time i.e. (3.21). Hence to analyse that whether there is any significant difference among the mean values of the above four factors in the pre & post-pandemic period, paired sample *t-test* was carried out. The result shows that there is a significant difference in the priority given by the residents to the resultant factors in the pre & post-pandemic period as the significance value is below 0.05 (Table 8). Hence in a

nutshell it can be stated that the "Residents of Dharamshala are giving more priority to the hygiene and food safety, quality of restaurant & food preparations, sale, service & distribution aspects and psychological factors in the post-pandemic period".

Table 8. Paired sample *t*-test for significant difference among the resultant factors in the Pre & Post pandemic period (Source: Primary Data)

FACTORS / DIMENSIONS	Grand Mean		Grand Mean difference	t-value	Sig. (2-tailed)
	Pre-Pandemic period	Post-Pandemic period			
<b>Pair 1</b> Hygiene & Food safety factors (Pre Vs Post Pandemic period)	3.81	4.33	-.519	-9.073	<b>.000**</b>
<b>Pair 2</b> Quality of restaurant & food preparations (Pre Vs Post Pandemic period)	3.62	3.86	-.249	-5.019	<b>.000**</b>
<b>Pair 3</b> Sale, service & distribution aspects (Pre Vs Post Pandemic period)	3.65	3.92	-.267	-5.884	<b>.000**</b>
<b>Pair 4</b> Psychological factors (Pre Vs Post Pandemic period)	3.21	3.42	-.210	-3.473	<b>.001*</b>

*Note: Priority given by the residents to the above factors was measured on a five-point scale, (from the lowest value of 1= Not a priority to 5= Highest priority/ Essential) Sample size (N)=286, \*p<0.01, \*\*p<0.001*

### Objective 3: Suggestive measures for the revival of the food outlets from the current crisis

It is clearly evident from the above analysis that there is a substantial decrease in various eating out aspects (like frequency of visit, frequency of purchasing/ordering, percentage of meals consumed from outside eateries, the average amount of money spent etc) and an increase in the level of priority given by the residents to hygiene, food safety, quality, service & distribution etc in the post-pandemic period. Hence now it will be a great challenge for the local restaurants to revive from this crisis. Therefore various strategies related to hygiene and conscious practices have to be adopted by them for a speedy recovery such as;

- ✓ Compulsory face mask for the guests and service staff in the restaurant;
- ✓ Thermal checking of temperature at the entry points of restaurants;
- ✓ Installation of automatic doors and sensor-enabled sanitizer dispenser at the entrance;
- ✓ Glass cabins in the restaurants / creating separate seating pods;
- ✓ Reducing the number of tables & keeping maximum gang space as possible;
- ✓ Glass separation between the cashier & guests and acceptance of online payments;
- ✓ Thermal checking of staff while entering the restaurant for duty;
- ✓ Compulsory wearing of mask and face shields by the cooks/chefs;
- ✓ Training of employees regarding latest sanitization procedures of the unit;
- ✓ Prohibition of cloths in kitchen & restaurant, instead use of only paper towels;
- ✓ Frequent cleaning & effective sanitization of kitchen, dining area & sales counters;
- ✓ Maintaining of daily sanitization chart with the time, area, disinfectant used etc;
- ✓ Purchasing of locally grown fresh farm vegetables preferably organic ones;
- ✓ Keeping track of raw materials procurement places for tracing it out during emergency;
- ✓ Prohibiting unauthorized entries in raw material receiving area, kitchen, dining area etc;
- ✓ Sanitisation of raw materials before entering them into the store/ kitchen;
- ✓ Date & time stamps on each of the stored goods (raw/cooked/fresh/dry etc);
- ✓ Reduction of Menu items & strict check on food wastages from time to time;
- ✓ Installation of automatic soap dispenser with the timer at the hand washing units;
- ✓ Marking on the grounds wherever necessary to ensure social distancing;
- ✓ Compulsory use of pedal operated dustbins which should be cleaned very frequently;
- ✓ Regular checking & replenishment of the sanitisers, liquid soaps & paper towels;
- ✓ Displaying of directional & interpretive signboards around the outlet for guests & staff;
- ✓ Regular sanitization of food delivery vehicles & carrying accessories used by them;
- ✓ Use of delivery sticks while handling food by home delivery men;
- ✓ Strict adherence to HACCP rules throughout the food supply chain process.

### CONCLUSION

Covid-19 has affected every segment of society in one way or the other. Be it the compulsion to stay at home, following social distancing norms, use of protective gears, or simply the loss of job, business, mental peace, or getting infected and struggling with life, each of them has brought out several changes in the human behaviour.

The above study tried to analyse the change in the behaviour of residents of Dharamshala (H.P.) during one of their most popular activities of the day i.e. "eating out". The inferential result shows that frequency of visit, frequency of purchasing/ordering, percentage of meals consumed from outside eateries, the average amount of money spent etc has decreased in the present times (referred to as post-pandemic period). Further, the residents have also started giving more priority to several factors during eating out like hygiene, food safety, quality of food items, sale, service & distribution aspects. Hence if the local restaurants & eateries quickly adapt to the suggested measures keeping in mind the new business case then it will certainly help them revive from the current crisis faster.

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