EFFECT OF COVID-19 ON CONSUMERS ATTITUDES IN RESTAURANTS

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ABSTRACT

This research determined the impact of Covid-19 infection threat on consumer attitudes and behaviors in restaurants. The study explained one aim that affects the consumer behavior which is Covid-19 infection threat. For the purpose of gauging the consumer behavior, contact limitation, keeping distance, personal security and dietary health were taken as endogenous variables. The data was gathered from students, staff, restaurant owners and those who used social media. A quantitative research approach was carried out through Ahorsu, D. K. et al, Szymkowiak et al & Prasetyo et al's questionnaire which has close-ended questions. This virus wreaked havoc on the hospitality industry, including hotels & restaurants. Consumers are scared to visit restaurants in the service environment. The measurement and structural models were applied to measure reliability, validity and hypotheses and SmartPLS was used to test the data. According to the results, the restaurant owners and government are suggested to make their strategies and accordingly take measures.

KEYWORDS:

Infection threat, Consumer attitudes, contact limitation, Keeping distance, Personal security, Dietary health.

INTRODUCTION

Since its emergence from the start of 2020, COVID-19 has spread fast over the planet. The epidemic has touched people from all walks of life in most nations and has had a catastrophic yet considerable effect on global economic development, including the United States. The catering business has been severely harmed (An, 2020), (Kashif, Rehman, & Javed, 2020).

Since March 2020, restaurants across Pakistan have been proscribed from providing dine-in services which not only resulted in a major loss of operating income for restaurants but also exposed them to fixed labor and costs of purchasing disease prevention and control materials.

Overview and Background

The Corona virus started spreading in Wuhan, China in Dec'19 has moved swiftly from Wuhan to all over the globe. The WHO designated the Corona virus outbreak as the 6th public health emergency of international concern on Jan 30, 2020 and WHO proclaimed Covid-19 a pandemic on Mar 11, 2020. In the beginning of month, April, there has been almost above 1.4 million cases of the infection, with 85.5 thousand deaths, a mortality rate of 5.95%. This virus possesses a very high rate of worldwide danger, according to the WHO. In the following days and weeks, the number of occurrences, deaths, and impacted nations is projected to skyrocket (Abid, Abdul bari, & Imran, 2020).

Corona virus is still spreading slowly in Pakistan. On Feb 26, 2020, covid's first case was recorded in Karachi, which has a population of 204.65 million. The virus is rapidly spreading across the country and has already reached epidemic proportions. On April 10, 2020, Pakistan had 4,601 confirmed COVID19 cases, 727 patients had recovered, and 66 had died in 45 days (Abid, Abdul Bari, Younas, Tahir Javaid, & Imran, 2020).

The reason of this brief study is to raise awareness about the Covid-19 epidemic and its impact on eateries across the country.

This would help to put the current situation in a nutshell and the steps the Pakistani health sector has taken to reduce the risk of communication. (Abid, Abdul Bari, Younas, Tahir Javaid, & Imran, 2020)

Problem Statement

Corona virus wreaked havoc on the hospitality industry, including hotels, restaurants, and bars. In early 2020, for example, eateries were forced to close due to the lockdown policy. Furthermore, customers exhibited a propensity to avoid other individuals in public. Because of the social distancing strategy, jurisdictions encouraged or required such enterprises to focus on delivery service or lower sitting capacities even after they reopened. The future of eateries appears to be doomed (Jungkeun & Jacob C., 2020).

Many individuals overreacted to corona virus by going to lengths to avoid contact with others. Consumers are also afraid to visit restaurants in the service environment. Therefore, it is hard to analyze the many aspects that may revive customer inclinations to frequent restaurants in these conditions.

LITERATURE REVIEW

A literature review is a study of a research project that includes substantive judgments as well as analytical and systematic contributions to a certain issue. This study focuses on one independent variable, the 'Covid-19 pandemic,' and its impact on consumers' attitudes in restaurants via four dependent variables: 'Contact Limitation, Keeping Distance, Personal Security, and Dietary Health.'

- *Covid-19***:** The corona virus (Covid-19) stands for Chinese originated virus in December 2019 which is an infectious disease. The majority corona infected patients will have mild or moderate symptoms while on the other hand some have severe symptoms and requires medical assistance.

- *Contact Limitation***:** It is basically avoiding or preventing physical meetings or communication with other people outside the house.

- *Keeping Distance***:** People are resuming their works and activities slowly that were put on hold when the COVID-19 disease broke out. Because the covid is still spreading, it is critical that people should maintain physical distance and take necessary precautions. Maintaining physical distance between each other is referred as keeping distance.

- *Personal Security:* Personal security is a broad state that happens when proper measures are taken to prevent, postpone, and warn of potential risks.

- *Dietary Health:* It maintains or improves overall health is referred to as dietary health. Fruits, vegetables, nuts, and whole grains are all part of a balanced diet that supply important nourishment to the body.

RELATIONSHIP BETWEEN COVID-19 AND CONSUMERS ATTITUDES

Covid-19 infection threatens individuals dining in restaurants, according to studies, thus consumers limited their restaurant visits and utilized contact-less payments instead of cash. (An, 2020), (Kashif, Rehman, & Javed, 2020), (Belarmino, Bertmann, Biehl, Neff, & Niles, 2020). People, it turns out, are primarily driven to take preventative steps when confronted with risks in order to lessen the threat that comes with inaction. As a result, the ongoing COVID-19 outbreak is predicted to have a substantial impact on consumers' attitudes in restaurants.

The influence of the covid-19 on customer sentiments is explained using the paradigm of in-store epidemic behavior. (An, 2020), (Szymkowiak, Gaczek, Jeganathan, & Kulawik, 2020). Contact limitation, preserving distance, personal security, and dietary health were chosen to examine the influence of Covid-19 effect on consumers' attitudes in restaurants.

Covid-19 and Contact Limitation

The covid-19 causes contact to be reduced. People used to sit at communal tables at restaurants to form bonds over food and drink (An, 2020), (Ranka, 2020). To prevent contracting the virus, customers abandoned their old practice of dining together and began using separate portions. Consumers prefer to go to restaurants with fewer people to avoid contact with others during the virus, according to the results of one study on the influence of corona virus on food retail and food services in Canada (Goddard, 2020). After returning to work, many limited their social gatherings and began dining alone at restaurants.

Covid-19 and Keeping Distance

Because Covid-19 spreads by intimate contact with other individuals, isolation, together with quarantine and social separation, has been deemed the most effective prophylactic approach (Farooq, Laato, & Islam, 2020). Despite the fact that isolation is inherently inconvenient, the danger of covid drove people to deliberately comply with these procedures (An, 2020), (Rubin, Amlôt, Page, & Wessely, 2009). During the outbreak, individuals did their hardest to decrease the danger of infection by staying away from questionable persons and locations.

Covid-19 and Personal Security

As a result of the outbreak, the public is more aware of the significance of personal cleanliness and virus control (Iyengar, Mabrouk, Jain, Venkatesan, & Vaishya, 2020). Personal hygiene methods suggested by WHO and national organizations include washing hands often after touching other people or things, wearing masks in public settings, and covering coughs and sneezes with disposable tissue or garments (Cascella, Rajnik, Cuomo, Dulebohn, & Di Napoli, 2020), (An, 2020). People deliberately accepted responsibility for infection management and placed a high importance on individual preventative methods (Kwok, et al., 2020), with electronic payments being suggested as a way to lower the risk of viral transmission.

Covid-19 and Dietary Health

Aside from maintaining a safe distance and maintaining good cleanliness, nutritional health is another approach to avoid becoming ill (FAO , 2020), (An, 2020). Furthermore, customers are more concerned about food safety as a result of the perceived infection hazard, such as if the materials are fresh and whether the cooks and waiters are taking precautions (Ranka, 2020), (An, 2020).

RESEARCH MODEL

The two foundations of our investigation to support the suggested model are Covid-19 and customer attitude/response. We've combined all of these factors into a single research of covid-19's impact on consumers' behavior, which suggests that the danger of covid-19 infection influences consumers' attitudes and actions in restaurants.
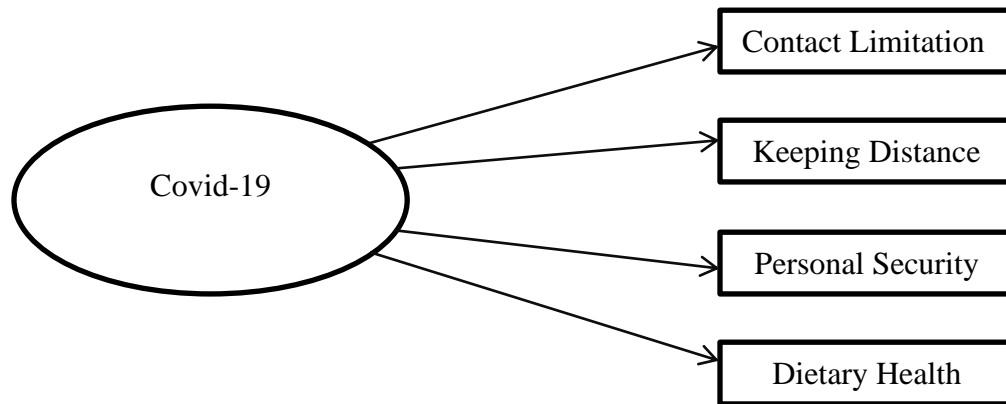
METHODOLOGY

The influence of Covid-19 customers' attitudes in restaurants is investigated using a quantitative research approach. Questionnaires were used to gather data, which was then examined to see if the provided hypotheses were true in order to answer the study questions.

SAMPLING

Sampling is a method of gathering data by selecting a group of units from a target population. The whole pattern of units for whom the survey information is utilized to make a conclusion is referred to as the target population for a survey. Simply put, the target population is made up of all the units for whom the survey results are standardized. The sample size refers to the number of participants or respondents who took part in a survey.

The sample size refers to the number of participants or respondents who took part in a survey 'n' is generally the one who donates it. A sample size of 384 is seen to be a feasible amount for obtaining minimal sampling. In this research a sample size of 250 was taken.

DATA COLLECTION

After examining relevant data collecting techniques from the literature, questionnaire questions are created by updating (Ahorsu, Lin, Imani, Saffari, Griffiths, & Pakpour, 2020), (Szymkowiak, Kulawik, Jeganathan, & Guzik, 2020).'s in-store pandemic behavior scales and (Prasetyo, Castillo, Salonga, Sia, & Seneta, 2020)'s questionnaire. The survey was distributed on several social media platforms like Facebook, WhatsApp and others in order to target those who have access to social media. As previously stated, the respondent's age, gender, or employment were not restricted. The only people who were interested were those who used social media. Students, staff, and restaurant owners all participated in this study and answered questions concerning covid-19 and consumers' attitudes and their opinions on the five factors chosen. Closed-ended questions are included in the survey, and participants are asked to score statements on a 5-point Likert scale.

STATISTICAL TECHNIQUE

The replies were collected on the spot and double-checked after all of the participants had completed the questionnaires. For analysis, all of the data obtained from participants was coded and loaded into SPSS statistics version 20.0.

To summarize the socio-demographic variables, descriptive statistics were used. The measurement and structural models were applied and SmartPLS was used to test the data. The model's reliability, validity, and R square were all tested in measurement model. Furthermore, the blindfolding approach was used to test the hypotheses and data's prediction capacity. To evaluate the assumptions in the structural model, the conventional 5000 bootstrapping procedure was used.

RESULTS

Because women attend restaurants more than males, the bulk of the population in this study is female. Men, on the other hand, showed up in good numbers. In the sample of 250, 149 women and 101 men participated, representing a strong contribution from both sides.

Variable	Category	Sample Size	%
Gender	Male	101	40.4
	Female	149	59.6
	Below 20 years	12	4.8
	21 to 30 years	193	77.2
Age	31 to 40 years	44	17.6
	41 to 50 years	1	0.4
	Above 50	0	0.0
	Below 25000	99	39.6
	25001-30000	35	14.0
Income	30001-40000	49	19.6
	40001-50000	41	16.4
	Above 50000	26	10.4
	Less than 1 year	100	40.0
	1-3 years	92	36.8
Work Experience	4-6 years	52	20.8
	7-10 years	4	1.6
	Above 10 years	2	0.8

Only 12 responses were under the age of 20, with the bulk of 193 being between the ages of 21 and 30. There were 44 replies between the ages of 31 and 40, and only one between the ages of 41

and 50. According to the demographic statistics, the majority of the 99 participants had an income of less than 25,000. There were 49 persons with an income of 30001-40000, 41 with an income of 40001-50000, 35 with an income of 250001-30000, and just 26 with an income of Above 50000. Furthermore, the work experience data was diverse; there were 100 persons with less than one year of experience, 92 with up to three years of experience, 52 with up to six years of experience, 4 with seven to ten years of experience, and 2 with more than ten years of experience.
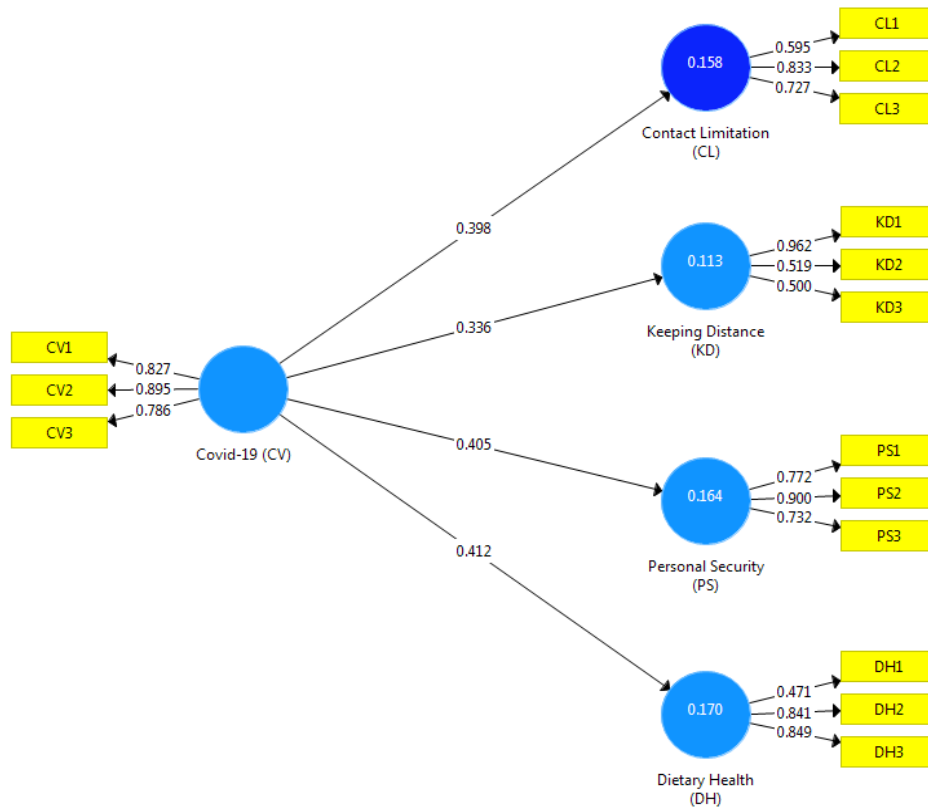
There were five variables taken in the research including exogenous variable. The measurement model was applied and it was found that the outer loadings of the constructs contact limitation, dietary health and keeping distance were not at par but the composite reliability and average variance extracted (AVE) was just above the line and meeting the standard parameters. Therefore, it was decided to take the remaining items of the contact limitation, dietary health and keeping distance and all the items taken of other constructs were retained as there was no major issue found. Moreover, the outer loadings of the items suggest that items are greater than the required values of 0.7. The data was also found clean with respect to multicollinearity, as all the items' values of VIF were less than the standard VIF value of 5. The composite reliability values of all the constructs were greater than 0.7 which is the minimum requirements to have a reliable data. Only

the value of construct keeping distance was found to be less than 0.5 while the remaining 4 constructs have values greater than 0.5 in the AVE that means except for one construct, all the items are explaining variance to their own constructs rather explaining the error. Therefore, it is almost safe to say that the data is valid and reliable to predict the outcome.

Constructs	Items	Outer Loadings	VIF	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Contact Limitation	CL1	0.595	1.193	0.578	0.630	0.765	0.526
	CL2	0.833	1.141				
	CL3	0.727	1.211				
Covid-19	CV1	0.827	1.813	0.788	0.818	0.875	0.701
	CV2	0.895	1.939				
	CV3	0.786	1.452				
Dietary Health	DH1	0.471	1.047	0.569	0.653	0.776	0.550
	DH2	0.841	1.445				
	DH3	0.849	1.432				
Keeping Distance	KD1	0.962	1.194	0.579	1.330	0.716	0.482
	KD2	0.519	1.200				
	KD3	0.500	1.147				
Personal Security	PS1	0.772	1.443	0.733	0.821	0.845	0.647
	PS2	0.900	1.623				
	PS3	0.732	1.380				

Fornell-Larcker and Heterotrait-Monotrait Ratio techniques were used to assess discriminant validity. Table 3 is about Fornell-Larcker, and Table 4 is about the HTMT technique of determining discriminant validity.

	CL	CV	DH	KD	PS
Contact Limitation	0.725				
Covid-19	0.398	0.837			
Dietary Health	0.456	0.412	0.742		
Keeping Distance	0.418	0.336	0.325	0.694	
Personal Security	0.401	0.405	0.471	0.588	0.804

All of the diagonal values in table 3 are bigger than their down and left side values, indicating that the data is explaining variations of their own constructions rather than variances of other constructs. Furthermore, the values of HTMT are shown in table-4 and all of the numbers in the table are less than 0.85. That is to say, this approach demonstrates that there is no problem with discriminant validity in the data. As a result, another validity tool is confirmed to be accurate.

	CL	CV	DH	KD	PS
Contact Limitation					
Covid-19	0.523				
Dietary Health	0.743	0.594			
Keeping Distance	0.694	0.350	0.452		
Personal Security	0.572	0.499	0.686	0.759	

The study's second criteria were R square. Because there are four endogenous variables accessible, four R squares were discovered. The values of R squares for the constructs contact limitation, nutritional health, keeping distance, and personal security were 0.158, 0.170, 0.113, and 0.164, respectively, which is believed a substantial variance discovered in the data from the model supplied.

	R Square	R Square Adjusted
Contact Limitation	0.158	0.155
Dietary Health	0.170	0.166
Keeping Distance	0.113	0.109
Personal Security	0.164	0.161

Table 5. R Square

Aside from R square, the fitness of the mode was assessed using the Q square approach. In the SmartPLS, the blindfolding approach was used to discover the values of Q square in the Construct Cross validated Redundancy. Table 6 indicated that the value of the Q square is larger than zero, implying that the model's predictive capacity is established.
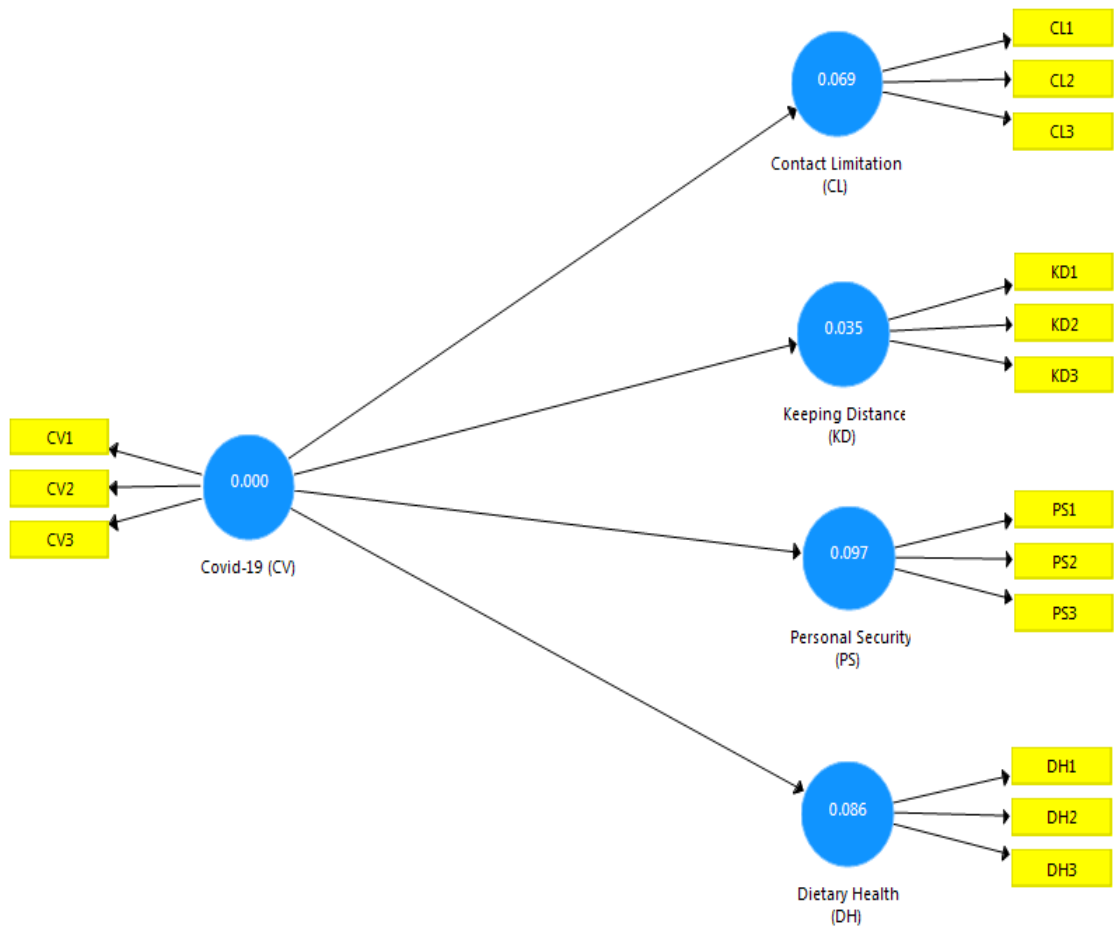
	SSO	SSE	Q² (=1-SSE/SSO)
Covid-19	750.000	750.000	
Keeping Distance	750.000	723.658	0.035
Contact Limitation	750.000	698.358	0.069
Dietary Health	750.000	685.540	0.086
Personal Security	750.000	677.396	0.097
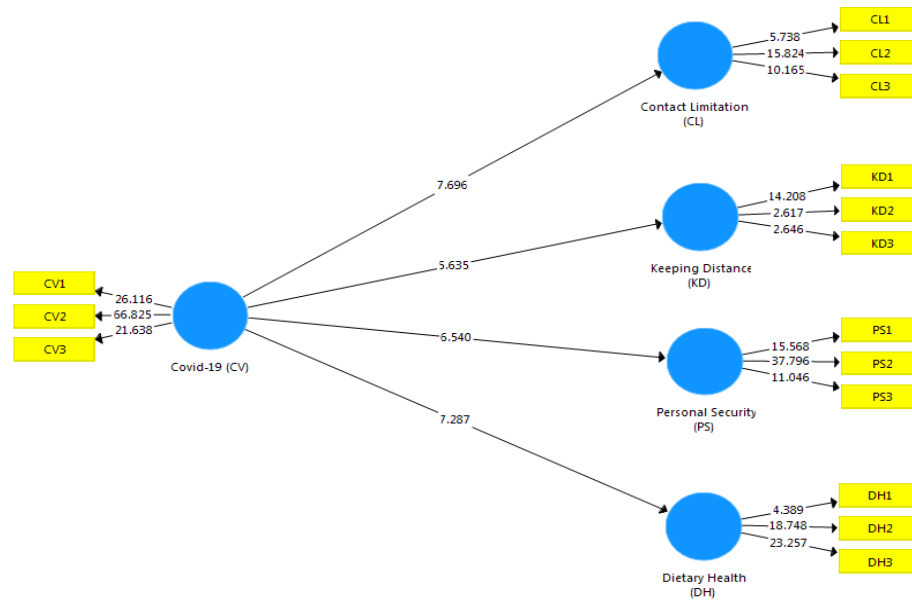
The study then proceeded to test the hypotheses after assessing all relevant measures of validity and reliability. The study included one independent variable, Covid-19, which was claimed to have an influence on the four dependent variables, contact limitation, keeping distance, personal security, and nutritional health. The hypothesis contact limitation p value was less than 0.05, and the T value was more than 2. It was found the influence of exogenous variable, Covid 19 on contact limitation is 39.8%. Hence the hypothesis (**H1**) was proved to be positive and significant therefore, it is said that Covid-19 has positive affect on Contact Limitation. The p value of hypothesis Dietary health was found less than 0.05, the T value was also greater than 2. The variance explained by exogenous was 41.2%. Hence the hypothesis (**H2**) was proved to be positive and significant, therefore it is said that covid-19 has positive effect on Dietary health. The p value of hypothesis Keeping Distance was found less than 0.05, the T value was also greater than 2. The variance explained by exogenous was 33.6%. Hence the hypothesis (**H3**) was proved to be positive and significant, therefore it is said that covid-19 has positive effect on keeping distance. The p value

of personal security was found less than 0.05, the T value was also greater than 2. The variance explained by exogenous was 40.5%. Hence the hypothesis (**H4**) was proved to be positive and significant, therefore it is said that covid-19 has positive effect on personal security.

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
Covid-19 (CV) -> Contact Limitation (CL)	0.398	0.409	0.052	7.696	0.000
Covid-19 (CV) -> Dietary Health (DH)	0.412	0.420	0.057	7.287	0.000
Covid-19 (CV) -> Keeping Distance (KD)	0.336	0.352	0.060	5.635	0.000
Covid-19 (CV) -> Personal Security (PS)	0.405	0.414	0.062	6.540	0.000

DISCUSSION & CONCLUSION

In this research, the impact of Covid-19 on consumer behaviors in restaurants is studied. As per the findings, the customer behaviors in restaurants have considerable effect due to Covid-19. Because the pandemic danger transcends the control of restaurants and consumers, the only option to manage covid-19 is to take preventative measures. This research backs up previous research findings that people actively take efforts to decrease hazards after they encounter them (An, 2020), (Hung, et al., 2014) (Janmaimool, 2017). Participants in this research believed Covid-19 would reduce their contact with others (**H1**). In restaurants, people are increasingly eating alone at rather than meeting with others (Rogers, 2020). Previous study indicates that personal preventative actions can lessen the effect of covid-19 posed by inaction in the areas of keeping distance (**H2**) and personal security (**H3**) (Hung, et al., 2014), (An, 2020). People have a better grasp of public health because of the government's and health organizations' aggressive publicizing during the epidemic. While in restaurants, customers intend to sanitize their hands with the disinfectant given by the restaurant or their own, always keeping their face masks on except during meal times, and keep a safe distance from others while waiting in the queue lines and also tend to use electronic payments methods in the restaurants or markets (Lo, Li, & Chan, , 2019), (An, 2020). Finally, this research discovered that the COVID-19 causes consumers to pay greater attention to nutritional health when dining out (**H4**). As a proper nutrition leads to a powerful immune system that improves the prevention of viral transmission (Prasetyo Y. T., Castillo, Salonga, Sia, & Seneta, 2020), (An, 2020). The purchasing of dietary health products has also been increased.

IMPLICATIONS/ CONTRIBUTIONS

This research adds to the existing body of knowledge on consumer behavior. As previously said, there has been minimal study on the influence of the covid-19 on consumers' attitudes at restaurants. Furthermore, this research has management consequences for restaurant owners. In terms of contact limitation, restaurants may offer a range of solo meals so that people can try numerous flavors while avoiding the masses. In terms of Keeping distance and personal security, the inclusion of outside eating area not only helps in social distancing but also adds to the customer's number. Furthermore, restaurants may provide cleanliness measures such as hand wash, as well as make it easier for guests to pay by putting Bar codes on tables or installing portable code scanners, lowering the amount of long queues of people to pay bills. Lastly, restaurant operators should focus on the diet and nutrition of their food and reply honestly to consumers' issues regarding food safety and quality.

LIMITATIONS

This research does have some limits. For starters, sample selection may have biases on hypothesis. The research is being done in Karachi, Sindh, and the target group is Pakistani customers. However, various cities in Pakistan may have distinct consumption behaviors, limiting the usefulness of the data. Secondly, as all of our data is derived from survey questions, our research findings may suffer from a usual method variance issue. Lastly, because this research is confined to the restaurant business in Pakistan, the results may differ when applied to other sectors or areas.

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