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SOCIAL CONSEQUENCES OF CORONA VIRUS (COVID-19) OUTBREAK IN PAKISTAN: PUBLIC OPINION EVIDENCE FROM KARACHI

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ABSTRACT

Corona Virus (COVID-19) is one of the most furious viruses and belongs to the family of Severe Acute Respiratory Syndrome (SARS) and MERS (Middle East Respiratory Syndrome). After producing a drastic effect on China the disease has been spread all over the globe and killed around 87,000 people still than the disease is a bit different from other zoonoses and recently there is a debate regarding its acceptance is a global pandemic. Although its breakout is the point of severe tension for economies like Pakistan as it is producing drastic impacts on the economy as well as on social life. Therefore, provincial governments have taken several measures to control the virus, but residents are not paying due attention to the disease and its potential outcomes. Therefore, a study is required to understand the perception that way people are reluctant in taking required preventive measures and thus a public opinion based research is conducted from Karachi city to understand the viewpoint of the local public regarding the factors which resulted in the outbreak of COVID-19. Thus this study has been done specifically to understand the concept through public opinion and the sample size for the study was taken from Karachi city and the result indicated that COVID-19 is affecting social life although it is not perceived as pandemic which might affect people from different ages.

Keywords: Karachi City, COVID-19, Public Opinion and Predictors of COVID-19.

INTRODUCTION

There are several epidemics which transformed into pandemics through their transferability across borders. This has already been evident in the case of HIN1, H5N1, HIV and SARS (Verikios,

Sullivan, Stojanovski, Giesecke, & Woo, 2016). These epidemics not all affect developing economies but also threatened the developed ones.

The important point is these pandemics might have different natures although shown similar patterns and diffusion mechanism during their outbreaks (Dimitri, 2015). Although the advance level of technology, infrastructure and education became major resultant through which developed economies use to mitigate negative consequences of these types of pandemics (Bloom & Canning, 2006). World Bank indicated that total economic loss due to outbreak of highly contiguous zoonoses from 1997 to 2009 reaches the figure of US $ 6.7 billion/ year which is obvious looks beyond than healthcare sector (Smith, Machalaba, Seifman, Feferholtz, & Karesh, 2019). Hence it is much difficult to measure the direct social and attitudinal effect of pandemics and there is lack of tool which can directly observe these types of impacts (Fetzer, Hensel, Hermle, Roth, Muller, Baldwin & de Mauro, 2020).

COVID-19 is the latest epidemic which was initially traced in Wuhan city of Hubei province of China has been dispersed out in most of the countries all over the globe (McKibbin & Fernando, 2020). Virus resembles Severe Acute Respiratory Syndrome (SARS) and Middle- East Respiratory Syndrome (MERS) and up till now killed more than 87,000 people all over the world. Although there are few studies available which study the effect of pandemics on individual behaviours and societies at large (Gao, Cao, Hong, Tang, Chen, Jin & Yan, 2020).

STATEMENT OF PROBLEM AND DELIMITATIONS

Economic effects created by epidemics are of high concern. Although epidemics also produces negative consequences on human wellbeing through the increase of death rate and injuries (Bloom & Canning, 2006) although literature portrays that pandemics like Black Death creates a range of negative consequences like economic, social and cultural (Fetzer *et.al.,* 2020). The point is especially potent when considering the massive contagiousness of COVID-19 (Bloom & Canning, 2006) and abilities of pandemics to disintegrate the economic, social, and political aspects of any economy. Although there are few pieces of research which addressed the social effects of

deadliest pandemic i.e. Spanish Flu except Karlsson, Nilsson, and Pichler (2014); Bengtsson and Helgertz (2015) and others. However, Bedford, Ernia, Giesecke, Heymann, Ihekweazu, Kobinger and Ungchusak, (2020) indicated the requirement to address the research gap associated with COVID-19, especially by the global community.

Hence optimal to trace the social impacts of COVID-19 in the low-income countries like Pakistan (Salik, Ishfaq, Saeed, Noel & Syed, 2015) as developing economies are also lacking in education, technology and infrastructure (Bloom & Canning, 2006). Therefore, this study is specially conducted to understand the social effects of COVID-19 on low-income countries like Pakistan. Although the findings of the study are based on public opinion conducted through an online survey from the residents of Karachi. There are several reasons for studying social impacts of COVID-19 as World Health Organization indicated that there are heaps of questions regarding the impact of COVID-19 on a specific population. On the other hand, the reason to select public opinion to gauge the social impact of COVID-19 has been supported by Fetzer *et.al.*, (2020) as there is the unavailability of method which can directly gauge the social impacts of pandemics. Moreover, public opinion is also used as the tool of data collection by Wang, Pan, Wan, Tan, Xu, Ho and Ho (2020) for tracing psychological impacts of COVID-19 & Karachi is the top-ranked city of Pakistan concerning the confirmed cases for COVID-19 ('Know About COVID-19', 2020b)

THEORETICAL FRAMEWORK

There are several social impacts which are created by pandemics although there are almost no research-based studies on low-income countries like Pakistan. Therefore, in this study researchers restricted to only those variables which are supported by literature and seem optimal due to their continuous use. Hence only five dependent variables are selected in the study and the moderation of age is used in order to examine the impact of age on the social life of residents of Karachi. Following variables are found to be legitimate and coherent with respect to the design and nature of the study:

a) **Health Consciousness:** The variable which looks almost similar to the Health Impact although it discusses the measures which are taken to remain healthy during COVID-19. Study of

Zhang and Ma (2020), indicated the same by highlighting the ways which are used by residents of China during CVID-19

b) **Social Distancing** has been indicated as the potent impact of pandemics by Shukla (2020) & Wan *et.al.,* (2020).
c) **Lockdown and Quarantine** are also caused by several pandemics and indicated as the legitimate part of the variables inventory of social effects by Geloso (2020); Shukla, (2020); Mesnard and Seabright (2009); and Wan *et.al.*, (2020).
d) **Negative Emotions** are also caused by pandemics and are highlighted as the part of social effect by Brooks, Webster, Woodland, Wessely, and Rubin (2020); Lin, Huang, Nie, Liu, Yu, Yan, Xu (2020); Wan *et.al.,* (2020); and Zhang, Wang, Rauch and Wei (2020).
e) **Disintegration of Social Trust** is indicated by Fetzer, Hensel, Hermle, Roth, Muller, Baldwin, and di Mauro (2020) and Zhang and Ma (2020). Although Fetzer *et.al.,* (2020) used variable as the root cause of the pandemic but as the analysis of social impact has never been done for countries like Pakistan, this study used the variable as the part of the dependent variable inventory.
f) **Age is used as the moderating variable as** Wan, Pan, Wan, Tan, Xu, Ho, and Ho (2020); Wang *et.al.,* (2020); Wan *et.al.,* (2020); and Zhang and Ma (2020) suggested that pandemics affect children adolescents. On the other hand, Elflein (2020) indicated that elderly people are at most risk from the spread of COVID-19 hence the study uses age as a moderator. Similarly, Zhang and Ma (2020) indicated that elderly people in Wuhan are receiving less support from friends and family since the outbreak of COVID-19 (Lau, Yang, Tsui, Pang & Wing, 2020).

SIGNIFICANCE OF THE STUDY

The study must be treated as one of the pervasive studies as it is the contribution of research towards the social impact of COVID-19. Moreover, this is from Pakistan which is the low income as well as one of the developing countries of the world hence the magnitude and implications can easily be utilized in other developing and low-income countries.

Furthermore, the study will also provide the base to conduct a more detailed study on social impacts of pandemics like COVID-19

through investigating the construct via the help of professionals and experts of the field.

LITERATURE REVIEW

Several countries are trying to prevent a major outbreak of COVID-19 by indicating preventive and control measures so to oversee the extensive flow of patients. This will also maintain the demand and supply function of extensive healthcare facilities like ventilators etc. Although COVID-19 is spreading all over the globe and create massive threats for all ages especially for workers of health-care units and elderly people (Bedford *et.al.,* 2020). According to the latest update of 10th April 2020, there were 4,489 confirmed cases of COVID-19 across Pakistan among them 572 got recovered and 63 got dead ("Know About COVID-19", 2020 a). Adding to this it has also been revealed that 2241 confirmed cases in Punjab, 1241 in Sindh, 560 in KPK, 212 in Baluchistan, 33 in AJK and 213 in GIB ("Know about COVID-19", 2020 b).

On the other hand, World Health Organization Europe (2020) also indicated that the pandemic is also affecting emotions and causing fear and strength across borders as people find themselves in a very critical situation. Therefore, in association with the points of the statement of the problem e.g. Bedford *et.al.,* (2020) and Bloom and Canning (2006), the following literature will present the social effect of COVID-19 on community

Health Consciousness

It is a well-Known fact that the health and health services are the area which is affected most severely due to the outbreak of COVID-19. Although COVID-19 might produce much broader consequences on health consciousness and services as the virus is also produced significant stress on health services even in developed countries (Hussein, 2020). Similarly, patients having issues associated with functions of lungs like shortness of breath or wheezing etc. are at extensive risk (Kelland, 2020). Children are also considered as one of the victims as their level of productivity as well as physical and mental health is mainly linked with their childhood. Not only these type elderly and young chronic diseases might also affect young ones as the

history revealed that chronic illness also increased anxiety, depression and stress (Wan, Pan, Wan, Tan, Xu, Ho & Ho, 2020).

These negative conditions might become worse due to forced separation from social circles and life (Shukla, 2020). Hence an effective mechanism is required to deal with these issues proactively so to diminish the negative consequences of the disease, especially for children (Wang, Zhang, Zhao, Zhang & Jiang, 2020). Zhang and Ma (2020) also highlighted that during COVID-19 people from China starts paying more attention towards their mental and physical health. This becomes clearer through the survey which reveals 62% of respondents are spending more time to take rest while 64% are spending more time to get relax and 59.7% spends more time on physical training etc.

Social Distancing

Social Distancing is simply the addition of distance among people through preventing travelling and interaction. This not only requires staying and working from home but also require avoidance of meeting, crowded places and exposing ourselves only at mandatory locations and occasions (Shukla, 2020). This might only be observed when the probabilities of negative health consequences are high (Liao, Cowling, Lam, Ng & Fielding, 2010), studies also indicated same that outbreak of influenza makes population significantly worried to be infected by others (Wan, C. *et.al.,* 2020). Also found true in the case of H1N1 when 50% of respondents from the UK perceived that social distancing will impair the spread (Liao *et.al.,* 2010). This looks similar in the outbreak of COVID-19 where it is recommended to maintain social distancing to decrease the chances of spread (Shukla, 2020). This has been proved by the study of Roy, Tripathy, Kar, Sharma, Verma, and Kaushal (2020) which indicated that 82% of their respondents avoid social contacting and around 90% avoid parties and meetings.

Lockdown and Quarantine

The reasons to restrict travelling, as well as orders of lockdown, are the serious measures taken by authorities to prevent further damages from the virus. Studies also indicated that quarantines are not be used only to restrict only those which can infect others, but the real

purpose is to isolate a large number of people. Similar happens in China where school vacations are extended in order to restrict the spread of COVID-19 (Zhang & Ma, 2020). Although the economic theory opposes these types of measures and indicated that imposition of these measures may worsen the conditions (Geloso, 2020).

Similar has been indicated by Shukla (2020) indicated that the probability of survival is 50% higher if one has a strong social relationship. Moreover, social isolation, loneliness and living alone push the rate of mortality up to 29% 26% and 32% respectively. Although Geloso (2020) uses the experiment of Mesnard and Seabright (2009) to indicate people who live in highly infected areas bears the cost due to the probability of getting infected. Although who are not affected secures them through migrating away and hence the spread of the diseases was hindered by the quarantine. On the other hand, Shukla (2020) indicated that there might be a different impact of COVID-19 on different people as the impact is based on thinking and psyche. The study indicated that some people would start celebrating this and enjoys every moment of that although some of them got frustrated due to the disturbance of routine and work schedule. Wan *et.al.,* (2020) indicated that the outbreak of contagious diseases has also a history of confining people to their homes. Similarly, the study conducted with 369 adults from China revealed that during lockdown 25% respondents stopped working and start residing at their home while more than 37% worked from their home (Zhang, Wang, Rauch, & Wei, 2020).

This happened due to the effective response from Chinese government who imposed a lockdown on Wuhan on 23rd January and after that quarantine extended to other provinces and cities which affect more than 50 million residents (Wan *et.al.,* 2020). The imposition of quarantine has been found successful in China as due to this they can restrict the spread of COVID-19 from one city to another. Although this was not able to stop the increase in the number of cases in Wuhan supported by Xiao and Torok (2020) as blocking off traffic and locking down villages are of no use. Moreover, the study also indicated that these types of measures might cause civil unrest and force to disobey prevention measures and control advises.

Negative Emotions

Pandemics are also associated with the increase of psychiatric morbidities and negative emotions even in the non-affected population. This happens due to the shutdown of educational and business institutions which ultimately compounds the negative emotions possessed by population (Wan *et.al.,* 2020).

A study conducted in China by Zhang *et.al.,* (2020) also indicated that respondents were found to have a higher rate of stress as well as poor on the scale of mental and physical health. Authors indicated that these negative outcomes are the reaction of being idle at home and spending time without purpose and routine. These effects are more dominant in children and adolescents as stressors like fear of infection, frustration, boredom, inadequate information, and distancing from friends are coupled with the fear of financial losses creates pathetic impacts (Wang *et.al.,* 2020).

Adding to these Shukla (2020) indicated loneliness is the element which brings most damage to human beings and sufficient to increase the probability of all forms of mental sickness like anxiety and depression etc. The study further indicated that COVID-19 might also produce similar sort of conditions which will make people very uncomfortable through worsen their mental health. These negative effects might continue for longer period of time as analysis of 48 people who were who quarantined three years ago indicated that 60% of them still possess a high degree of depression (Brooks, Webster, Woodland, Wessely & Rubin, 2020). Although this was not the case during the outbreak of H1N1 virus as a study of Lin *et.al.,* (2011) but the survey conducted indicated that around 12% of respondents can't even sleep due to the stress & threat of getting affected from COVID-19. Similarly, 41% indicate sacredness when any of their closed attachment got affected from COVID-19 while 80% of the respondents indicated that they spend extensive time in discussion the pandemics with their close connections (Roy *et.al.,* 2020).

Disintegration of Social Trust

Study of Fetzer Hensel Hermle Roth Muller Baldwin di Mauro (2020) posited that Spanish Flu disintegration of social trust during was the main element which caused the decline in other social factors. Instead of including disintegration of social trust as the mediating

variable, this study uses the variable as one of the dependent variables in parallel to the other variables. Study of Fetzer *et.al.,* (2020) further indicated that social disturbance in social life caused by the Spanish flu caused permanent changes in human behaviour and decreased social trust. The study also indicates that the decrease in social trust might impair economic growth for years & there is a possibility that furious spread of COVID-19 in Italy might reunite them and increase cohesiveness which was not the case in the spread of Spanish Flu (Fetzer *et.al.,* 2020). Although similar was the case during the spread of SARS in Hong Kong 2003 where the spread of SARS improves the quality of social life through enhancing support from friends and family (Lau, Yang, Tsui, Pang & Wing, 2020). On the contrary, Zhang and Ma (2020) indicated that there is a difference of impact of COVID-19 from different age groups as young are receiving ore help and care from friends and family which was not similar in the case of elderly people.

RESEARCH QUESTIONS

Q.1 What are probable social impacts of COVID-19 on fewer income countries like Pakistan?

Q.2 Whether COVID-19 can only disturb the social trust in Pakistan?

Q.3 Is there any difference in the social effects of COVID-19 to Pakistan or the impact is same as compared to the other countries?

RESEARCH HYPOTHESES

H_1A: There is a relationship between the outbreak of COVID-19 and health impact in the population.

H_2A: There is a relationship between the outbreak of COVID-19 and health consciousness in the population.

H_3A: There is a relationship between the outbreak of COVID-19 and social distancing by population.

H_4A: There is a relationship between the outbreak of COVID-19 and imposition of quarantine on population.

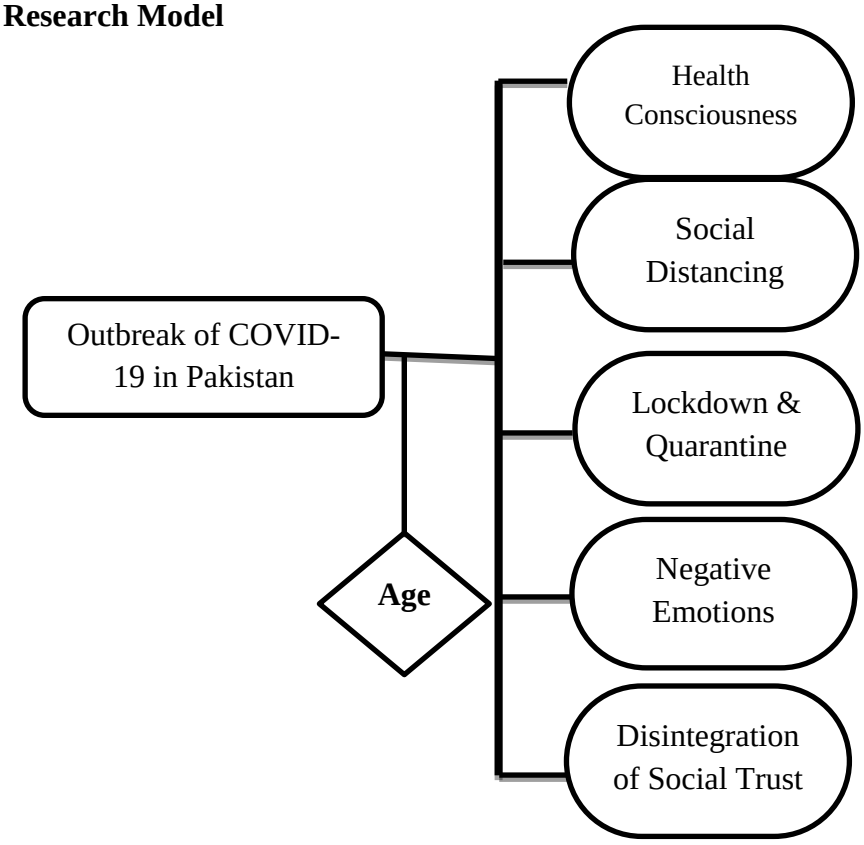
H_5A: There is a relationship between the outbreak of COVID-19 and increase of negative emotions in population.

H_6A: There is a relationship between the outbreak of COVID-19 and disintegration of social trust in the population.

H_7A: Age of the members of the population moderates the relationship between the outbreak of COVID-19 and increase of negative emotions in population.

H_8A: Age of the members of the population moderates the relationship between the outbreak of COVID-19 and disintegration of social trust.

Research Model



RESEARCH METHODOLOGY

Research Design: The purpose of this study is to investigate the social impacts of COVID-19 through investigating the residents of Karachi about the social impact of the disease. The reason for investigating social impacts is that economic impacts are too extensive and most of the economic and financial impact might not be uncovered without secondary data which will be available after some time. Although Bedford *et.al.,* (2020) highlighted that research gaps must be

fulfilled to trace out the detailed impact of the disease and especially important is of work from those courtiers which are not the main victim.

This requirement becomes clearer through Wang *et.al.,* (2020) who checked the psychological effect of the disease in China through public opinion. Hence the philosophy of research linked with this study is Ontology as this will trace out the fact that whether the population of Karachi will believe in the same way as the population of research work carried earlier? To collect response from masses, in the form of public opinion, the research strategy integrated into the survey method through a closed-ended questionnaire

Sampling Design: The research has been based on data from Karachi as it is the business hub of Pakistan and also has the greatest number of COVID-19 cases in comparison to other cities of Sindh (Ilyas, 2020). The research has been based on data from all five (5) districts of Karachi. The sample size of the study is 1500 respondents i.e. 300 from each district through convenience sampling technique. Figure 1 indicates the number of reported cases from different towns in Karachi.

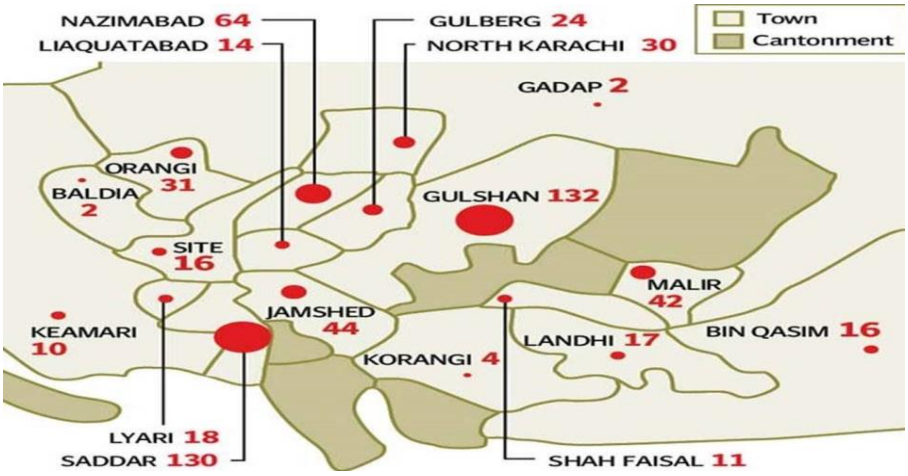


FIGURE-1
Map of Karachi with different towns and reported COVID-19 cases (Mandhro, 2020)

Questionnaire: A self-administered questionnaire was adapted from Wang *et.al.,* (2020) and Fetzer *et.al.,* (2020) and surveyed

through Google Docs. To make the questionnaire robust, psychological, and physiological impacts of pandemics are also incorporated and transformed into a Likert scale for the collection of data.

STATISTICAL TESTING AND ANALYSIS

Initially, the Pilot-Testing was conducted to check the consistency of data on the sample of fifty respondents from five main districts (10 from each) of Karachi Cronbach Alpha was used to determine the reliability of the questionnaire. The value of Cronbach Alpha for all variables was more than 65% (Maiyaki & Mohd Mokhtar, 2011).

Sr No.	Description of Variable	No of Items	Cronbach's Alpha
1	Out Break of COVID-19 in Pakistan	**5**	**0.793**
2	Health Impact	**5**	**0.679**
3	Health Consciousness	**4**	**0.657**
4	Social Distancing	**5**	**0.690**
5	Lockdown and Quarantine	**4**	**0.709**
6	Negative Emotions	**5**	**0.764**
7	The disintegration of Social Trust	**4**	**0.670**
8	Age	**4**	**0.816**

TABLE-1
VALUES OF CRONBACH'S ALPHA FOR PILOT TESTING

The study uses a reflective model for Smart Pls, thus descriptive measures and inferential measures are conducted (Hair *et.al.*, 2019).

	Age	Disintegration of Social Trust	Health Consciousness	Lockdown & Quarantine	Mod-1	Mod-2	Negative Emotions	Outbreak of COVID	Social Distancing
AGE	1.000								
COV1								0.883	
COV2								0.879	
COV3								0.924	
COV4								0.926	
DST1		0.930							
DST2		0.912							
DST3		0.933							
DST4		0.763							
HC1			0.779						
HC2			0.927						
HC3			0.913						
HC4			0.944						
LQ1				0.930					
LQ2				0.862					
LQ3				0.847					
LQ4				0.937					
NE1							0.816		
NE2							0.816		
NE3							0.869		
NE4							0.897		
Outbreak of COVID- * Age					0.994				
Outbreak of COVID-19 * Age						0.994			
SD1									0.913
SD2									0.911
SD3									0.744
SD4									0.832

TABLE-2
OUTER LOADINGS

Table-2 indicates the reliability of all elements as suggested by Maiyaki and Mohd Mokhtar (2011). As this study uses theory-building approach, Hair, Risher, Sarstedt, and Ringle (2019), suggest that Structural Equational Modeling (SEM) through SMART-PLS must be incorporated for studies which entail theory-building approach.

R Square		
	R Square	**R Square Adjusted**
Disintegration of Social Trust	0.597	0.530
Health Consciousness	0.682	0.645
Lockdown & Quarantine	0.702	0.697
are treated as substantial and Negative Emotions	0.691	0.634
Social Distancing	0.610	0.565

TABLE-3
QUALITY CRITERIA

Table-3 indicates the extent of the predictive accuracy of the model associated with the social consequences of COVID-19 through R^2. The predictive accuracy in the model of social consequences of COVID-19 according to R square in Table-3 must be termed as moderate as it must be 0.75 or above for substantial effect (Hair, Ringle & Sarstedt, 2016).

Construct Reliability and Validity

	Cronbach's Alpha	Rho-A	Composite Reliability	Average Variance Extracted (AVE)
Age	**1.000**	**1.000**	**1.000**	**1.000**
Disintegration of Social Trust	**0.913**	**0.946**	**0.936**	**0.787**
Health Consciousness	**0.914**	**0.918**	**0.940**	**0.798**
Lockdown & Quarantine	**0.917**	**0.919**	**0.941**	**0.801**
Mod-1	**1.000**	**1.000**	**1.000**	**1.000**
Mod-2	**1.000**	**1.000**	**1.000**	**1.000**
Negative Emotions	**0.872**	**0.880**	**0.912**	**0.723**
Outbreak of COVID-19 in Pakistan	**0.925**	**0.934**	**0.947**	**0.816**
Social Distancing	**0.878**	**0.926**	**0.914**	**0.727**

TABLE-4
CONSTRUCT RELIABILITY AND VALIDITY (CONVERGENT VALIDITY)

Table-4 indicates the convergent validity through factor loading, Composite Reliability and Average Variance Extracted (AVE). The table is also highlighting reliability for the construct through using Cronbach's Alpha (α) and Dillon-Goldstein's rho, as (α) is the lower

level predictor of accuracy (Sijtsma, 2009) and rho is the better predictor than (α) (Ravand & Baghaei, 2016). Although the minimum acceptable value for both of these indicators is 0.70, the value of rho must be more than (α). Similarly, a more appropriate measure of accuracy is AVE and its minimum acceptable value is 0.5 (Ab Hamid *et.al.,* 2017).

Furthermore, Table-5 indicates the discriminate validity through Hetero Trait-Mono Trait ratio (HTMT). The maximum value for the association between two variables is 0.85 and no value above than this reflects appropriate HTMT ratio (Hair Jr, Sarstedt, Ringle & Gudergan, 2017), which is validated through Table-5.

	Age	Disintegration of Social Trust	Health Consciousness	Lockdown & Quarantine	Mod_1	Mod_2	Negative Emotions	Outbreak of COVID-19	Social Distancing
Age									
Disintegration of Social Trust	0.097								
Health Consciousness	0.429	0.110							
Lockdown & Quarantine	0.308	0.120	0.514						
Mod_1	0.102	0.243	0.071	0.021					
Mod_2	0.102	0.243	0.071	0.021	1.000				
Negative Emotions	0.245	0.132	0.619	0.392	0.046	0.046			
Outbreak of COVID-19 in Pakistan	0.065	0.233	0.401	0.337	0.180	0.180	0.332		
Social Distancing	0.197	0.642	0.163	0.071	0.169	0.169	0.137	0.103	

Table-5: Heterotrait-Monotrait Ratio (HTMT)

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
Age -> Disintegration of Social Trust	-0.085	-0.088	0.071	1.207	**0.228**
Age -> Negative Emotions	-0.229	-0.231	0.072	3.202	**0.001**
Mod_1 -> Negative Emotions	-0.017	-0.015	0.070	0.239	**0.812**
Mod_2 -> Disintegration of Social Trust	-0.185	-0.178	0.068	2.708	**0.007**
Outbreak of COVID-19 in Pakistan -> Disintegration of Social Trust	-0.199	-0.207	0.063	3.169	**0.002**
Outbreak of COVID-19 in Pakistan -> Health Consciousness	0.386	0.387	0.050	7.736	**0.000**
Outbreak of COVID-19 in Pakistan -> Lockdown & Quarantine	0.319	0.323	0.057	5.606	**0.000**
Outbreak of COVID-19 in Pakistan -> Negative Emotions	0.304	0.308	0.055	5.560	**0.000**
Outbreak of COVID-19 in Pakistan -> Social Distancing	-0.098	-0.111	0.072	1.353	**0.177**

Table-6: Path-Coefficients

Table-6 has been used to indicate the social consequences of COVID-19 though path coefficients. The minimum value of t-statistics which indicates the relationship between to constructs is 1.97 (Hair *et.al.,* 2011), and minimum p-value to highlight the relationship between two variables is 0.05 (Kock & Hadaya, 2018). Hence, in the light of these indications, figure 1 & 2 indicate that the outbreak of COVID-19 in Pakistan fostered health consciousness, create awareness of lockdowns and quarantine, generate negative emotions, and disintegrate social trust. Although people are not maintaining social distancing and there is also no relationship between age of respondents and disintegration of social trust.

Moreover, findings also indicate that moderation of age also decreases the extent of negative emotions. The moderator has been induced in range and through its moderation; one of the negative social influences of COVID-19 has turned positive. Thus, it is appropriate to indicate that the residents of Karachi believe that COVID-19 is not

making people follow social distancing neither they are surrounded by negative emotions.

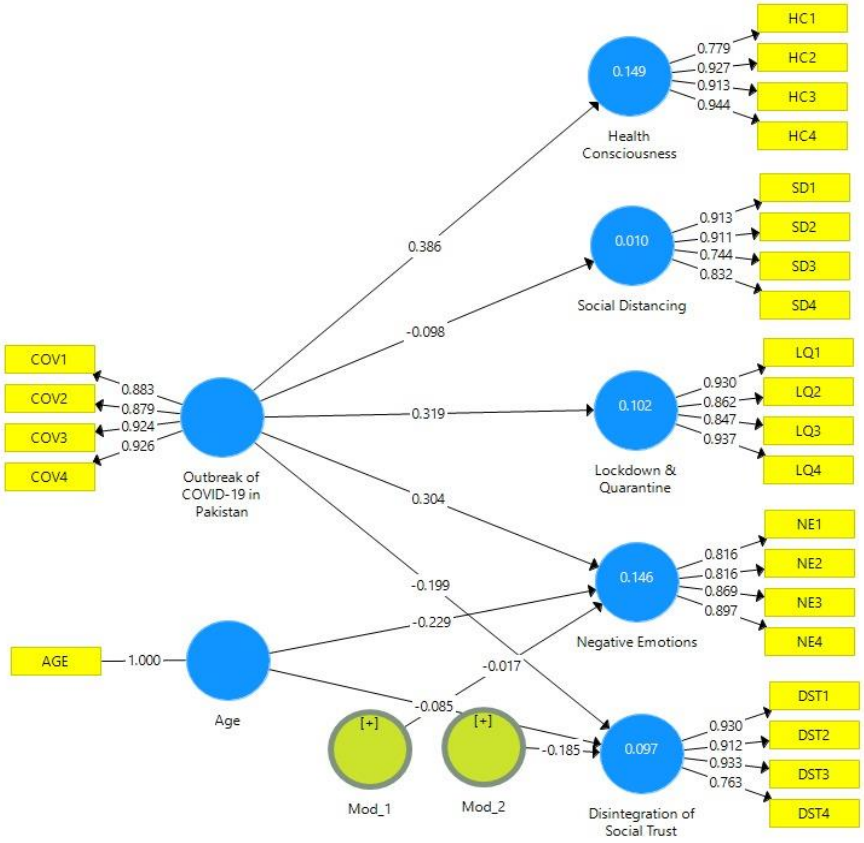


Figure-1: Highlighting the outer loading for each variable in the construct of social consequences of COVID-19

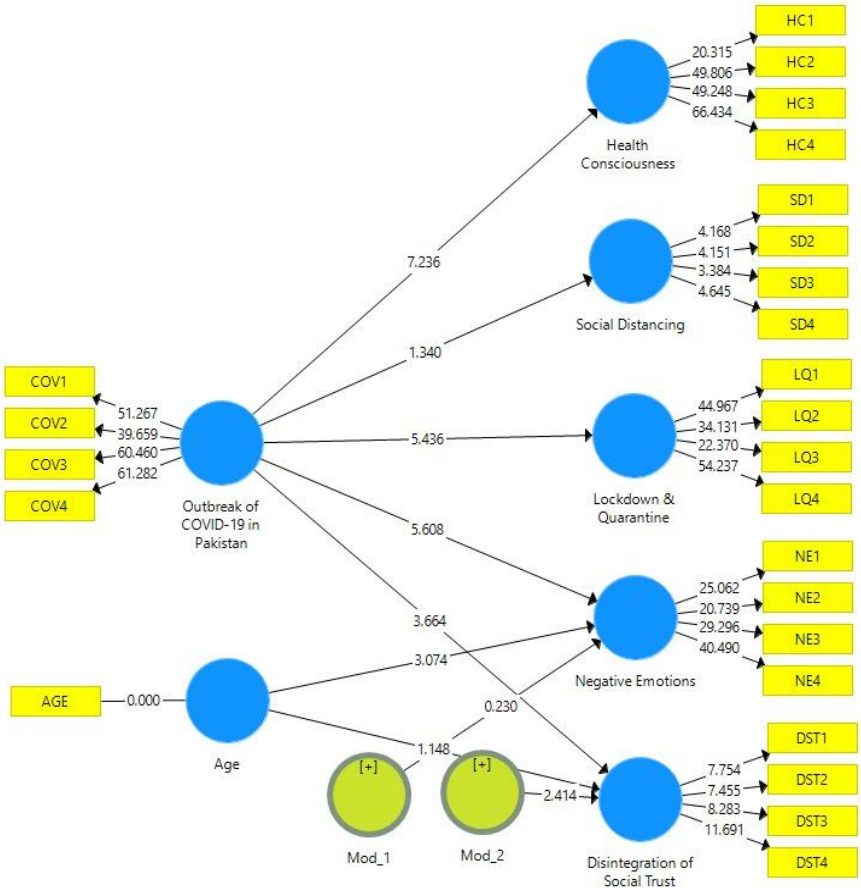


Figure-2: Showing t-statistics for indicate path coefficient and relationship among different variables of the constructs

CONCLUSION, DISCUSSION, AND IMPLICATIONS

The statistical analysis through SMART PLS indicated that the findings are inconsistent with Bedford *et.al.,* (2020); and Bloom and Canning (2006) and others that COVID-19 is perceived as pandemic which initiates deep social consequences.

Initially, the social consequences of the statistical test were found coherent with the findings of Hussein (2020) and Zhang and Ma (2020) as COVID-19 is increasing health consciousness in residents of Karachi. Similarly, the study also found positively related to the

indications regarding lockdown and quarantine as the social impact of COVID-19.

The study also found that pandemics might foster negative emotions (Roy *et.al.,* 2020; Shukla, 2020). Similar is valid in the case of COVID-19 although the moderation of age changes the impact of negative emotions and results indicate moderation nullifies the negative consequences. Thus, it is coherent with Lin *et.al.,* (2011) which indicate the heart of respondents were not filled by negative emotions during the outbreak of H1NI. Lastly, the results also validate the findings of Fetzer *et.al.,* (2020), that Spanish Flu resulted in the disintegration of social trust. Similarly, we found that there is no impact of age on the disintegration of social trust. COVID-19 might produce a different impact on different age groups. Results also revealed that the pandemic has resulted in a decrease in social trust. Although there is one major disagreement made through the statistical analysis that COVID-19 is not making people obey social distancing thus the findings majorly contradict the study of Liao *et.al.,* (2010); and Shukla (2020). The study findings thus imply that pandemics have severe social consequences on the society which devastates the social structure to a greater extent. The findings will help social administers and policy makers to devise policies adherent to social wellbeing.

AREA OF FUTURE RESEARCH

The study tried to uncover the major social impact of COVID-19 by combining various outcomes indicated by prior studies on pandemics. Although the study is conducted through primary data and better analysis can be made after the pandemic gets over i.e. through secondary data. Moreover, collecting response from other provinces like Punjab which has the most cases of COVID-19 might make the analysis more effective and robust.

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