



Volume and Issues Obtainable at the Department of Tourism and Hospitality Management-  
The Islamia University of Bahawalpur, Bahawalpur, Pakistan 63100.

**Journal of Tourism, Hospitality, and Services Industries Research**

ISSN: 2958-5570 ; ISSN (E): 2958-5589

Volume 2, No.2, December 2022

Journal homepage: <https://journals.iub.edu.pk/index.php/jthsir>

DOI: 10.52461/jths.v2i02.1690

## Effect of COVID-19 Fear on Worker's Well-being: A Hope Intervention Approach for Services Sector

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### ARTICLE DETAILS

#### History

Revised format: Oct 2022

Available Online: Dec 2022

#### Keywords

*COVID-19; Fear; Hope; Well-being; Workers*

### ABSTRACT

The current study has investigated the mechanism of COVID-19 deteriorating workplace well-being. The study determines that people confronting a surge in fear of COVID-19 start losing hope resulting in damaged well-being. The workplace well-being scale as developed by Bartels et al., (2019) was amended to meet the requirements of the current context. Hence, the authors added a phrase before items (during current COVID-19, and remote working need) to relate the scale with the current study. The study found a significant relationship between fear of coronavirus and the workplace well-being of remote workers. A significant mediation was observed through the hope construct. Hence, established that COVID-19 is damaging workplace well-being. The study also has certain limitations, as COVID-19 is a recent pandemic not much literature is present to support the phenomenon. Future researchers might go for a greater data set for generalizing the phenomenon. A cross-country analysis could present great insights into the model. It is a timely decision for policymakers, politicians, managers, academicians, and practitioners to devise strategies to control the phenomenon.



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## Introduction

On 31<sup>st</sup> December 2019, officials from China informed the world health organization (WHO) about novel pneumonia with an unknown etiology in the city of Wuhan, Hubei province (Sahin et al., 2020). On February 11<sup>th</sup>, 2020 WHO named novel pneumonia a ‘coronavirus disease’ (Rodriguez-Morales et al., 2020). Its genetic sequence of RNA was released on 12<sup>th</sup> January 2020, and transmission from victims to healthcare workers, and staff members was confirmed on 20<sup>th</sup> January. Soon after the outbreak, this pandemic started hitting the globe and reaching other countries one after the other (Waris et al., 2020). Till now, it has infected more than 209 countries more than 2,959,929 infected people, and almost 202,733 mortalities worldwide, and the number is rising rapidly (*World Health Organization, 2020*). Contemporary life has been drastically changed as the pandemic has infiltrated into social, political, financial, and economic aspects of life as an emergent global challenge (Ahorsu et al., 2020). To date, an absence of a vaccine or a cure has made us follow social distancing, as a measure of slowing its spread, leading to redefining of life (Huang et al., 2020; Li et al., 2020).

An international review of this pandemic reveals that it has targeted even the world giants including the United States as the one with the highest number of positive cases, Italy, Spain, Korea, and others (*World Health Organization, 2020*). Meanwhile lowering its claws towards underdeveloped countries for example India, Bangladesh, and Pakistan (Waris et al., 2020). WHO declared COVID-19 as the sixth public health of emergency service (SPHES) on 30<sup>th</sup> January 2020 (Kurtkulagi et al., 2020). The current study aims at exploring the effect of coronavirus (COVID-19) on the attitudinal outcomes of remote workers in the lower Punjab area of Pakistan.

### COVID-19, and Well-being: A challenge for Pakistan

The first case of COVID-19 was reported in Pakistan on 26 February 2020 in Karachi, Sindh province by the Ministry of Health, the government of Pakistan. Preventive measures and health strategies were defined, devised, and deployed by government agents to the public. As per the geographical quadrants of Pakistan, continuous surges in the cases of COVID-19 need an emergency level of action, plans, and management. On 12<sup>th</sup> February, the Ministry of National Health Services, Regulation & Coordination Pakistan came up with a plan named “National Action Plan for Preparedness & Response to Corona Virus Disease (Covid-19) Pakistan”, aiming to control the spread of virus strengthening civil emergency preparedness to ensure timely, well-organized, and effective, and efficient response to threats imposed by Covid-19 (Waris et al., 2020). The most critical steps taken by the government include designated hospital facilities, quarantine centers, testing equipment, public awareness through media messages, and a movement control order (lockdown).

In the wake of a pandemic, it is usually observed that health professionals, scientists, and managers start focusing principally on the pathogen, and other biological risks involved, advising measures for prevention (Tucci et al., 2017). Unfortunately, psychological, and psychiatric consequences resulting from the pandemic, both on the individual, and collective levels, tend to be neglected, and underestimated, leading to gaps in handling, and fighting the aftermaths (Ornell et al., 2020). It is evident from the past literature that during pandemics, the number of people with affected mental health tends to be higher than the number of people affected by the infection itself

(Manderson & Levine, 2020). The current study is an endeavor to explore the unique perspective that fear of COVID-19 can extend to the workplace well-being of employees working remotely.

Pakistan is an underdeveloped country with 24.3% of the population living below the poverty line (Asian Development Bank, 2015). Hence, it was a thick hour for Pakistan due to the scarce resources to implement and sustain a lockdown. A lockdown implies a complete shutter down of markets, industries, and facilities other than food, and health. Despite the lockdown imposed by the government, many organizations are running remote operations through the use of the internet, and other mediums ensuring social distancing rules (Dawn, 2020). Remote working is a fancy concept but its implementation might get problematic in some work areas where people are not having the aptitude to do so (Grant et al., 2013). The anxiety of lockdown, unable to have face-to-face communication, fear of a pandemic around, and work pressure might get on to the nerves leading to shattered work spirit. Overall, we have conducted our research following the guidelines provided in the previous research (e.g., Anser et al., 2020; Gulzar et al., 2022; Hameed et al., 2019; Iqbal et al., 2021; Masood, Feng, Rasheed, Ali, & Gong, 2021; Naeem, Weng, Hameed, & Rasheed, 2020; Pitafi, Rasheed, Kanwal, & Ren, 2020; Zhang, Wu, & Rasheed, 2020).

## **Literature Review**

### **Workplace Well-Being**

Political leaders, government agents, and managers are under huge pressure regarding what businesses to open, what to close, what workers to attend office, and what to retrench, keeping social distancing still as a weapon to fight this pandemic. In this scenario, the fear of COVID-19 stands as an active agent to affect employee well-being. Well-being is a subjective reality of life (Cropanzano, 2000; Ginossar & Oetzel, 2019; Miceli & Castelfranchi, 2010). It is a state of mind that affects all other functions, and actions performed by a human (Ho & Kuvaas, 2019). Well-being is generally defined as, the overall quality of employee experiences, optimal functioning, and growth at work (Bartels et al., 2019). Literature has worked out two complementary perspectives of workplace well-being, hedonic, and eudaimonic workplace well-being (Culbertson et al., 2010; Ryan & Deci, 2001a). Where, hedonic well-being is a cognitive, and affective evaluation of one's life, and eudaimonic well-being is about, optimal functioning, and growth of employees, and is usually referred to as psychological well-being (Bartels et al., 2019). The Introduction of eudaimonic well-being is a nuanced perspective claiming that well-being is more than just the pursuit of pleasure, and happiness. Eudaimonic well-being is believed to exist when there is a congruence in action and mental states with the beliefs of an individual. Unfortunately, unlike hedonic workplace well-being, no measure exists for eudaimonic workplace well-being, and previously it was measured through a re-tooled version of general well-being (e.g. I have aims and objectives for a living), and adding the work context (e.g. At work, I have aims and objectives for a living).

### **Hope:**

The theoretical contribution made by the current study is the nuanced mechanism through which COVID-19 is presumed to affect the well-being of an individual. The study entails that, fear of COVID-19 affects the well-being of employees through the construct of hope (Snyder, 1991). In clinical care especially psychiatry, discussion on hope is a common concern. However the role

played by hope in shaping public health has received scarce attention (Long et al., 2020). The concept of hope is deeply rooted in religion (Godfrey, 1987), and philosophy (Miceli & Castelfranchi, 2010). Hope is defined as a passion that follows apprehensions of a difficult yet possible future good (Aquinas, 1948). In the mid-20<sup>th</sup> century, hope was introduced as a unidimensional construct. Later, by the end of the 20<sup>th</sup>-century proponents of positive psychology conceptualized hope as a bi-dimensional cognitive construct (i) agency (ii) pathway (Arnau et al., 2007; Snyder, 1994). According to *Snyder* (1994) theory of hope, agency refers to commitment, and determination to help people move in the direction of set goals, and pathways refers to the perceived ability to reach those goals while designing alternative plans in case of a hindrance (Arnau et al., 2007; Snyder, 1994). Today organizations are found in a continuous state of flux (De Cuyper et al., 2020). Change has been critical for organizations and might bring positive or negative consequences. The recent pandemic of COVID-19 brought an abrupt, and risky change in the life of people globally (Ahorsu et al., 2020; Manderson & Levine, 2020; Ornell et al., 2020). Every individual today is dealing with COVID-19, and its repercussions, in one way or another.

### **COVID-19, and Well-being**

A nuanced perspective of the relationship between COVID-19, and workplace well-being seems to emerge with the fear of the pandemic. Recent COVID-19 (World Health Organization (WHO), 2020) seems to have severe negative consequences on health. A recent study by Druss (2020) established that one of the fields of medical science that is going to experience the consequences of this pandemic, and its complementary societal deviations are psychiatry. Indeed, many recent studies from medical, and social sciences are proposing a general worsening of mind in the populations facing the pandemic (Sonderskov et al., 2020). A recent survey in China claimed, 54% of the respondents ranked the COVID-19 outbreak as having a moderate or even severe (in some cases) negative psychological effect (Wang et al., 2020). A related tendency was observed in another survey conducted recently in the USA regarding mental health by the American Psychiatric Association (2020).

It is presumed that a general impact of fear of COVID-19 on employees has raised the concern of reduced well-being. Working remotely due to the current situation of the pandemic might make an employee feel lonely, and disconnected more than ever before (Grant et al., 2013). This study attempts to empirically establish that employees working remotely in the current scenario and facing the fear of COVID-19 might experience lower well-being. The situation can be hypothesized as follows:

H1: FC\_19 has a significant influence on workplace WB.

### **Well-being, and Hope:**

The second, question that may embark on the mind of a reader is, how this fear gets translated into reduced well-being. One assumption in this regard is made through the use of hope as a suitable mediator between fear of COVID-19, and well-being. When people are experiencing fear of something that can hurt their health and life, and the life of their loved ones, they might start losing the level of their hope. A lower hope is related to a lower level of well-being (). Hence, the study proposes that hope as a construct can be measured for its mediating effect between fear of COVID-19, and well-being. Here, mediation is hypothesized that:

H2: Hope has a significant effect on FC\_19, and workplace WB.

H3: Hope has a significant effect on workplace WB.

## Data, Variables and Methodology

### Workplace well-being:

There are two complementary perspectives in the understanding of the construct of workplace well-being: hedonic, and eudaimonic workplace well-being (Culbertson et al., 2010; Ryan & Deci, 2001). Previously, only the hedonic perspective was used as a measure of well-being represented by job satisfaction (Diener & Seligman, 2004; Diener et al., 2010; Weiss, 2002). But to describe a complete picture of well-being eudaimonic well-being was also required. Eudaimonic workplace well-being (EWWB) also known as psychological well-being measures the optimal functioning, and growth of individuals at work (Ryff & Keyes, 1995). Besides, all studies in past used the general well-being scale as a measure of the eudaimonic perspective of workplace well-being that ignored the peculiarity of the workplace in measurement tool. Recently, a scale of EWWB was developed designed to measure eudaimonic workplace well-being (Bartels et al., 2019). Bartels et al., (2019) developed it as a two-dimensional construct, including interpersonal (relationship with co-workers), and intrapersonal workplace well-being (inner well-being of individual). Both dimensions of EWWB have four items each (a sample item for interpersonal EWWB includes: ‘during COVID-19, I feel close to the people in my work environment as a remote worker, and for intrapersonal EWWB a sample item includes, during COVID-19, I am emotionally energized while remotely working). Hedonic workplace well-being was measured using 15 items adopted from (Hackman, J. R. & Oldham, 1974) (a sample item includes: during COVID-19, and remote working, the work I do on this job is very meaningful for me). Both dimensions were measured on a five-point Likert scale. Cronbach  $\alpha$  for the variable was 0.965 as shown in table 1.

**Table 1. Cronbach’s  $\alpha$  values**

Variables	No. of Items	Cronbach’s $\alpha$
FC_19	7	0.874
Hope	8	0.858
Well-being	19	0.965

### Fear of COVID-19

Fear of COVID-19 is the latest construct as developed by (Ahorsu et al., 2020). It has 7 items measuring the fear of COVID-19 of the participant, a sample item asked respondents “if it makes them uncomfortable thinking about coronavirus”. The construct was measured on a five-point Likert scale. Cronbach  $\alpha$  for the variable was 0.874 as shown in table 1.

### Hope

Hope is a positive construct that is measured using a scale developed by Snyder (1991). The scale has two dimensions named agency and pathway. The scale consists of 12 items measured on a five-point Likert scale. Literature has strong support for the reliability, and validity of the scale

(Arnau et al., 2007; Miceli & Castelfranchi, 2010). Cronbach  $\alpha$  for the variable was 0.858 as shown in table 1.

## Data, Variables, and Methodology

The current study is a unique inquiry into the novel pandemic of COVID-19, and its impact on remote worker well-being mediated through hope. Hence, it's an exploratory study, with two-tailed hypotheses, the population of the study is the lower Punjab region of Pakistan. The current study aims at investigating those employees who fall into the category of remote workers. Remote working refers to performing your job activities without physically attending (Grant et al., 2013) the office, and virtually accessing, performing, and completing assigned duties, and tasks. In the current scenario of the pandemic, predominantly the life of remote workers has been affected. Also, the population of the current study includes only those employees who were previously not remote workers (for example freelancers). Alternatively, the population of the study is working-class temporarily performing as remote workers due to COVID-19. Our research method is line with the methods designed for research studies in social sciences (e.g., Kanwal, Pitafi, Rasheed, Pitafi, & Iqbal, 2022; Khan, Liu, Khan, Liu, & Rasheed, 2020; Luqman, Masood, Shahzad, Imran Rasheed, & Weng, 2020; Rasheed, Malik, et al., 2020; Rasheed, Weng, Umrani, & Moin, 2021).

The sample consists of employees from the education, and information technology sectors remotely working for their respective organizations. For the current study, random sampling is done as due to movement control orders it was a bit difficult for the researcher to meet any specific sample needs. Fear of COVID-19 was taken as an independent variable predicting the workplace well-being of employees through the underlying mechanism of hope. Our sampling is all in all consistent with the sampling strategies outlines in social sciences research studies (Moin, Omar, Wei, Rasheed, & Hameed, 2021; Nisar, Rasheed, & Qiang, 2018; Sattar, Rasheed, Khan, Tariq, & Iqbal, 2017; Yousaf, Rasheed, Hameed, & Luqman, 2019).

Data was collected through the use of an adapted questionnaire. Respondents were contacted through online survey forms, and they were assured of data confidentiality. Data collection was made through a formal request to IT firms, and universities included in the sample. In stage 1, Managers, and the head of the department were contacted through email to forward the survey link to their employees. Only 147 employees responded out of those only 138 responses were appropriate, and complete in all aspects. For analyses of data we have followed the guidelines regarding data analysis techniques utilized in previous research (Rasheed, Jamad, et al., 2020; Rasheed, Okumus, Weng, Hameed, & Nawaz, 2020; Saleem, Rasheed, Malik, & Okumus, 2021; Yousaf et al., 2014; Zhang, Rasheed, & Luqman, 2019). The data model was analyzed using PLS-SEM.

**Table 2. Profile of the Employees**

Category (Industry)	Frequency	Percentage
Banking	29	20.86
Telecom	23	16.54
Education	87	62.58

## Analysis and Results

Data in the current study were analyzed by using SmartPLS v 3.3.0 as it deems to be appropriate for formative, and reflective items, also for the small size of the sample (Hair, Ringle, & Sarstedt, 2011). Two items from eudaimonic workplace well-being, two items from hedonic workplace well-being, and 4 items from the hope scale were eliminated as they were not matching with the content of the study (Joseph F. Hair et al., 2016). The measurement model was estimated by evaluating the outer model (measurement model) testing the factor loading, validity, and reliability. The inner model (structural model) was measured using bootstrapping (1000 resampling) to examine the significance of path coefficients, and hypothesis testing. Confirmatory factor analysis (CFA) was performed to measure factor loading, validity, and composite reliability of current study reflective constructs. First, using the PLS algorithm, a measurement model was performed to determine the effect of FC\_19 on WB mediated through Hope (see Figure 1). The model generated an acceptable output since all factor loadings were higher than the benchmark value (0.70). There was not found any significant cross-loading among the items of the study (see Table 2). The model shows a good fit for the data set as the root mean square residual value is 0.074 (SRMR-estimated model), and the normed fit index (NFI) is close to 0.85. Convergent validity test, statistics reported below (see Table 3), shows that the validity of the construct is established as a value above 0.50, indicating enough of the average variance obtained by loaded items (Anwar et al., 2020). Discriminant validity also demonstrated the value is in an acceptable range, for instance, above 0.70 as per the established standards, and recommendations in literature (Joe F. Hair et al., 2011). Moreover, Cronbach's  $\alpha$  values, and composite reliability (see Table 3) were found in an acceptable range, for instance, above 0.70 as recommended by Nunnally, and Bernstein (1994). Overall, results from the study established that the constructs used were reliable, and valid for measuring intended constructs, and relationships.

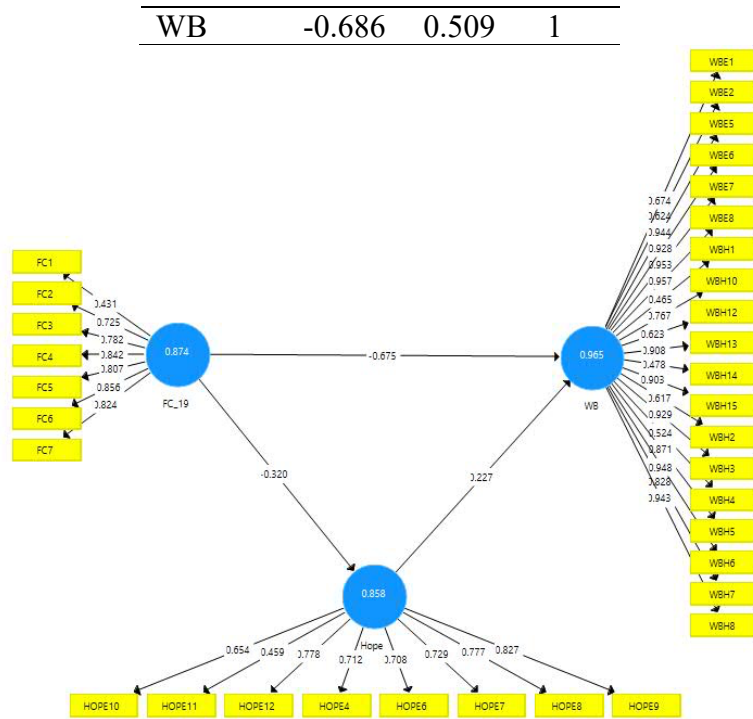
### Common Method Bias

In the current study, data were collected using a structured questionnaire, from the same respondent at the same time, which may lead to common method bias (Podsakoff & Organ, 1986). Harmon's One Factor test was applied, which demonstrated only three of the factors having an eigenvalue above 1 from that one factor explained for 37.24% variance (which is lower than 50%). Hence, the study argued that none of the factors explain major variation, confirming no issue related to the common method bias study.

Correlation values provide initial support to the proposed hypotheses of the current study. Table 4 shows a negative relationship between FC\_19, and WB as well as a negative relationship between Hope, and WB. Results confirmed an absence of a multicollinearity issue as all correlation values were less than .80. Additionally, the variance inflation factor (VIF) indicated the nonexistence of multicollinearity, and a VIF value less than 3 (Neter, Wasserman, & Kutner, 1983).

**Table 3. Correlation**

Variable	FC_19	Hope	WB
FC_19	1		
Hope	-0.396	1	



**Figure 1. Structural Model**

Bootstrapping with a 1000 resampling method was executed to test study hypotheses (see Figure 2). Results indicated that FC\_19 has a significant influence on WB ( $\beta = -0.675, t = 9.207$ ). Hope was also significantly related to WB ( $\beta = .227, t = 2.927$ ). The results exhibited that the constructs, that is, FC\_19, and Hope explain a 22.4% variance in WB.

**Table 4. Hypotheses Testing**

Hypotheses	$\beta$	$t$	Remarks
FC_19 → WB	-0.675	9.207	Supported
FC_19 → Hope	-0.320	4.104	Supported
Hope → WB	0.227	2.927	Supported

**Conclusion and Discussion:**

The study was conducted in the wake of the recent pandemic of COVID-19. Assuming the concern that workers unable to access the workplace and required to do work from home are facing a situation of panic, and anxiety. This situation has detrimental effects on their well-being. The current study has narrated the mechanism of COVID-19 affecting workplace well-being. The study entails that, people confronting a surge in fear of COVID-19 start losing hope resulting in damaged well-being. The workplace well-being scale as developed by Bartels et al., (2019) was amended to meet the requirements of the current context. Hence, the authors added a phrase before items (during current COVID-19, and remote working need) to relate the scale with the current study. The study found a significant relationship between fear of coronavirus and the workplace well-being of remote workers. A significant mediation was observed through the hope construct. Hence, established that COVID-19 is damaging workplace well-being. The study also has certain



limitations, as COVID-19 is a recent pandemic not much literature is present to support the phenomenon. Future researchers might go for a greater data set for generalizing the phenomenon. A cross-country analysis could present great insights into the model. It is a timely decision for policymakers, politicians, managers, academicians, and practitioners to devise strategies to control the phenomenon.

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