

Research article

# Analyzing in Post COVID-19 era: The Effect of Occupational Stress and Work-Life Balance on Employees Performance

#### Sheikh Umer Sani\*1

 $^1 Faculty \ of \ Management \ Sciences, Riphah \ International \ University, Islamabad; umersanileo@gmail.com$ 

\*Correspondence: umersanileo@gmail.com

Received: 1 February 2024; Revised: 4 March 2024; Accepted: 8 May 2024; Published: 30 June 2024

Abstract: For any organization, employee has a significant role in the overall performance and development. They have been considered the main asset of the organization. Employee performance has been dependent on various factors and contextual understanding. Drawing on the theory of self-determination, this research study focused on antecedents of employee performance in post COVID-19 context. The motivation behind this research study is to investigate the effects of occupational stress and work-life balance on employee performance in post COVID 19 era. To achieve the aim of the study 208 respondents were approached, who have been serving as middle-tier officers in reputed public sector medical universities and institutions. Statistical techniques (Normality of data, Correlation Analysis, Control Variables, Reliability Analysis and Regression Analysis) are applied to analyze the data through SPSS. The findings of this study depict that occupational stress and work-life balance create negative effects on employee performance in the context of fear of COVID-19. Accordingly, recommendations are provided for the targeted sector and others in general.

**Keywords:** Occupational stress, Work life balance, Employee performance, COV-ID-19, fear.

#### 1. Introduction

Occupational Stress has unfavourable outcomes in both cases for the organization and the employees. Serious risks comprise the fitness of workers specifically health care due to occupational stress. Healthcare professionals can lead to mental illness, and social, psychological, and physical issues because of occupational stress. Disorders are associated with the following mentioned Stress: fatigue (chronic) (Van der Ploeg & Kleber, 2003); disordered eating (King et al.,2009); headaches (Schaubroeck & Fink, 1998); increased blood pressure (Melamed et al., 2001); high risk of cardiovascular diseases (Espnes & Byrne, 2008); and pains (musculoskeletal) (Eriksen et al., 2003).

Work-Life Balance is however on the other is badly affected during the situation of COVID-19. The employees whose preference is to work from home face real-time challenges just because of their maximum time of presence at home. The COVID-19 epidemic and nationwide sanctions have put pressure on even the most well-built relationships. Home space and the sharing of work, as well as the pressures of home online schooling and health-related concerns, have demonstrated too much for some and have formulated a 'perfect storm' for relationship breakdown. As a result, the performance of employees is poor.

The changing work patterns over all these years have posed a remarkable obstacle to both the families and social life of working adults. Having a day with a limited resource of 24 hours, working

individuals can face many hard challenges including official meeting deadlines, financial limitations, and family responsibilities. These kinds of situations can lead to character disputes, which can influence their level of involvement in family, work and social life. However, some scholars suggest domestic activities in high demand make it somehow very difficult to balance family and work life, especially in disasters (Chakma et al., 2020; Cruz et al., 2022; Cvetković, 2019; Cvetković et al., 2023; Cvetković & Janković, 2020; Goyal, 2019; Hossen et al., 2022; Hussaini, 2020).

Work-life imbalances among employees are known to be linked to various health problems, specifically poor physical health, self-explained health, psychological disorders, life dissatisfaction and poor mental health. However, health outcomes and work-life conflicts can vary by gender just because of the unequal distribution of work-related roles in the organization. For example, a positive correlation has been found in some previous research studies between self-reported health and working-life conflict among working women as compared to men, while some other studies show similar results between women and men.

Initially, it was not taken into consideration as it emerged in one region and the pictures and supporting videos showing the impact of this infection are somehow the movie's short clips, so it seems to be factious. It was treated as an epidemic, not a pandemic. After mid-January 2020, it spread like a wave of infection in other parts of the world, but the carriers were not initially considered as humans but through meat. Pakistan registered its first case on February 26, 2020, and later in March Government imposed the first lockdown in all parts of Pakistan. Now the real twist begins after the lockdown as it has become a Pandemic already and increased the mortality and infection rate worldwide. It is widely possible that coronavirus disease (COVID-19) started impacting species of animals, and then later spread to humans. Person-to-person contact has been reported main cause spread of the Novel coronavirus, but it is not yet understood how remotely it occurs. Other human interactive coronavirus strains are through person to person via contaminated droplets being carried from a person who's sick (through sneezing or coughing) or from uncleansed hands.

In April 2020 National Command and Control Center NCOC started working on the instructions/orders of the Prime Minister of Pakistan, Mr. Imran Khan, to collect, examine and inspect information received from all provinces, AJK, GB, and Islamabad. It formulated the guidelines and new mandatory policies to be followed in every government and private institution/organization. According to the government's new policies and guidelines a new concept of "Work from home" and "Virtual" emerged across Pakistan. Though this might be previously applicable to some sectors specifically Information Technology IT, but majority was unaware of it. Initially, it seems that the government had provided the solution to the problem during this uncertainty, but this became the main cause of Occupational stress.

Now the employees have been segregated into two groups. The ones who are working in the office are the real pressure as they must do double jobs as there is no paperless environment in Pakistan and physical interaction is only applicable across Pakistan. Female employees got an edge they must only work from home whether it was their turn to work from the office as they must look after family which leads to gender discrimination. This point is raised not for any cause but just for building an argument during this situation. The ones who are working from home as their no concept of a virtual and paperless environment, so they are not bound to do any work that is required. They proclaim a lack of internet service, laptops and working conditions availability.

# 2. Underpinning Theory

According to Van den Broeck et al., (2016) Theory of Self-Determination (SDT) considers the primary psychological needs for autonomy, competence, and relationship to be essential to natural and ongoing psychological development, introspection, and well-being. The theory of self-determination (SDT) (Hart & Cooper, 2002) became one of the most influential theories. The SDT commonly used to describe human stimuli was originally a broad-based theory. SDT presents the existence of the three basic psychological needs: autonomy, competence, and relationship needs. The autonomy for need is expressed as the people's desire to determine their behaviour and take responsibility for the outcome. (Deci & Ryan, 1985; Little, 1991).

The competence for need refers to the desire of people to acquire their potential and to feel confident in expressing it (Hart & Cooper, 2002). Ultimately, the need for relationships is the desire of peopleto connect with others and their community. Be cared for, cared for, and respected by others; and a sense of unity (Hart & Cooper, 2002; Uebuchi, 2004). The SDT offers a variety of incen-

tive and regulation degrees to interpret the level of motivation, depending on how well the needs are met. Thus, the more their behaviour becomes internally dynamic the more individuals' natural psychological needs for autonomy, competence, and connection are met.

The exposure of autonomy can be created from characteristics of a job, such as controlling all or one's work in most aspects or increasing the scope for decisions, but it has been often the most powerful. When individuals know exactly the goals and objectives of their work, they, therefore, reflect them. Have deep-rooted values and long-lasting interests. (Sheldon & Houser-Marko, 2001).

The self-concordance model of Sheldon and Elliot's (1998), SDT sub-theory, further explains the internal stimulus based on this value. Self-made goals are internally motivated because they seem to be born of selfishness that reflects personal belief and individuality's true sense (Bono & Judge, 2003; Sheldon & Hauser-Marco, 2001; Sheldon et al., 2003). Self-coordination increases when workers identify with the goals of the work they are progressing (identity motivations) or when they figure out that the purpose and goals are very enjoyable and interesting. (Sheldon & Houser-Marko, 2001; Sheldonet al., 2003).

According to self-determination theory, when individuals figure out that achieving goals of work reflects their values and interests, or even when they understand work internally pleasurable and interesting, their performance increases. When they are sure they are getting the job. To achieve extrinsic goals rewards or to accomplish the tasks assigned to them, this reduced their stress.

For this research paper self-determination theory fits because it results in the performance of employees by fostering work-life balance. Likewise, if a person believes in their ability to face challenges and stress at his workplace and can keep his work family balanced is motivated by his / her preference he will also prove self-determination theory by engaging more and more in his job. The theoretical framework concerning variables is in Figure 1.

#### 3. Materials and Methods

The quantitative research methodology through deductive approach and applied type was executed. This study includes both participation from male and female gender as per population point of view. The size of the sample is always less than the total group of the population. The data was collected from the middle-tier employees of universities located in twin cities of Pakistan (Islamabad and Rawalpindi)

# 3.1. Sampling

Convenient sampling under the nonprobability sampling technique was used for this study (Letchumanan & Rohani, 2011). Target subjects from the population are dependent on sample selection. The current study in discussion is a survey-based based that requires responses in due time. The unit of analysis of this study was individuals such as the employees of public sector Universities of twin cities Rawalpindi and Islamabad. A total number of 300 questionnaires were distributed through personal and via internet source Google form.

## 3.2. Measuring Instruments and Scale

The questionnaire was drafted for this section of the study. All variables of research have been designed and incorporated to get the maximum output through the questionnaire, therefore self-self-administered questionnaire with closed questions will be used. This study will use the hypothesis to analyze the effect of occupational stress and work-life balance on employee performance in the post-COVID-19 era.

The Likert Scale in the current study is a five-point scale that is used to give an opinion and understanding of how he perceives the statement by pointing out the required scale mentioned in the statement. The intensity of behaviour is linear and is assumed in the Likert scale, that is, does not strongly agree with the constant agreement, and an assumption that attitudes are measurable. Likert scale includes Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree. A 5-point Likert scale was established and therefore used to measure work-life balance in which the endpoints are 1 = strongly disagree and 5 = strongly agree. The results received in responses by interpreting will help to balance or neutralize any kind of tendency to over-reported difficult and unacceptable behaviours

in workplace situations faced by the respondents. (Fairbrother & Warren, 2003). The 5-point scales are mostly aggregated in WLB research (e.g., Boyar et al. 2003; Fairbrother & Warn 2003; Forsyth & Polzer-Debruyne 2007). Six conceptualizations of work-life balance found in the literature: (1) multiple roles; (2) equity across multiple roles; (3) satisfaction between multiple roles; (4) fulfilment of role salience between multiple roles; (5) a relationship between conflict and facilitation; and (6) perceived control between multiple roles. Based on a review of this research identifies the two primary features of the work-life balance definitions and proposes a new definition of this construct. Fairbrother & Warn (2003) added the respondents face confusion because of ambiguity in questions, thus requiring reframing of the question.

## 3.3. Measures of occupational stress

Occupational stress is the independent variable. Occupational stress mainly covers the various aspects of the job covering the reason for its occurrence and impact on the organization. All the responses in the questionnaire are measured based on a 5-point Likert scale to guarantee consistent results. The questions are designed in such a way, that after reversing necessary items, the average of all items is computed to present the overall stress level score for an individual. In simple terms, the OS uses questionnaire statements to assess, a) how you feel about your job b) how you assess your current state of health, c) the way you behave generally, d) how you interpret events around you e) sources of pressure in your job, and f) how you cope with the stress you experience. Lambert, Hogan, Camp and Ventura (2006). Sample items included "I feel that my tasks are more challenging than my co-workers'" and "During the past six months, my actual performance at work is decreasing day by day." The higher the score, the higher the stress level, with a minimum of 1 and a maximum of 5.

## 3.4. Dependent Variable

Employee performance (EP) is the dependent variable for the study. A questionnaire is designed totest the constructive validity of employee performance factors based on some previous studies (Nassazi, 2012) THI, 2012); The first dimension, the utility of the work, consists of five items, the second dimension, work plan, consists of five items, while third dimension is creativity and innovation consists of six items, the last dimension making efforts comprise of seven items. Thus, a maximum number of 7 items for the questionnaire are used to measure the external accuracy of the employee after evaluating his performance (expert judgment). This was achieved by giving the questionnaire to experts in this area scale ranging from 1 to 5 therefore all the items are scored on a five-point rating.

## 3.5. Moderating Variable

Developing the fear of COVID-19 scale various steps were taken (McCoach et al. 2013). Primarilyscale of fear was assessed after a broader reviewing the availability of literature. The fear of measures that have been studied and identified are almost thirty through different populations and diseases (availability through corresponding authors). The most relevant items that are more prospective are the combined efforts collected through two researchers (i.e., the third and final authors). About 28 items were finally retained for further examinations after excluding items that had similar content or expression. Secondly, furthermore, 11 more items were removed from the list by the recommendation of an expert panel who reviewed all 28 items in general. This panel constitute the following members general physician, health psychologist, psychiatrist, virologist, and nurse.17 items have been retained in the third portion, for whom recommendation is sent to different panels that include further review health experts and educators, sociologists, social psychologists, and pulmonologists. Seven more items further were omitted following the recommendations from another expert panel. In conclusion, an 8-item scale was administered to 46 individuals (26 of them were male participants and 20 of them were female participants with a mean age of 39.63 years and an education 9.38 number of years) to obtain a primary scale estimate. A five-point Likert scale was used to understand the items and to get the required details. After reviewing the results, it was concluded that the respondents understood the item description (mean 3.81, SD = 1.04). In addition, all the participants were approached through telephone-based cognitive interviews with similar pilot

participants to ascertain their views and responses to each scale item. Furthermore, no changes were recommended by the pilot participants as no more changes were required.

## 3.6. Sample Characteristics

White-collar employees were used as the population for the current study, and they were working in the public sector universities in the twin cities of Pakistan, Rawalpindi, and Islamabad. Due to the non-availability of the population listings convenience sampling technique was used. A total number of 300 questionnaires were drafted and distributed in physical and through Google form but the questionnaires that were filled were 208. 69.30% was the rate of responses. To retain confidentiality and unanimity the questionnaires distributed had a cover page. Complete assurance was provided to the respondents in all manners, and it was ensured to all the participants that this data collection was solely for educational research only. After acceptance of will from the respondents the data collection was conducted. The sampling of demographics is mentioned in Table 1 to Table 5.

# 3.7. Normality of Data

The normality of data is a basic assumption for regression. The correct estimation of the relationship of variables under study from non-normal data poses a threat to generalizability and even leads to spurious regression for violation of assumption. (Jackson, 2018). Further for reliability of normality of data for advanced analysis normal distribution was assured. For this purpose, Skewness and Kurtosis were calculated for data. Skewness and Kurtosis are if it is 3 times less than their respective standard error is the acceptable value. Skewness and Kurtosis values in -2 and +2 are acceptable asper the recommendation of George and Mallery (2010). Kurtosis and Skewness result is mentioned in Table 6.

#### 3.7. Research Tables

Table 1. Gender distribution.

Female         99         47.6         47.6         47.6           Valid         Male         109         52.4         52.4         100.0           Total         208         100.0         100.0	Frequer	ncy	Pe	ercent	Valid Percent	CumulativePercent
112010		Female	99 4	47.6	47.6	47.6
Total 208 100 0 100 0	Valid	Male	109	52.4	52.4	100.0
10tai 200 100:0		Total	208 1	0.00	100.0	

Gender is considered one of the most important demographic variables, it elaborates the division of male and female. The sample of the study was 208 out of which 47.6% were female respondents and 52.4% respondents were male. The frequencies are represented in the pie chart graph given below (Table 1).

**Table 2.** Age distribution.

Frequer	ncy		Percent	Valid Percent	CumulativPercent
Valid	20-35	174	83.7	83.7	83.7
	36-50	29	13.9	13.9	97.6
	51-60	5	2.4	2.4	100.0
	Total	208	100.0	100.0	

The sample included responses from different age groups of which 83.7% were between the ages of 20-35, 13.9% were between the age of 36-50 and 2.4% were between the age of 51-60. The frequencies are given in presented in the form of a graph for better understanding (Table 2).

**Table 3.** Education Level of Employees.

	Frequency		Percent	Valid Percent	Cumulative Percent
	Graduation	35	16.8	16.8	16.8
	Master	52	25.0	25.0	41.8
17-1: J	MS/M-Phil	46	22.1	22.1	63.9
Valid	PhD	17	8.2	8.2	72.1
	Under Graduation	58	27.9	27.9	100.0
	Total	208	100.0	100.0	

The education level of employees was an important factor, and it was ensured that the sample included employees with a graduation degree to further carry out the research. The white-collar employees of different universities were included for them to understand the question statements properly and therefore to respond accordingly. The education levels of the sample employees were 8.2% had PhD level of education, 22.1% had MS/M-Phil level of education, 25% had a master's Level of education, 16.8% had a Graduation level of education and 27.9% had under graduation level of education. The frequencies are given below with a graphical representation (Table 3).

Table 4. Employee Designation.

	Frequency		Percent	Valid Percent	Cumulative Percent
	Manager	38	18.3	18.3	18.3
	Officer	31	14.9	14.9	33.2
Valid -	Others	123	59.1	59.1	92.3
valid	Senior Manager	6	2.9	2.9	95.2
_	Supervisor	10	4.8	4.8	100.0
	Total	208	100.0	100.0	

The sample comprised different employee designations that were working in the Universities. 2.9% of the respondents were senior managers, 18.3% were Managers, 14.9% were Officers, 4.8% were supervisors, and 59.1% were others. However, others are specifically those who are on a special pay scale and in higher positions the frequencies are represented below as a figure (Table 4).

**Table 5.** Total years of Experience.

	Frequency		Percent	Valid Percent	Percent
	Less than 5	124	59.6	59.6	59.6
Valid	More than 5	84	40.4	40.4	100.0
_	Total	208	100.0	100.0	

The sample comprised of different employee tenure (years) the respondents have worked in the universities. 59.6% of the respondents had worked less than in the current organization, and 40.4% had working experience of more than 5 years. The frequencies are given in Table 5.

Table 6. Kurtosis and Skewness Results

Variables		Total OS	Total WLB	Total EP	Total COVID
N	Valid	208	208	208	208
IN	Missing	0	0	0	0
Std.	Error of Mean	.337	.363	.295	.464
Skewness		307	316	.443	.310
Std. Error of Skewness		.169	.169	.169	.169

Kurtosis	014	.103	.950	122
Std. Error of Kurtosis	.336	.336	.336	.336
Minimum	6	8	8	9
Maximum	30	35	33	45

The above table reflects the results of Kurtosis and Skewness of all the variables of the current study. The values of Kurtosis are between -0.014 to -1.22 whereas the Skewness values are between -.337 to 0.443. The above-mentioned values are acceptable as values fall within prescribed limits thus, depicting that current study data is normally distributed.

Table 7. Correlation results.

Variables.	1	2	3	4
1. EP	1			
2. OS	0.077	1		
3. WLB	0.024	0.628 **	1	
4. COVID	0.152 *	0.428 **	0.423 **	1

\* p<.05, \*\* p<.01, \*\*\* p<.001

The association reflected in the table is within the defined range.

	100	
Demographics	Employee Per	rformance
	fstatistics	p value
Gender	15.881	.000***
Age	3.995	.080
Marital Status	12.007	.001**
Qualification	.861	.424

Experience 16.273.020\*
\* p<.05, \*\* p<.01, \*\*\* p<.001

One-way ANOVA was performed to see the influence of demographics on the dependent variable. Three demographic effects were noted and controlled in regression analysis, accordingly.

Table 9. Reliabilities of the scales.

Variable Name	Mean	Cronbach's Alpha
EP	2.869	0.765
OS	3.010	0.718
WLB	3.414	0.707
COVID	3.501	0.734

Table 10. Moderated Regression Analysis.

Predictors	Employee's I	Performance	
	β	$\mathbb{R}^2$	$\mathbb{R}^2$
Step 1			
Control Variables		.112	
Step 2			
OS	510**		
WLB	.169***	.228	.116
COVID	.137*		
Step3			
OS * COVID	.624*		
WLB * COVID	.417**	.293	.065*
		:	* n 05 ** n 01 *** n 0

\* p<.05, \*\* p<.01, \*\*\* p<.001

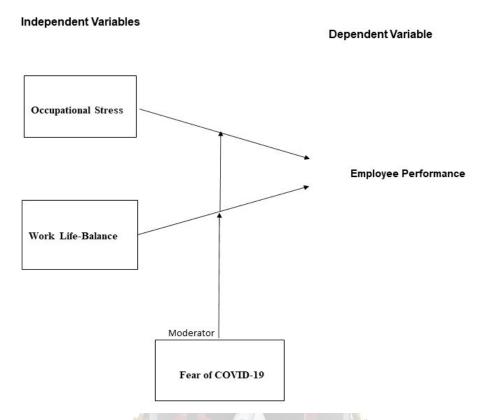


Figure 1. Relationship between variables.

## 6. Date Analysis

## 6.1 Correlation Analysis

Correlation between variables indicates that with a change in the value of one variable, the other variable changes in a specific direction. The purpose of correlation is to check the association between the variables. Variables that are positively related or negatively related define the direction of the relationship. A greater than zero correlation coefficient provides a positive relationship whereas the value less than zero is a negative relationship indication. There is no relationship between the variables if the value is zero. The below correlation table represents the positive relationship among the variables and there is a strong association between the variables. The correlation between occupational stress and employee performance is positive so there is an association between them. Similarly, the correlation between Work-life balance and employee performance is positive and there is an association between the variables. Whereas the moderator's fear of COVID-19 shows the correlation between the independent variables and therefore association with the dependent variable. The association reflected in Table 7 is within the defined range.

## 6.2 Control Variables

All variables that may affect the outcome must be controlled, except for the independent and dependent variables. If you do not control for relevant variables, you may not be able to show that they did not affect your results. Uncontrolled variables are alternative explanations for your results and affect the reliability of your arguments Control variables have significance to develop causal relationships that may lead to over or understatement between the independent variable and dependent variables. The below-mentioned Table 8 below represents the beta coefficients, standard error, and the t-statistic of the beta coefficients with significance.

## 6.3 Reliability Analysis.

Reliability analysis was performed to analyze the instrument reliability of respective variables in the current study. To measure consistency of data reliability analysis is required. For this purpose, a value of more than .7 is consistent. The result of reliability analysis includes the variable's instrument's reliability present in the model. Whereas the employee's performance scale has 0.765 Cronbach alpha reliability, occupational stress shows .718, work-life balance is .707 and fear of COVID-19 has .734 Cronbach alpha reliability. The consistency of the variable's scales was reflected in Table 9.

## 7. Regression

According to the results of regression analysis, the one unit increase in occupational stress will bring by -.510 units change in employees' performance, one unit increase in work-life balance will bring .169 units change in employees' performance and one unit change will bring .137 units to change in employees performance whereas moderating effect of occupational stress and fear of COVID 19 will bring .624 units change in employees performance and moderation effect of work-life balance and fear of COVID 19 will bring .417 units to change in employees performance. The relationship between variables due to the moderating effect is statistically significantly positive as p <.01. As per these results from regression analysis the hypothesis is accepted. The regression analysis in Table 10 shows that employee performance is predicted through occupation stress and work-life balance and moderation is established with a 65% overall effect.

# 8. Theoretical Implications

The current study was mainly focused on discussing and through light to give some theoretical contributions and practical contributions in such a way as to enlighten the prescribed literature that existed previously and therefore for identification of stress types and provide guidelines for policymakers along with the recommendations to the management. Furthermore, for an enriched healthy working environment formulated guidelines to change the style to improve employee outcomes and balance their professional as well as their family lives.

Theoretically, the significance of current study findings has contributed its part towards the existing literature on occupational stress, and work-life balance highlighting the dark side of fear of COVID-19 and its implication along with the literature on employee performance. The focus of this research is the foremost contribution regarding the study of employee performance to understand which kind of employees can work without retrogression in the job outcomes under an uncertain situation of COVID-19. In the context of Pakistan on the other hand current study has an important theoretical contribution is the utilization of the social exchange theory to describe the preventative and safetymeasures taken to overcome and reduce of fear of COVID-19.

## 9. Practical Implications

The valuable practical implications have been provided by this study as it has described the harmfuleffects of fear of COVID-19 on employee performance.

- Working circumstances in the organizations were adjusted to the distinctions in individuals' physical, mental, and logical circumstances of life. Thus, organizations ought to focus closely on the balance between work-life balance (WLB) of their employees by trying to carry outan assortment of WLB practices and strategies, for example, strategic scheduling, position sharing, seasonal work, home working from home, sponsored sporting, and relaxation exercises among other family-accommodating strategies.
- Subsequently, embracing a more essential way to deal with WLB can assist with advancing superior worker execution, better mental and actual well-being, position fulfilment and decreased turnover (Kossek et al., 2012). To get the maximum performance the employee's manager must be clear about the approach he is adopting to get the required outcomes.
- Managers need to focus on implications that can reproduce positive outcomes and need to be acquainted with the fact that their roadmap and guidelines have a significant positive outcome

on employee performance and so therefore their mental and physical health collectively benefits the operations of the organization.

- Understanding the critical negative effects of occupational stress and work-life balance, limits and restricts organizations to avoid recruiting such managers with capabilities to work under uncertain conditions.
- For improvement of employee's performance by implementing a mechanism of anonymous feedback and complaint handling suggestions this can benefit the organizations. This will benefit employees to stand up and raise their voices against heavy workloads, poor working conditions, nepotism, disturbance in work life, and wrongdoings of their managers and increase organisational citizenship behaviour.
- The organization should derive a mechanism of anonymous feedback of office culture for the identification of issues and problems. There should be a grievance policy which should not be hidden and displayed for the employees to register their concerns, in this case, whistleblowers should be kept anonymous to protect them from unfavourable policies, they may be a hurdle and obstacle to employees for the attainment of their interests.
- For this reason, they should formulate a separate department that handles such sort of issues or even at business level organizations, especially the public sector departments, e.g. universities should ask their strategy and policymakers to present such sort of acts which give security to workers.

## 10. Conclusion

This research study is an attempt to fill the gap that appeared in the previous research studies. The results of this study were discussed in light of previous research findings. The theoretical agenda of this research study is to contribute to the existing research about how employee performance has been affected by occupational stress and work-life balance. However, the result supported that occupational stress and work-life balance had a significant negative effect on the employee's performance due to the moderating effect of fear of COVID-19. The research work suggested that employee performance plays an important role in the development of the organization. These findings constitute very important and valuable implications for the organization. The recommendations which are given in the research work are for future results. To conclude the research will depict that employees' primary priority is to focus on their work and try to balance both their working life as well as their families even in circumstances created by the effects of COVID-19. By following the preventive measures, the employee can get full satisfaction from his/her work and give time to his/ her family. The success and the outcomes of the organization are dependent on the employee's performance. Different organizations according to perceived measures need to adopt some activities like online learning skills and few training programs for the employees so that these employees can perform with proper efficiency.

#### 11. Recommendations

The following focal points of the current study were to analysis that how occupational stress and work-life balance affected the performance of employees in post post-COVID-19 era. As per Universities perspective by maintaining a diligent, reasonable work pace, employees can prevent procrastination and consistently finish the tasks they begin. Additionally, employees should place importance on things like punctuality, regularity, time management, honesty, diligence, and discipline, as these characteristics help promote a positive, professional attitude that's often recognized and rewarded by upper management personnel. Fear of COVID-19 has imposed insurgency in establishing a new reason for occupational stress and therefore the relationship between work-life balance and employee performance has become fatal. The research study achieved its objectives by using the technique of questionnaire. Many of the researchers are in favour that it is hard for how employees to manage their work while in stressful situations. For the future purpose, this research can help a lot of researchers to find out their results.

## 12. Limitations and Future Discussions

This research study has some of the limitations that are important and need to be addressed in future research works. The current study is not an exception also because none of the research studiesis without limitations. The data which was included is self-reported which gives the opinion of the employees of the universities. The researcher collected the data from both males and females of different universities. So, future research could be conducted by taking gender as a moderator. This research work is conducted in Pakistan so; future research could be done on the organization of any multinational to generalize the results. The reason why multinational is recommended is that there is a huge difference in working environment in public and private sectors. Public sector organizations have a different working environment than the private sector. A well-reputed multinational organization or even more one adopt the best practices that have been used all over the developing countries in terms of organizations and for the betterment of its employees.

**Acknowledgements:** We are very thankful to Associate Professor Dr. Muhammad Sarmad for proofreading of this manuscript for possible publication.

Conflict of Interest: We have no conflict of interest to declare.

**Ethics statement:** No ethical approval was required in this study as there is no sensitive research data was used.

#### References

- 1. Abu Al Rub, R.F. (2004), Job stress, job performance, and social support among hospital nurses. *Journal of Nursing Scholarship*,36(1),73-78. DOI: 10.1111/j.1547-5069.2004. 04016.x
- 2. Adnan Bataineh, K. (2019). Impact of work-life balance, happiness at work, on employee performance. *International Business Research*, 12(2), 99-112. DOI:10.5539/ibr. v12n2p99
- 3. Ahmadi K., a. A. (2007). Stress and Job Satisfaction among Air Force Military Pilots. *Journal of Social Sciences*, 159-163. DOI: https://doi.org/10.3844/jssp.2007.159.163
- 4. Ahorsu, D. K., Lin, C. Y., Imani, V., Saffari, M., Griffiths, M. D., & Pakpour, A. H. (2020). The fear of COVID-19 scales: development and initial validation. International journal of mental health and addiction, 1-9. doi: 10.1007/s11469-020-00270-8
- 5. Akanji, B. (2013). Occupational Stress: A Review on Conceptualizations, Causes and Cure.
- 6. Al-Aameri, A. S. (2003). Source of job stress for nurses in public hospitals. *Saudi Medical Journal*, 1183-1187.
- 7. Alexandrov, A., Babakus, E., & Yavas, U. (2007). The Effects of Perceived Management Concern for Frontline Employees and Customers on Turnover Intentions. *Journal of Service Research*, 9, 356 371. DOI:10.1177/1094670507299378
- 8. Anderson E.S., C. S. (2002). Formal Organizational Initiatives and Informal Workplace Practices: Links to Work-Family Conflict and Job-Related Outcomes. *Journal of Management*, 787-810.
- 9. Andolsen, B. H. (2009). *The new job contract: Economic justice in an age of insecurity.* Wipf and Stock Publishers.
- 10. Applied Psychology. Applied Psychology: Health and Well-Being, 1(2), 137-164.
- 11. Arnal, E., & R. Torres. (2001). Knowledge, work organization and economic growth. Organization for economic co-operation and development. Paris. DOI: 10.1787/302147528625
- 12. Arnold, H., & Feldman, D. (1982). A multivariate analysis of the determinants of job turnover.
- 13. Ashford, S. (1989). Content, causes, and consequences of job insecurity: A theory-based measure and substantive test. Academy of Management Journal, 803-829.
- 14. Atatsi, E.A., Stoffers, J. and Kil, A. (2019). Factors affecting employee performance: a systematic literature review, Journal of Advances in Management Research.
- 15. Bakker, A., & Oerlemans, W. (2011). Subjective Well-being in Organizations. The Oxford handbook of positive organizational scholarship,49,178-189.
- 16. Bender, K. A. (2006). Job satisfaction of highly educated. Scottish Journal of Political Economy, 253-279.

- 17. Brondino, M., & Bazzoli, A. (2020). Validation and measurement invariance of the multidimensional qualitative job insecurity scale. Quality & Quantity.54(3),925-942
- 18. Budhwar, P. (2000). Determinants of HRM policies and practices in India: An empirical study.
- 19. Burhan, M., Salam, M. T., Abou Hamdan, O., and Tariq, H. (2021). Crisis management in the hospitality sector SMEs in Pakistan during COVID-19. International Journal of Hospitality Management, 98, 103037.
- 20. Campbell, J. P., McHenry, J. J., & Wise, L. L. (1990). Modeling job performance in a population of jobs. Personnel psychology, 43(2), 313-575. https://doi.org/10.1111/j.1744-6570.1990.tb01561.x
- 21. Caplan, J. R. (1972). Organizational stress and individual strain. New York: The Failure of Success.
- 22. Caplan, R. C. (1975). Relationships of cessation of smoking with job stress, personality, and social support. Journal of Applied Psychology, 211-219. DOI: 10.1037/h0076471
- 23. Certo, S. C. (2003). Supervision: Concepts and Skill Building. New York: McGraw Hill.
- 24. Chakma, U. K., Hossain, A., Islam, K., Hasnat, G. T., & Kabir. (2020). Water crisis and adaptation strategies by tribal community: A case study in Baghaichari Upazila of Rangamati District in Bangladesh. *International Journal of Disaster Risk Management*, 2(2), 37-46.
- 25. Cho, J. J., Kim, J. Y., Chang, S. J., Fiedler, N., Koh, S. B., Crabtree, B. F., ... & Choi, Y. H. (2008). Occupational stress and depression in Korean employees. International archives of occupational and environmental health, 82(1), 47-57.
- 26. Cohen, P., West, S. G., and Aiken, L. S. (2014). Applied multiple regression/correlation analysis for the behavioral sciences. Psychology Press. https://doi.org/10.4324/9781410606266
- 27. Cooper, D. R., Schindler, P. S., and Sun, J. (2006). Business research methods (Vol. 9). New York: McGraw-Hill Irwin.
- 28. Cropanzano, R., and Mitchell, M. S. (2005). Social exchange theory: An interdisciplinary review. Journal of Management, 31(6), 874-900. https://doi.org/10.1177/0149206305279602
- 29. Cropanzano, R., Anthony, E. L., Daniels, S. R., and Hall, A. V. (2017). Social exchange theory: A critical review with theoretical remedies. Academy of Management Annals, 11(1), 479-516.
- 30. Cruz, R. D. D., & Ormilla, R. C. G. (2022). Disaster Risk Reduction Management Implementation in the Public Elementary Schools of the Department of Education, Philippines. *International Journal of Disaster Risk Management*, 4(2), 1-15.
- 31. Currie, J. (2014). Early childhood education programs. Journal of Economic Perspectives, 213-238.
- 32. Cvetković, V. (2019). Risk Perception of Building Fires in Belgrade. *International Journal of Disaster Risk Management*, 1(1), 81-91.
- 33. Cvetković, V. M., Romanić, S., & Beriša, H. (2023). Religion Influence on Disaster Risk Reduction: A case study of Serbia. *International Journal of Disaster Risk Management*, *5*(1), 66-81.
- 34. Cvetković, V., & Janković, B. (2020). Private security preparedness for disasters caused by natural and anthropogenic hazards. *International Journal of Disaster Risk Management*, 2(1), 23-33.
- 35. De Witt, H. (2005). Does job insecurity affect the union attitudes of workers and their participation in unions? Job Insecurity: Union Involvement and Union Activism.
- 36. Deci, E., & Ryan, R. (2008). Hedonia, eudaimonia, and well-being: An introduction. Journal of Happiness Studies, 9, 1-11.
- 37. Del Bono, E. (2001). Fertility and economic instability: The role of unemployment and job displacement.
- 38. Demerouti, E. (2001). The job demands-reource model of burnout. Journal of Applied Psychology, 499-512.
- 39. Department of Work and Pension. (2006). Exploring how general practitioners work with patients on sick leave. Research report.
- 40. Diener, E., & Smith, H. (1999). Subjective well-being: Three decades of research. Psychological Bulletin, 125(2), 276-302. DOI:10.1037/0033-2909.125.2.276
- 41. Ehsan, M. and Ali, K. (2018). The Impact of Work Stress on Employee Productivity: Based in the Banking sector of Faisalabad, Pakistan. International Journal of Innovation and Economic Development, 4(6), 32-50.

- 42. ERER, B. (2020). Impact of Covid-19 fear on employee performance. Social Sciences, 10(4), 845-852
- 43. Frone, M. R. (2003). Work-Family Balance. Washington D.C.: American Psychological Association. Grau, M. (2017). Work-life balance: Scale development and validation.
- 44. Global Business Review,1(2), 229-247. https://doi.org/10.1177/097215090000100205
- 45. Goyal, N. (2019). Disaster governance and community resilience: The law and the role of SDMAs. *International Journal of Disaster Risk Management*, 1(2), 61-75.
- 46. Grzywacz, J. G., & Carlson, D. S. (2007, November). Conceptualizing Work–Family Balance: Implications for Practice and Research. Advances in Developing Human Resources, 9, 455-471. https://doi.org/10.1177/1523422307305487
- 47. Gyamfi, E. P. A. O. A., Emmanuel, A. K., and David, B. The Effect Of Occupational Stress On Job Performance At Aspet A. Company Limited.
- 48. Hagedorn, L. S. (1994). Retirement proximity's role in the prediction of satisfaction in academe.
- 49. Hameed, A., & Waheed, A. (2011, July). Employee Development and Its Affect on Employee Performance a Conceptual Framework. International Journal of Business and Social Science, 2, 224-229.
- 50. Haradhan, M. (2012, March 14). The occupational stress and risk of it among the employees.
- 51. Hart, P. M., & Cooper, C. L. (2001). Occupational stress: Toward a more integrated framework. Handbook of industrial, work and organizational psychology, 2, 93-114.
- 52. Hartley, J., & Jacobson, D. (1991). Job insecurity: Coping with jobs at risk. Sage Publications Limited.
- 53. Hellgren, J. (2002). A two-dimensional approach to job insecurity: Consequences for employee attitudes and well-being. European Journal of Work and Organizational Psychology, 8(2)179-195.
- 54. Herlin, P. K. (2010). The Influence of Work-Life Balance Benefits on Family-Supportive Organizational Perception and Work Attitudes.
- 55. Hossen, M. N., Nawaz, S., & Kabir, M. H. (2022). Flood Research in Bangladesh and Future Direction: an insight from last three decades. *International Journal of Disaster Risk Management*, 4(1), 15-41.
- 56. Hunter, J. E., & Hunter, R. F. (1984). Validity and utility of alternative predictors of job performance. Psychological bulletin, 96(1), 72. https://doi.org/10.1037/0033-2909.96.1.72
- 57. Huppert FA. (2009). Psychological well-being: Evidence regarding its causes and consequences.
- 58. Hussaini, A. (2020). Environmental Planning for Disaster Risk Reduction at Kaduna International Airport, Kaduna Nigeria. *International Journal of Disaster Risk Management*, 2(1), 35-49.
- 59. International Journal of Mainstream Social Science, 17-34.
- 60. International Journal of Productivity and Performance Management, 63(3), 308-323.
- 61. J. P. Campbell, R. A. (1993). A theory of performance. In N. a. Borman, Personnel Selection in Organizations San Francisco: Jossey-Bass 35-70.
- 62. J., A. (2014). Determinants of employee engagement and their impact on employee performance.
- 63. Jamal, M. (1985). Relationship of job stress to job performance: A study of managers and blue-collar workers. Human relations, 38(5), 409-424. https://doi.org/10.1177/001872678503800502
- 64. Jick, T. (1985). As the axe falls: Budget cuts and the experience of stress on organizations. Human stress and cognition in organizations, 83-114.
- 65. Jimmieson, N. T. (2004). A longitudinal study of employee adaptation to organizational change: the role changes related information and change-related self-efficacy. Journal of Occupational Health Psychology, 11-27.
- 66. Jokela M, Batty GD, & Nyberg ST. (2013). Personality and All-Cause Mortality: Individual- Participant Meta-Analysis of 3,947 Deaths in 76,150 Adults. Am J Epidemiol. Oxford University Press.
- 67. Journal of Applied Psychology, 350-360. https://doi.org/10.1037/0021-9010.67.3.350
- 68. Khuong, M. N. (2016). Investigate the Effects of Job Stress on Employee Job Performance A Case Study. Ho Chi Minh: International University, Vietnam National University.
- 69. Kim, H. K. (2014). Work-life balance and employees' performance: The mediating role of affective commitment. Global business and management research: An international journal, 6(1).

- 70. Kirkman, B. L., and Shapiro, D. L. (2001). The impact of cultural values on job satisfaction and organizational commitment in self-managing work teams: The mediating role of employee resistance. Academy of Management journal, 44(3), 557-569.
- 71. Kniffin, K. M., Narayanan, J., Anseel, F., Antonakis, J., Ashford, S. P., Bakker, A. B., and Vugt, M.
- 72. Lambert, E.G., Hogan, N.L., Camp, S.D., and Ventura, L.A. (2006). The impact of work–family conflict on correctional staff: A preliminary study. Criminology and Criminal Justice, 6, 371–387. https://doi.org/10.1177/1748895806068572
- 73. Malasch, C., & Leiter, M. (1997). The Truth about Burnout: How Organization Cause Personal Stress and what to Do about it. Jossey-Bass Incorporated, Publishers.
- 74. Mehl, M. R., Vazire, S., Holleran, S. E., & Clark, C. S. (2010). Eavesdropping on happiness: Wellbeing is related to having less small talk and more substantive conversations. Psychological science, 21(4), 539-541. doi: 10.1177/0956797610362675
- 75. Meneze M. M. (2005). The Impact of Stress on productivity at Education Training & Development Practices: Sector Education and Training Authority. Master thesis, University of Pretoria.
- 76. Mensah, A., Adjei, N.K. (2020). Work-life balance and self-reported health among working adults in Europe: a gender and welfare state regime comparative analysis. BMC Public Health 20, 1052.
- 77. Molm, L. D. (2003). Theoretical comparisons of forms of exchange. Sociological Theory, 21(1), 1-17. Molm, L. D. (2010). The structure of reciprocity. Social psychology quarterly, 73(2), 119-131.
- 78. Montgomery, D. B. (1996). A model of financial securities sales persons' job stress. The Journal of Services Marketing, 21-34.
- 79. Montoya, A. K. (2019). Moderation analysis in two-instance repeated measures designs: Probing methods and multiple moderator models. Behavior research methods, 51(1), 61-82
- 80. Mosadeghrad, A. M. (2014). Occupational stress and its consequences. Leadership in Health Services, 27, 224-239. https://doi.org/10.1108/LHS-07-2013-0032
- 81. Motowidlo, S. J., Packard, J. S., & Manning, M. R. (1986). Occupational Stress: Its Causes and Consequences for Job Performance. Journal of Applied Psychology, 71, 618-629.
- 82. Motowidlo, W. C. (1993). "Expanding the criterion domain to include elements of contextual performance. In N. S. Borman, Personnel Selection in Organizations 71-98.
- 83. Narayanamurthy, G., and Tortorella, G. (2021). Impact of COVID-19 outbreak on employee performance–moderating role of industry 4.0 base technologies. International Journal of Production Economics, 234, 108075. DOI: 10.1016/j.ijpe.2021.108075
- 84. Nassazi, A. (2013). Effects of training on employee performance.: Evidence from Uganda. inefield, A. H., & Jarret, R. (2001). Occupational Stress in University Staff. International Journal of Stress Management, 8, 285-298.
- 85. Obiageli, O. L., Uzochukwu, O. C., and Ngozi, C. D. (2015). Work-life balance and employee performance in selected commercial banks in Lagos State. European journal of research and reflection in management sciences, 3(4).
- 86. Ones, C. V. (2000). Perspectives on models of job performance. International Journal of Selection and Assessment, 216-226. https://doi.org/10.1111/1468-2389.00151
- 87. Rabindra Kumar Pradhan, & Lopamudra Hati. (2019). The Measurement of Employee Well-being: Development and Validation of Scale. Global Business Review, 1-23.
- 88. Rahman, M. a. (1995). A comparison of organizational structure, job stress and satisfaction in audit and management advisory services (MAS) in CPA firms. Journal of Managerial Issues, 290-305.
- 89. Rahman, M. a. (1995). A comparison of organizational structure, job stress and satisfaction in audit and management advisory services (MAS) in CPA firms. Journal of Managerial Issues, 290-305.
- 90. Randall, A. K., & Bodenmann, G. (2009). The role of stress on close relationships and marital satisfaction. Clinical psychology review, 29(2), 105-115.
- 91. Research in Higher Education, 35(6), 711–728.
- 92. Rocha, C., Hause Crowell, J., & McCarter, A. K. (2006). The effects of prolonged job insecurity on the psychological well-being of workers. J. Soc. & Soc. Welfare, 33, 9.

- 93. Ryan, R., & Deci, E. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. American Psychologist, 55(1), 68-78.
- 94. Ryff, C. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. Journal of personality and social psychology, 57(6). https://doi.org/10.1037/0022-3514.57.6.1069
- 95. Ryff, C.D. (1995). Psychological well-being in adult life. Current directions in psychological science, 4(4), 99-104. https://doi.org/10.1111/1467-8721.ep10772395
- 96. Schmitt, N., Cortina, J. M., Ingerick, M. J., & Wiechmann, D. (2003). Personnel selection and employee performance.
- 97. Sender et al, & Wang et al. (2017). Job security as a threatened resource: reactions to job insecurity in culturally distinct regions. Journal of Human Resource Management, 1-27.
- 98. Shea, T., and De Cieri, H. (2011). Workplace stress evaluation tools: A Snapshot Review. ISCRR and Monash University.
- 99. Shereen, M. A., Khan, S., Kazmi, A., Bashir, N., and Siddique, R. (2020). COVID-19 infection: Emergence, transmission, and characteristics of human coronaviruses. Journal of advanced research, 24, 91-98.
- 100. Shields, M. (2006). Unhappy on the job. Health Reports, 17(4), 33-37.
- 101. Sokro, E. (2012). Analysis of the relationship that exists between organizational culture, motivation and performance. Problems of Management in the 21st Century, 3, 106.
- 102. Sonmezer, M. G. (2008). A comparative analysis of job satisfaction level of public and private School. Journal of Theory and Practice in Education, 189-212.
- 103. Sverke, M., Hellgren, J., & Näswall, K. (2002). No security: A meta-analysis and review of job insecurity and its consequences. Journal of Occupational Health Psychology, 7, 242-264.
- 104. Tabouli, E. M., and Habtoor, N. (2016). Employee performance scale: Using (cfa) on jumhouria bank in Libya. International Journal of Science and Research.
- 105. Thornbill, A. (2000). Research Methods for Business Studies (6th ed.). Pearson Education Limited.
- 106. Tombaugh, J. a. (1990). Downsizing: an empirical assessment of survivors' perceptions in a post layoff environment. Journal of Organization Development, 32-43.
- 107. Tyler, T. R., Lind, E. A., and Huo, Y. J. (2000). Cultural values and authority relations: The psychology of conflict resolution across cultures. Psychology, Public Policy, and Law, 6(4), 1138
- 108. V. (2021). COVID-19 and the workplace: Implications, issues, and insights for future research and action. American Psychologist, 76(1), 63.
- 109. Valenzi, E., and Dessler, G. (1978). Relationships of Leader Behavior, Subordinate Role Ambiguity and Subordinate Job Satisfaction. Academy of Management Journal, 671-678.
- 110. Warr. (1999). Well-being and the workplace. The foundations of hedonic psychology, 392-412.
- 111. Waterman, A. (1993). Two conceptions of happiness: Contrasts of personal expressiveness (eudaimonia) and hedonic enjoyment. Journal of personality and social psychology, 4, 678-680.
- 112. William, E., & Scott, J. (1966). Activation theory and task design. Organizational Behavior and Human Performance, 1(1), 3-30. https://doi.org/10.1016/0030-5073(66)90003-1