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# THE IMPACT OF TELECOMMUTING ON JOB PERFORMANCE, JOB SATISFACTION, WORK LIFE BALANCE, AND MENTAL HEALTH OF EMPLOYEES IN PAKISTAN IN COVID-19: ANALYZING THE MODERATING EFFECT OF TRAINING

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## ABSTRACT

*As Covid-19 has affected the whole economy and forced the organizations to work from home, the performance of employees has started increasing. This study focuses on the impact of telecommuting on job performance, job satisfaction, mental health and work life balance of employees along with analyzing the moderating effect of training using the survey data. Quantitative research approach is employed with survey data from 303 diverse sets of white-collar employees from different organizations of Pakistan. The results implicate that when employees telecommute while appraising the performance of employees' results in job dissatisfaction, high intention to quit and low job performance.*

**Key words:** Telecommuting, job performance, job satisfaction, mental health, work life balance and training

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## 1. INTRODUCTION

As it is viewed that COVID-19 has affected the world badly, Pakistan is also in one of those affected countries and it has been affected by this virus at its worst. Everything was going smoothly before this outbreak. The economy was growing well before the pandemic but suddenly this infectious disease attacked to Pakistan and created a fear among the people that it causes death. The virus led to the cause of death of many people in Pakistan. The economy of Pakistan was badly destroyed that it could not be managed properly at once by the government. As Pakistan is an under developing country, it was very difficult for the government to cope up with this unexpected situation because no one was ready to handle this. In March, the government of Pakistan announced a complete lockdown for 15 days and urged the people to stay at homes. All the educational institutions, markets, shopping malls, offices, restaurants, transport, marriage halls and all the businesses were closed down. Despite of these measures by the government, Coronavirus was kept increasing and making the lives of people in danger. Then it was noticed by the federal government that due to the complete lockdown, the economy of Pakistan is decreasing. People are dying from hunger as the majority of the people are poor and many of them are below poverty line. At that movement, all the businessmen and traders came out and protested against the lockdown because their businesses were completely destroyed. Then the federal government came along with the idea of SMART LOCKDOWN and after the consensus of provincial governments, a SMART LOCKDOWN was announced by the government. In this lock down, educational institutions, shopping malls, electronic markets, marriage halls, offices and restaurants were closed and small businesses, banks, construction sites and small markets were allowed to open in between 9:00 am to 5:00 pm for daily operations. In restaurants, dine-in facility was not available but the deliveries and take away were allowed. Despite of these measures, the businesses were still facing loss and hence, many organizations adopted the system of telecommuting. As it was not widely acceptable in Pakistan so many problems were faced by the employees as well as by the employers to manage it but telecommuting was the only way left to run their businesses. Therefore, most of the organizations started working from their homes. The National Bank of Pakistan, SIEMENS Pakistan are one of the best examples of telecommuting in this regard as it allowed its HR department to work remotely. Now the main problem for the organizations was to look into the employees' perspective of working from home that either they can work from home or not? What would be the challenges will they face working remotely? How would working from home effect their employees' performance as the employees are not used to of working like that. Would they be satisfied or not? What would be the impact of working remotely on their balance of life and work? Would they be able to manage their life and work properly? What would happen if working from home effect their mental health and what if they get into depression, stress or anxiety? What sort of equipment are required to them at their homes? As working from home is new for the employees so how would the employees be trained? What measures the management need to take for the training of their employees. Another question arises that would the training be beneficial for them or not? Would the employees be able to perform well after the training? Would the training have a beneficial impact on their job satisfaction or not? All these questions were unanswerable for the organizations they were not

sure how telecommuting would be going to affect their businesses. So, after analyzing this situation, I concluded that all these gaps should be examined properly.

### **1.1. Research Questions**

The central or major research questions are as follows:

- Does telecommuting have an impact on the job performance of employees in COVID-19?
- Does telecommuting have an impact on the job satisfaction of employees in COVID-19?
- Does telecommuting have an impact on the work life balance of employees in COVID-19?
- Does telecommuting have an impact on the mental health of employees in COVID-19?
- Does training moderate the relationship between telecommuting and job performance of employee?
- Does training moderate the relationship between telecommuting and job satisfaction of employee?

### **1.2. Research Objectives**

- To examine the impact of telecommuting on the job performance of employees in COVID- 19.
- To study the impact of telecommuting on the job satisfaction of employees in COVID-19.
- To investigate the impact of telecommuting on the work life balance of employees in COVID-19.
- To inspect the impact of telecommuting on the mental health of employees in COVID-19.
- To examine the moderating effect of training between telecommuting and job performance.
- To inspect the moderating effect of training between telecommuting and job satisfaction.

### **1.3. Significance of the Study**

The current research inspects the relationship between telecommuting and other variables which are relevant to both organizations and individuals specifically job performance, job satisfaction, work life balance, mental health and training. The study incorporates into the existing body of knowledge in various ways. The findings of this research will help the organizations to understand how this pandemic of COVID-19 has affected the lives of people and organizations. Firstly, in regard with the relation between telecommuting with job satisfaction, job performance, work life balance and mental health of employees, there are studies that have reviewed but its impact in COVID-19 is not yet identified. In addition, a moderating effect of training between telecommuting and job performance and job satisfaction of employees is also not inspected yet. Moreover, this kind of study has not been conducted in Pakistani context.

### **1.4. Background Of COVID-19**

Since the outbreak was identified in Wuhan, it has been widespread to other 215 countries of the world and caused the death of millions of people. After the consideration that the virus is infectious and has widespread ability, the governments of all Asian countries took the initiative of social distancing program for its prevention. In December 2019, WHO (World Health Organization) was informed by the health officials of China that suddenly there are cluster of patients who are having a mysterious pneumonia. Then the outbreak of COVID 19 was declared by WHO on January 30, 2020. All of a sudden, the pandemic is now known as a household word in our lives and it is defined as a disease which is infectious and spreads from person to person. However, it was not only spreading in China but in multiple states and countries around the globe and at the same time. (Savić, 2020). In the integrated and connected world, the effect

of the virus has become visible and apparent since this pandemic. (McKibbin & Fernando, 2020).

Till 27<sup>th</sup> of May, 2020, the pandemic had affected more the 5.6 million people and had taken the lives of around 350000 across the world. (Bai et al., 2020). We have seen various lockdowns lead to increase in production interruption and decrease in consumption. Overall, the supply chain worldwide has been obstructed and affecting the organizations around the world. There is a high chance of losing jobs of millions of people over upcoming months. Moreover, each day people are hearing the news of shut down of businesses. The pattern of consumption and preferences of consumers have been changed as a result of shortage of commodities in markets around the globe. As a result of pandemic, a sharp fall has been seen in the financial markets globally. The whole globe is now at recession. Now, at this stage, the damage from COVID-19 cannot be predicted accurately. Everything is dependent on time now. (Fernandes, 2020).

There is a vast literature available on the causes and reasons of recession but the recession which is caused due to this pandemic is novel in the history of modern world. This recession is a triggered one and is quite different from the previous recessions. For example, the crisis of Asian debt in 1997 which was caused due to the fall of Thai baht which not only created high panic but also became the cause of economic recession and financial crisis in Asia. Another example is the financial crisis of 2008 which was global and the reasons were that the regulatory structure was weak, monetary policy was loose, subprime mortgages, and the banking sector was highly leveraged. In 2016, Nigeria faced a triggered recession and the causes were the fall in the crude oil prices, deficit in balance of payment, petrol pump price increase, and weaknesses in infrastructure. Furthermore, the Greeks faced the financial crisis, less flexibility in the monetary policy, and structural weaknesses in 2010. The government of most of the countries-imposed restrictions on travelling which were non-essential to those countries that were affected by this pandemic, suspended travel tourism, visas od immigration and work visas. On the other hand, some of the countries imposed a ban on travel completely on all outward and inward travelling and shut down the airports. When Coronavirus was on peak, the airplanes were empty because most of the passengers had canceled the flights. As there was a complete ban on travelling, a huge decrease in demand was found in all form of travelling and due to this, some airlines suspended their operations temporarily. The globe had to face a huge loss of 200 million dollars in only tourism industry due to the restriction. Not only tourism industry is affected by this outbreak but also hospitality industry has also been affected. The social distancing and stay at home movements were announced by the governments of many countries and it has impacted the restaurant industry badly. The announcement led to shut down in many cities of the world. It is witnessed that billion dollars of bookings were canceled in hotels across the globe and the industry had to face a bailout of \$150 billion dollars. The staff of restaurants was laid off by the executives of restaurants. Even though, the governments had to face the criticism by the executive restaurants on imposition of restriction because many small and pub businesses were destroyed. Hence, the hotel industry was affected at its worst and destroyed the economy due to this pandemic and its impact on economy was more drastic, severe and critical than 2008 and 9/11 economic decline combined. Furthermore, this outbreak also affected the sports industry. The matches of football were suspended immediately by the football leagues of England and Scotland. The Turkish Super League, Tokyo Summer Olympic and Paralympic, Monaco Grand Prix, England's FIH Pro League, World Snooker Championship, European Aquatics Championship and many more events were canceled due to this outbreak and the sports industry had to bear a huge loss. Likewise, the oil dependent countries were also suffered a lot. In the early of 2020, there was a war between Saudi Arabia and Russia and the oil prices were fallen down. The pandemic intensified and worsened the condition through the decrease in prices of oil. The movement of goods and people are decreased due to the restrictions on travelling resulted in a reduction in demand or fuel, coal and energy products subsequently and

these things led to fall in oil prices and demand of oil. There was a severe impact of COVID-19 on those countries who are oil dependent. As the prices of oil declined globally, the oil revenue faced a high shortfall to the countries who are dependent on oil and due to this, the current deficit in account was increased and damaged the balance of payments of various countries. Moreover, this pandemic has also affected the national budgets. Consequently, various countries had to take a loan from World Bank, IMF, and other lender for the funding of their deficits in budget and for creating a new budget due to the massive deficit faced by many countries. Besides this, the pandemic also affected the countries which were dependent on import. There are many countries in the world whose import is dependent on the countries like Japan, India and China who export their goods. The reason of importing is the consumption of goods. Now the flow of commodities have been reduced though supply chain globally and there is a decrease in export of many countries due to shortage of supplies. Due to this, we have seen a rise in the prices of imported stocked commodities for the export. In addition, the rise in non-performing loans have been found due to the drop off and decline in macroeconomics in the sector of banking. A high exposure of credit risk is faced by the private banks. Moreover, the bank transactions, the use of credit cards, ATM machines usage have been slow down in this outbreak worldwide. Hence, the collection of fees was low which led to low bank profit. In contrast, a high demand in online shopping for many online services can be seen. The most apparent effect of this COVID-19 was on the financial markets which worsened the stock market globally. It had to face loss in trillion dollars till now. In the early 2020, there was a high contribution of event industry in the economy. For example, various business events were hosted and more than 1.5 billion people participated across 180 countries of the world in 2018. The direct spending of \$1.07 trillion were generated, direct jobs of around 10.3 million were created, and a direct GDP of \$621.4 billion was generated by the event industry globally. During this pandemic, cancellations of events such as parties, weddings, music shows, corporate events, conferences, trade shows, exhibitions, brand launches and many more hit the event industry financially. Plus, the entertainment industry has also badly affected by the pandemic. A loss of \$5 billion was incurred by the film industry globally. Collectively, a high rise in unemployment level has been seen in the entertainment industry. Furthermore, the impact of Coronavirus resulted in the high number of deaths and it was increased due to shortage of beds in hospitals, insufficient drugs supply, lack of vaccination for the cure of patients and limited isolation centers for the catering of increasing number in Coronavirus cases. Additionally, a drastic impact has been seen among the students of school, college and university as the educational institutes were instructed to close for the protection of students. There is a severe kind of disruption faced by educators and students, Institutes which do not have online learning platforms and are unable to provide education online are facing the worst consequences. Further, it is reported by UNESCO that 290.5 million are those students whose education was disrupted due to the Coronavirus pandemic. Moreover, many teachers are unemployed now due to the closure of educational institutes. (Ozili & Arun, 2020).

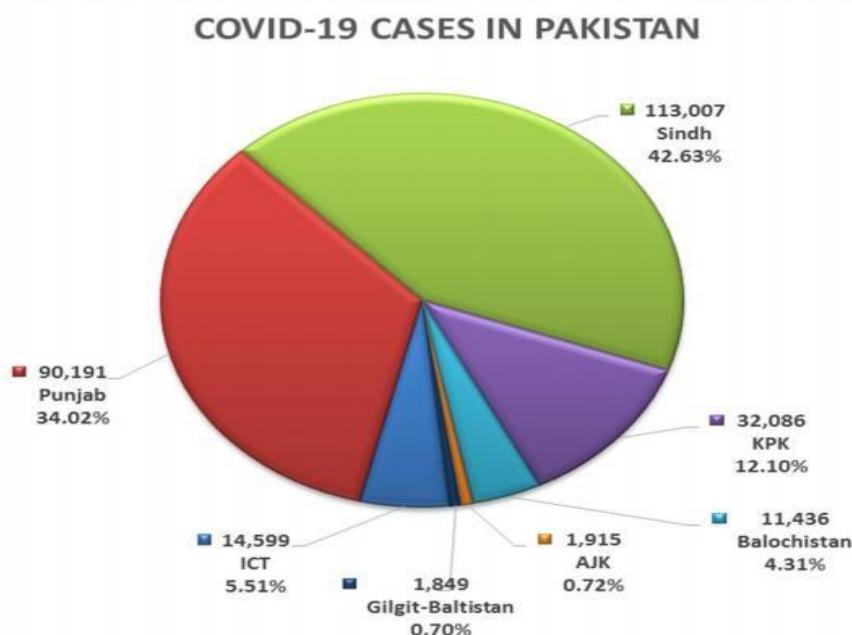
### **1.5. COVID-19 and Pakistan**

Like other countries, Pakistan is also in one of those countries who are affected by this pandemic. The crisis has affected our global and national economies severely. There are various organizations who are facing various issues along with huge losses. Many problems are being faced by organizations like a disruption in supply chain, demand decrease, orders of cancellation of exports, shortage of raw material, disruption in transportation, and many others. Furthermore, there are many MSMEs that are not able to operation, out of stock, and there are some who will be out of the stock. As it is known that MSMEs are considered as the backbone of economy that provides employment opportunities and income to a greater number of population globe wide. In the same way, MSMEs in Pakistan are regarded crucial and essential for the economy

because an estimate of 90 percent means 32 million business corporations are constituted by them and they have a vast contribution with 40 percent of export earnings to the GDP. Hence, due to this lockdown and outbreak, unprecedented negative impacts are being faced by the firms in Pakistan on their businesses. (Shafi et al., 2020).

In accordance to the current report of the UNCTAD (United Nations Conference on Trade and Development), this global outbreak of COVID-19 would hit Pakistan at its hardest. (UNCTAD, 2020). Additionally, due to the ongoing crisis, the business operations will severely be hampered by this pandemic as all the MSMEs are dependent highly on cash economy that has also been impacted by this outbreak. (Williams & Schaefer, 2013). Alongside, the inconvenience and inaccessibility of labor, raw material shortage, slow down in production, and restrictions in transportation also have major consequences on businesses. In return, this will have a significant impact as a whole on the national economy. (Shafi et al., 2020).

In Pakistan, the first Coronavirus case was disclosed on 26 of February, 2020. A rise in confirmed cases was started rapidly from 15<sup>th</sup> of March, 2020 when all the pilgrimage started arriving from Iran through the border of Taftan. Therefore, a lockdown was announced and enforced within a day in Pakistan. Furthermore, a high rise was found in cases from 53 to 1078 in between 15<sup>th</sup> of March to 25<sup>th</sup> of March. Since then, day by day, a rise in seen in number of cases and they are exponentially growing in many parts of Pakistan. Then, confirmed 265,083 cases were reported as of 20<sup>th</sup> of July, 2020 and out of them, 5599 people have lost their lives. It is shown in the current data that 113,007 confirmed cases which is 42.63% as a whole was reported in province Sindh alone and 90,191 confirmed cases which is 32.02% was reported in province Punjab. (Shafi et al., 2020). The province wise confirmed cases in Pakistan are represented in figure 1.



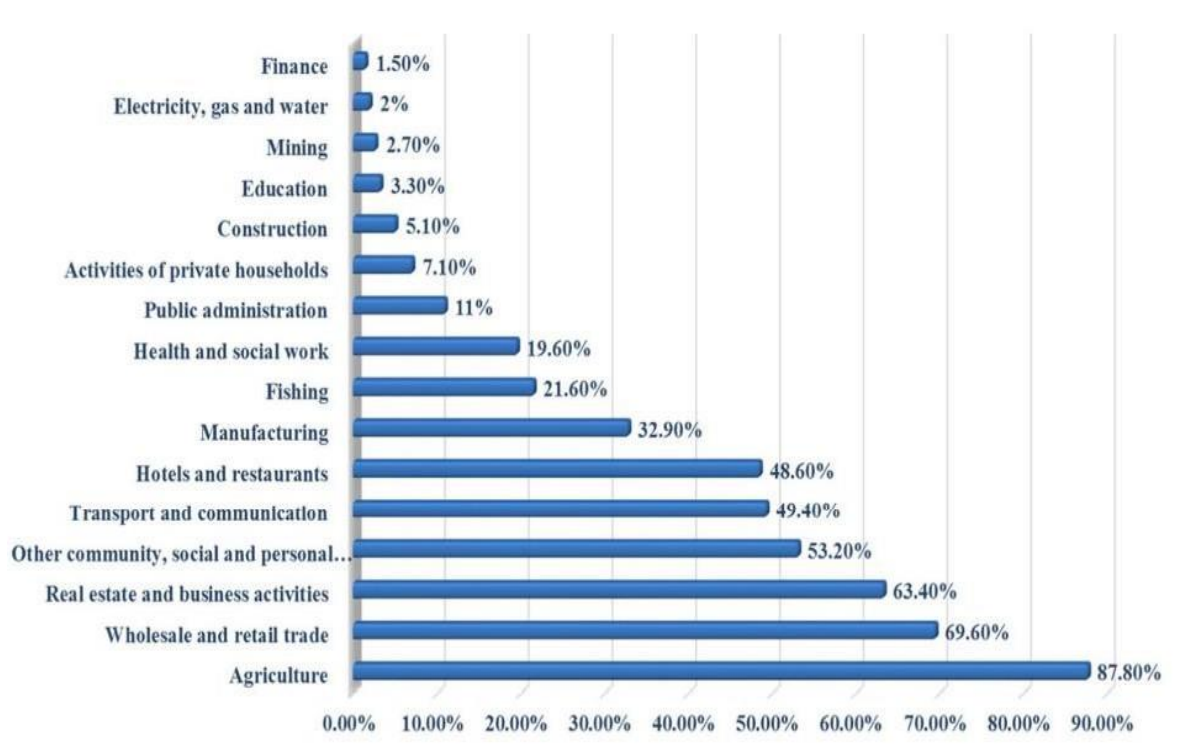
**Figure 1** Confirmed cases in Pakistan of COVID-19

How the Coronavirus impact the economy and society of Pakistan can be witnessed through the enforced lockdown in all over the country. A study of Junaidi, (2020) reported that the export of Pakistan was dropped by 50% and Pakistan had to face a loss of 1/3 of its revenue due to the lockdown imposed in this outbreak of COVID-19. In the report of Naqvi, (2020), in Pakistan, amid virus lockdown, the economists warned of recession. Meanwhile, World Bank also warned Pakistan about its recession. Due to the outbreak, many crisis were faced by

Pakistan that in fiscal year, 2020, the real GDP will be having a fall of 1.3% because all the activities nationally as well as globally was slow due to the pandemic.

The most immediate and the biggest effect of the enforced lockdown is the cession and halt in all the operations of business. At first, when the government announced the lockdown in Sindh, a downfall was rise. Karachi which is regarded as the capital of Sindh is known as it is the largest zone of industries in the country and is accounted for the thirty percent of the exports in total of Pakistan. There are more than 2700 factories located in Karachi. At the first day of working in lockdown, out of them, only 50 or less than that were in operations. Moreover, it was reported by him that 5 million people who are live at or below the line of subsistence while, there are large number of people in the country who are low or unskilled for example labors, transport workers, waste recyclers, domestic workers, construction workers etc who are working in industries, agriculture and services and the main thing is that they rely on wages on daily basis to fulfil their needs. As stated by the author that there are around 40 million of people who work on wages om daily basis only in Karachi. The lockdown has hit these wagers the hardest. (Husain, 2020).

After the daily wagers, there are a number of micro enterprises. It is defined as those people who are self-employed such as household businesses, street vendors, shop owners and many others who rely heavily on their businesses. Usually, family members operation such businesses in different type of industries, from service to education. In addition, all the mice enterprises are regarded as a portion of our informal economy because their operation activities are undocumented mostly. Therefore, the exact number of micro enterprises are not known accurately. Recent statistics show that 35.7% are those employed persons who are accounted for out of the national employment in total. Moreover, more than 55.6 percent of these enterprises are at risk and vulnerable. For more details, the vulnerability of these micro enterprises sector wise is mentioned in figure 2. (Sohail, 2019).



**Figure 2** Distribution of employment (Vulnerable) sector wise

Source: (PAKISTAN EMPLOYMENT TRENDS, n.d.)

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From the above chart, it is quite clear that how severely the outbreak of COVID-19 has impacted micro enterprises.

After micro enterprise, the small and medium enterprises come. The same issues are being faced by them. For example, due to the enforcement of lockdown, many apparel and textile industries have been badly affected in COVID-19. Around 54 percent of our exports of manufacturing sector are food, beverages, textile and tobacco. Due to the reduction in the demand of exports in these sectors, these sectors are disproportionately affected in this lock down. Likewise, the agricultural sector has also become inconvenient and is no exception. For example, the harvesting of wheat crops mostly starts at the March till mid of June in Sindh and Southern Punjab. Several huge issues were also faced by this sector because the transport and labor both were unavailable. Correspondingly, in transport industry case, there were many drivers of transportation (local) including buses, taxis and rickshaws has been asked to stay at homes. The disruption of supply chains nationally and the closure of business operations are having a huge effect on the wholesale, retail, communication, warehousing and transport services. Similarly, the condition of other industries is same. The most important thing is that during Ramadan, there were many sectors such as food, salon, clothing, electronics, shoes and many others were impacted severely. All the SMEs faced a hard hit by the pandemic and are expecting to face liquidity issues. In addition, those enterprises that are running their business operations, an extra cost is being faced by them such as they have to maintain all the SOPs and provide masks, sanitizers and gloves for the health and safety of their employees. Moreover, the currency of Pakistan is also affected by the ongoing crises. Pakistan is facing a devaluation in its currency and it is a big threat for all the businesses. It is mentioned in the report by the World Bank that the exchange rate of Pakistan was stable relatively from June to Feb but in March, it has been devalued by 7.3 percent. (Shafi et al., 2020).

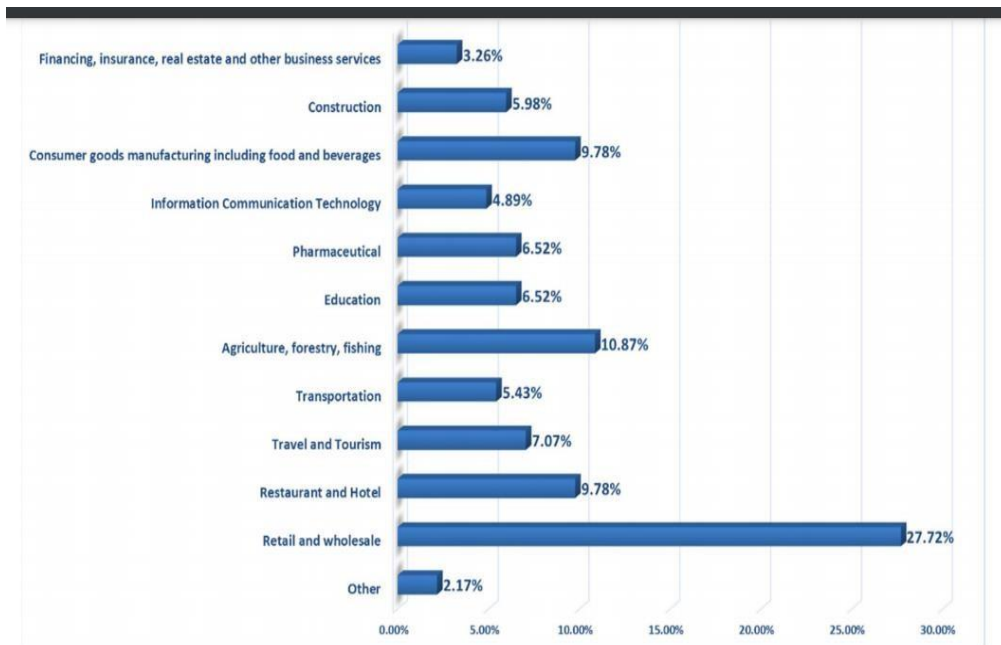
The Labour Force Survey Report of Pakistan Bureau of Statistics shows that the rate of unemployment in the country is 5.8 percent and it is expected that during the FY 2020-2021, it will reach to 8.1 percent due to the pandemic. Deep scars will be left by the Coronavirus on the economy of Pakistan as well as all around the world. Moreover, COVID-19 would have affected a number of employees. The sample size was 174. The details are presented in the table no 1.

**Table 1** Composition of samples % of participants

<i>Designation of participants</i>	
Owner	37.50%
Director	13.04%
Manager	24.46%
Assistant Manager	14.67%
Others	10.33%
<i>Province</i>	
Sindh	46.20%
Punjab	13.04%
KPK	9.78%
Balochistan	6.52%
Gilgit-Baltistan	8.15%
Azad Jammu and Kashmir	7.07%
ICT	9.24%
<i>Annual sales turnover</i>	
Under 1 million PKR	35.33%
1-5 million PKR	19.02%
6-10 million PKR	10.87%
11-20 million PKR	6.52%
21-49 million PKR	7.07%
50-100 million PKR	4.89%
101-149 million PKR	7.07%
150-800 million PKR	9.24%
<i>Total no. of employees</i>	
Less than 10 employees	32.61%
10-50 employees	43.48%
51-100 employees	11.96%
101-200 employees	7.61%
201-249 employees	4.35%
<i>Daily wages employees</i>	
None	38.04%
less than 10	33.70%
11-20 employees	13.04%
21-29 employees	8.15%
30-50 employees	2.72%
51-100 employees	1.63%
More than 100 employees	2.72%

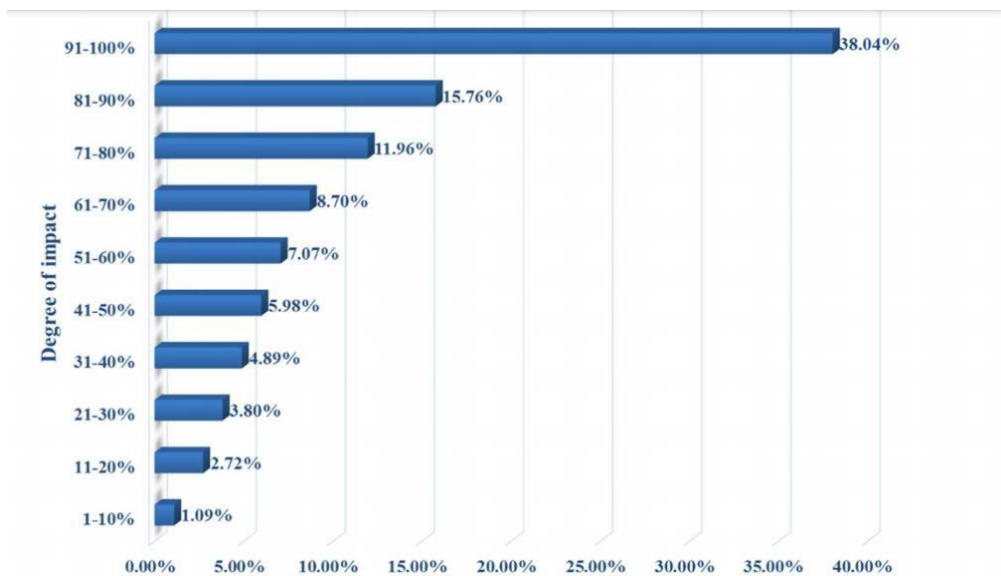


A research was conducted by Shafi et al., (2020) to know the impact of this outbreak on MSMEs and different sectors were represented in this research. See figure 3 for the distribution of industry that represented in the study.



**Figure 3** Industry distribution

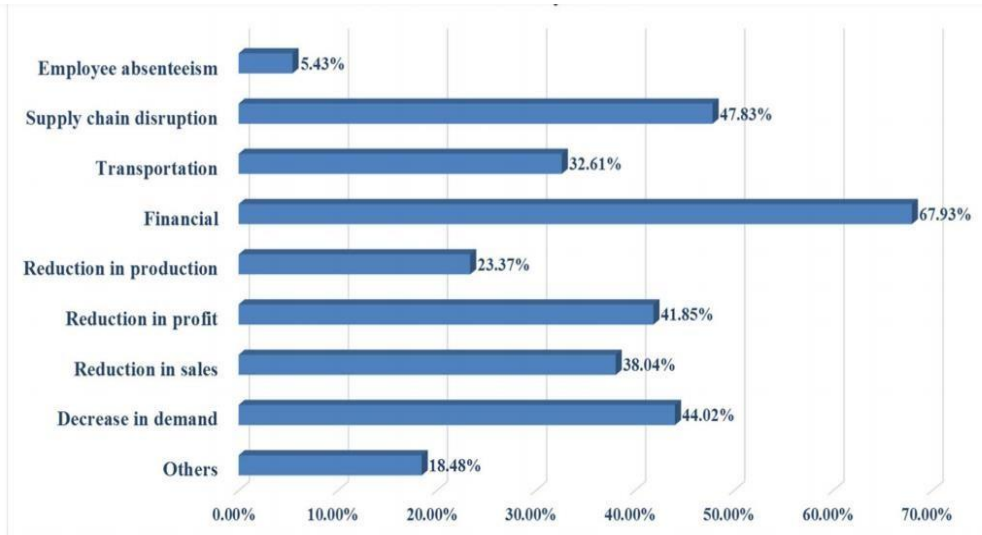
It is revealed in figure 4 that many enterprises are affected severely by the COVID-19 outbreak. (Shafi et al., 2020).



**Figure 4** The degree of effect of lockdown on COVID-19 on MSMEs.

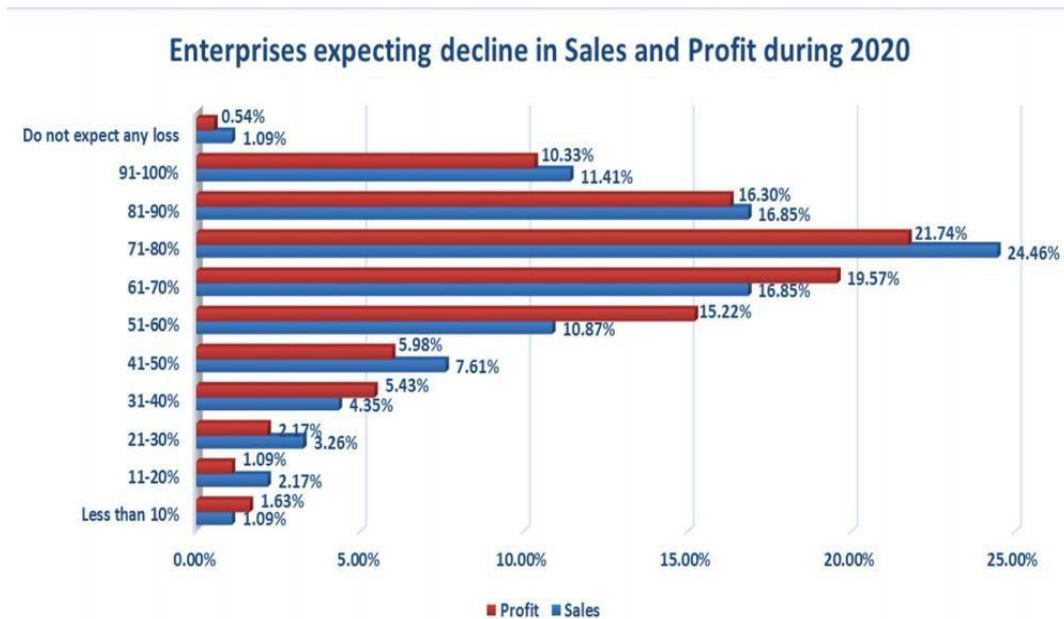
When MSMEs were asked about the issues which they are facing amid of lockdown or COVID- 19, the five top problems were reported. These were financial, sales and profit reduction, disruption in supply chain, and decrease in demand. (Shafi et al., 2020). See figure 5.

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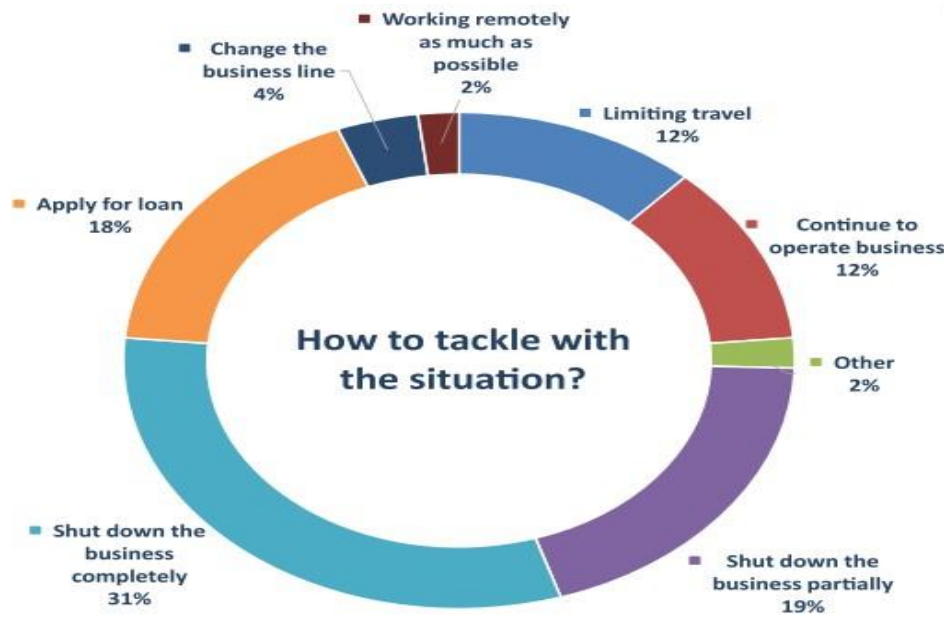
**Figure 5** Various issues and problems faced by MSMEs due to lockdown or COVID-19

Particularly, when it was asked about the decline (expected) in sales and profit during the year, 2020. It was reported that over 60% of decline was found in sales and profit. (Shafi et al., 2020). See figure 6.



**Figure 6** Expecting decline in sales and profit during lockdown or COVID-19

Now organizations are choosing variety of strategies for curbing the business crisis. Many organizations started shutting down their businesses. Therefore, a high ratio was reported in the closure of business. Following are the strategies which have been chosen to cure these crisis and to tackle with the shortage of cashflow. (Shafi et al., 2020). See figure 7 and 8.



**Figure 7** How the current situation is being planned to tackle the current situation?



**Figure 8** How the shortage of cashflows are being planned to tackle the current situation

### 1.6. Telecommuting

In 21<sup>st</sup> century, the work place nature has been completely changed due to advancement in technologies and globalization. Now, new arrangements in work have been emerged. Telecommuting is one of them. Therefore, it is not astonishing and surprising that the workplace notion; work anytime, anywhere or at anyplace have been transformed. (Narayanan et al., 2017). Therefore, telecommuting has always been a great topic for the researchers as well as practitioners. (Siha & Monroe, 2006). Telecommuting is also called working from home, remote work, mobile work, and teleworking is an arrangement of work all the employees often

work at their homes, libraries, coffee shops or any other place. They don't travel, commute or go to the work place. It was started in 1990s and in 1995, it got the boom and was found that there were variety of telecommuters who were appeared with their slogans or mottos of working from home. Then at that time many businesses, different organizations and government took the decision of using telecommuting. Remote work is the present itself, not the future. In the era of 21<sup>st</sup> century, different means of technology are used by the telecommuters such as mobile phones, laptops etc. at their home for telecommuting. It was discovered by the Reuters poll that one out of five telecommute around the world frequently and 10% workers those who work from home on daily basis. In the 2019, it is mentioned in the report of "State of Remote Work" that for the upcoming next five years, workers like to be stayed at their current jobs. There are many advantages of telecommuting; if you are working at your home, there is no need to waste your precious time on commuting and no need of spending several hours to arrive at your office. So, it saves time as well as transportation cost. Another benefit of telecommuting is that you are free to choose your workplace. It could be your home, library or a coffee shop. You can listen to the music, turn on the radio or watch whatever you would like to while working or you could work in silence. It is all dependent on your choice or mood. On more comfort of telecommuting is flexible timing. You don't have fixed timing. You can spend this time with your loved ones, on relaxation or shopping or can polish your skills. There are many benefits of telecommuting for employer as well. Rent, electricity bills, supplies, furniture, equipment, climate control costs are saved and avoided. On the other side of the coin, there are many drawbacks of telecommuting as well. When you work remotely, it is high in chance that you are being distracted and you are feeling isolated. (Хлыповка, 2020).

The word telecommuting can be used with the term "work from home" interchangeably but there are various businesses which cannot be considered as telecommuting such as businesses that are home based and over time work. It can be considered as remote work but there are many others. (Mokhtarian, 1991). The traditional work arrangements are being modified by the virtual work and telecommuting. The term 'telecommuting' is credited by Jack Nilles in 1973 first. Other people referred it as home working, off site workers, virtual working or working at a distance and defined it as working away from the conventional and traditional workplace, from home or any other location, and by using the computer based technology. (Clark et al., n.d.). Many organizations are now aware of the pros of telecommuting. (Rathbone, 1992). Many organizations are considering it. It is now in a trend currently in organizations but every organization is unique. Each company is having different organizational culture, financial ability and philosophies. In addition, there are certain jobs in which we may not telecommute because those jobs have different functions to be performed. So the internal factors and functions of those jobs must be considered by the employers. (D'Arruda, 2001).

Firms who are having thorough plans and policies of telecommuting, take less time (33%) in hiring process than the traditional ones and a high increase in retention of employees. (Barbuto et al., 2020). There are numerous surveys conducted and they show that there is a rapid growth in telecommuting. The BLS (Bureau of Labour Statistics), 21 million people worked at their homes and their job was considered as primary job in 1997. In accordance with the survey Wirthlin Worldwide, telecommuters are called "very committed" irrespective to their firms. (Potter, 2003). A large number of people are utilizing the technology of telecommuting to extend the workday when they reach their homes. People who are involved in this form of work are called, "occasional homeworkers". There are few terms used to describe telecommuting phenomena are virtual office and telework. After the inception of it, it's been a discussed topic and there are many articles have written on it which explore the issues of it. There are limited number of firms who have openly shared their experiences related to telecommuting. The success of telecommuting program depends upon the support of top management, good IT architecture, comprehensive development and training and address the personal and technical

issues on immediate basis. (Siha & Monroe, 2006). The research indicates that telecommuting also has some social pros like reduction in congestion of traffic, reduction in cost of transportation, and decrease in costs of real estate. The issues in HRM of teleworking are summarized by various studies. It has been found in various studies that the support of management is always critical and significant for the success and existence of telecommuting programs. (Gao & Hitt, 2003). There are three issues in the adoption of telecommuting which are the preference, opportunity and practice. (Peters et al., 2004).

Jobs which are related to professional, technical and financial services are like enough to be implemented and performed from home or at home as the collaboration and communication can be done with the customers and workers electronically. On the other side, job which are labour intensive, low skilled and high service is less likely and difficult enough to be done from or at home. (Reuschke & Felstead, 2020). Extensively, the virtual teams are utilized in US, the western Europe and UK. Although, they are also utilizing and emerging in Asia and different parts of the world. (Workman, 2007).

### ***1.6.1. Rules and Policies for Telecommuting***

The rules and policies of telecommuting describe that it is voluntarily. If the employee is busy somewhere and can't work on the fixed time, he or she can stop working anytime but they need to notify their managers. Employers and employees come to an agreement in which they decide the working hours and the number of hours do not change without informing and the approval of the employers. The company provides the required equipment and all the office supplies to their workers and it is the responsibility of them to use those equipments only for work related purpose and protect the assets of company. Moreover, if the data is sensitive then make sure that it is not stored and saved in any kind of local media. In addition, the employer should be adhered to the policies of a company which are confidential in nature. Besides, there is same Worker's Compensation Insurance for the telecommuting and non-telecommuting workers. The employee can inform to the employer in case if any accident or injury occurs. Moreover, while working at homes, the employee is fully responsible for the operating costs such as maintenance, utilities, and home insurance. Additionally, the company is not liable and responsible for any loss or damage of employee property whether it is personal or real. In addition, before the start of telecommuting program, an agreement is signed by the employee which ensures that the rules and policies of the agreement have been read and clearly understood by the employees. (Ye, 2012). Research shows that corporations that allow telecommuting face 25% less ratio in turnover as compared to those organizations who do not allow it. (Barbuto et al., 2020).

### ***1.6.2. Reasons of the invention of Telecommuting***

It was observed by De Klerk & Hoffmann, (2002), that telecommuting is being rapidly adopted by the public and private organizations and the reasons were:

- It facilitates the competition globally.
- It provides the customer support for 24 hours.
- Improvements in technology.
- It increases the flexibility which is also a desire of workers.
- It reduces overhead expenses.
- It expands the labor pool radius.
- Flexibility in staffing.
- Improvement in customer service.
- Improvement in ownership of job and loyalty.

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- It causes less traffic.
- Less consumption of fuel and air pollution
- Telecommuters can work longer hours.
- Telecommuters can work despite of minor sickness.

**1.6.3. Telecommuting in Developing Countries, Why?**

Based on the previous survey and studies of the literature by Nyaanga et al., (2013), the negative and positive effects of telecommuting are summarized below in Table no 2.

**Table 2** Potential Effects of Teleworking or Telecommuting.

Positive Effects	Negative Effects
Cause of low absenteeism	It causes the loss of synergy in corporation
It increases loyalty	It increases the concerns of data security
Positive Effects	Negative Effects
It increases productivity	It causes difficulty in measuring objectives
It increases the belonging feelings with the corporation	It causes difficulty in the financial benefits evaluations
It improves the morale of employees	Difficulty in the management of teleworkers
It increases the employees’ retention and attracts new ones	It increases the isolation feeling
It decreases overcrowding and cost of real estate	It reduces the promotion chances
It increases flexibility of organization	It tends to increases the overwork
Quick response towards the needs of customers	It decreases intra organizational communication
It reduces commute time	
It reduces expenses related to work	
Increase in job performance	
Increase the quality of work	
Increase in job satisfaction	
Increase balance between work life and office life	
Increase self-empowerment	
Increase a sense of autonomy in greater	
Increase in flexible working hours	

**1.7. Job Performance**

Job performance can be defined as the ability of employed worker for meeting or exceeding agreed upon tasks of job with the set of technologies, tools and procedures provided. (K. M. Campbell, 2015).

Job performance refers to how employees perform in an organization to reach the goals. It is the part of human resource management. Job performance contributes to the ratings of supervisors. It is observed by Viswesvaran & Ones, (2000), that performance is considered as the main construct of the psychology of organizations. (Murphy & Cleveland, 1995) ; (J. T. Austin & Villanova, 1992) ; (G. A. Campbell & Foster, 1920) ; (Schmidt & Hunter, 1992). It is in the debate that performance dimension is affected by differences behavior in all individual through motivation or knowledge. Viswesvaran & Ones, (2000), says that there are many training programs have designed for the improvement of job performance. Supervisors evaluate and assess the individuals for the identification of their strengths and weaknesses.

Since decades, educationists and researchers have investigated several aspects and factors of job performance in various disciplines. When the team becomes virtual and start working virtually, the management of team becomes complex correspondingly. It is suggested in

literature that there are four components need to be considered in working virtually; communication, participation of team and coordination, trust, the outcome of work.

**Communication:** There are many challenges which employees face while telecommuting which lead towards conflicts, incompleteness of task and difficulty in building teams. It is documented that collocated teams are two times productive as compared to non-collocated teams. Hence, effective communication plays a vital role in improving job performance or productivity and is considered as a key factor.

**Participation of team and Coordination:** The clarification of goals, planned work, tracked tasks and progress, accountability of results are required in virtual teams for a proper and good coordination.

**Trust:** There are many prior researches have been done and it is concluded that trust is a main factor to build successful teams. If there is a trustworthy and good relationship of employees with the manager and other workers, then it leads to that perception of positivity among employees about their performance. These relationships have a stronger and great influence on the performance of teams.

**The outcome of Work:** The above three factors; communication, participation of team and coordination and trust are the main aspect for the work outcome and the process of team work. (Lu et al., 2006).

Sciences like electronic instrument, technology development and management has led to the awareness in today's employees than the past. A change in the structure of organization has been found and a new era and generation of workers have been created by new technologies. E-HRM and telecommuting in an organization with the usage of effective skills in communication helps in empowering and improving the job performance of its employees. (Kariznoee et al., 2012). As the global transformation is emerging, a tremendous growth has been found in the service industry which has created the need of competent, enthusiastic, knowledgeable, energetic and efficient manpower. In this era of technological development, with the inventions and innovations, the world is now considered as a global village which is making our lives, faster, competent and easier. (Hosain, 2017).

It is found that work from home or teleworking has been claimed for the enhancement of productivity. (Baker et al., 2007). The setup of virtual working has now been adopted by many organizations because it not only improves the performance of employees but also the whole organizational performance. (Zhang, 2016).

To survive and for staying competitive in today's world, effectiveness and efficiency are required. The achievement of any objective of an organization is based ultimately on how much competent the organization is and its members are. The fact is true especially that the organization as well as its members should be competent enough to remain in the market in service and industrial companies because there is more competition and not exception. Hence, the enhancement productivity must be a concern for the managers in any organization. Therefore, the organizations are moving towards telecommuting. Furthermore, it is claimed that there is an increase of 15 to 20 percent productivity in virtual organizations over those organizations who are working traditionally. But the question arises that what type of job suits for the virtual work? Generally, those workers whose job work produces a product on a permanent basis often: documents and information which can easily be electronically transmitted. (J. Austin & Gamier, 1998).

## 1.8. Job Satisfaction

Job satisfaction can be defined as it is the feelings and attitude of a person about his job and employment. (K. M. Campbell, 2015). Job satisfaction refers to how satisfied and content the

employees are with their jobs. The more the people are happier with their work and jobs, the more satisfied they would be. (Ahmed et al., 2014). Job satisfaction is defined as it is an evaluative judgement which is positive and negative of an individual's job and its situation. (Desrosiers, 2001).

According to Rogers et al., (1994), employees in any organization are considered very important. That is why from few decades, many studies and researches have focused on employees as they are the human resource. For organizations, it is very important to know and understand employees' behavior and the factors which influence employees' behavior in a workplace. They claimed that job satisfaction is known as one of the components which is considered very important as they are so much associated to the performance of organization. (Arshad & Masood, 2013). Ali, n.d., defined job satisfaction that it measures the person's attitudes and feelings towards his job. Job satisfaction tells what feelings employees have about their job. Many researchers concluded that job satisfaction is associated to the motivation. (Koys, 2001); (Kreitner, 2007); (Brockner et al., 2001), (Tziner et al., 2008). However, Sahadev & Purani, (2008), found that satisfaction with compensation, HR policies, supervisor's behavior, clarity of task and career growth are the main components of job satisfaction. Moreover it indicated that satisfaction of job is almost the employees' perception which comes in result of their job. (Arshad & Masood, 2013).

According to Westover & Taylor, (2010), there are several factors such as the environmental conditions or the personal problems of employees which affect the satisfaction of job. It can be achieved by giving rewards to employees. Thus, the level of job satisfaction of the employees is determined by the fulfillment of their needs. (Arshad & Masood, 2013).

The success of business is dependent upon how much the employee is satisfied. Therefore, it is a necessary to understand some factors behind the employees' needs and job satisfaction for the better results and output because it helps in the growth of business activities. It is observed that a greater level of job satisfaction is experienced by teleworkers. To find the job satisfaction of telecommuters, BIG FIVE PERSONALITY TRAITS were used. (Mohite & Kulkarni, n.d.).

For the better performance of organization, the job satisfaction of employees is regarded as an essential factor and indicator frequently. In the support of its importance, it is found that it has a direct effect on the job performance and outcomes of business. (Baker et al., 2007).

## 1.9. Work Life Balance

The capability of managing the stability between personal life and work and to remain competitive and dynamic at office while balancing and maintain a healthy a cheerful personal life in spite of facing stress at work place is work life balance. (Kundnani et al, 2014). Work-life balance can be defined as achieving equilibrium (harmony) and satisfaction in both domains of personal and professional lives. It is considered that work and family are two most essential domains in any person's life. It has been observed that both the employee and the employer have understood the importance that there must be harmony between work and anyone's personal life and it is acceptable from both perspectives. But the balance between work and personal life is critical for any employee or a business owner as it is known that there is a strong connection exists between the satisfaction of employee and the balance of work and life. However, it is noted that telecommuters generally experience greater satisfaction, less conflicts in work, and increased job performance if they have control over their schedule of work and location. If telecommuters are provided various options related to work like they can customize their timings and location of work on their own so a positive balance can be created in both outside and inside the corporation. Therefore, it is important for all the business leaders to



understand that the job performance of any individual is affected by flexible work modals. (K. M. Campbell, 2015).

The standard practices in businesses of workplace domestically has working hours which are typically meant to be from 9:00 am to 5:00 pm, Monday to Friday, having some strict boundaries. (Lirio, 2017). But, no one including employees and employers were aware that the lifestyle which these people are living would completely be changed after the COVID-19 outbreak. This outbreak has changed the working style of employees as well as the management. Now, they do not work in typical working hours, from 9 to 5. Since decades, the issues in work and lives of employees have become a debatable topic in work field as well as in organizational psychology because it has become a major challenge for employees to balance their work and life together. (Leka & Alwis, n.d.)

### **1.10. Mental Health**

As, coronavirus is spreading rapidly in several countries of the world, so besides its negative effects on a person, it has triggered the employees that they are unable to work in a physical location. Then what about their mental health? Therefore, anxiety and stress have been found among the employees because they are not allowed to work in an office which is physically existed due to this pandemic. Hence, it is observed that COVID-19 is not only affecting the physical health of people but also mental health is affected by it heavily. Mental health involves major depression and psychological distress. Psychological distress is also regarded as a major indicator of mental health of any individual. It refers to an individual's state of emotions showing the symptoms of anxiety, depression and insomnia. Whereas, depression involves psychiatric disorder in our mood that leads to persistent disorder in interest and mood, persistent feeling of isolation, sadness and negative emotions. This leads towards difficulty in the management of daily life activities and to cope up with the responsibilities. Moreover, if the psychological distress is unidentified, it will lead towards a severe depression and this severe depression leads towards suicide. Both disorders, depression and psychological distress are the outcome of a continuous and an intense stress which have not been managed easily. In addition, the government has imposed lockdown and asked the public to stay in quarantine. Quarantine was imposed to separate those people who were infected by the infectious disease or the virus from rest of the people. Although, it was imposed for the betterment of public, but it also has some negative consequences too. In fact, people who quarantined themselves might be experiencing anger, boredom, and loneliness. It has been pointed out in some studies that quarantine is associated with the poor mental health of people during this pandemic of COVID-19 having high prevalence of mental disorders like depression and psychological stress. And this can be even worse if the duration remains same. (Hamouche, 2020).

## **2. LITERATURE REVIEW.**

### **2.1. COVID-19 and Telecommuting**

The globe was not expecting this pandemic of COVID-19 and it had impacted the social, economic, health issues and many more which the world has never thought of. Now for the employees, working from home has become necessary and this necessity is causing several issues because of bringing the work from conventional office to home. (Irawanto, 2020). This hard time has impacted the livelihood and economy of the world at the worst. Due to this pandemic, the digital transformation concept has been brought into focus. Digital transformation means doing things in different ways like mapping a new and creative business model which requires computer technologies and modern information. COVID-19 has affected the workforce at variety of levels. They have found a drastic change in the work nature, its value, variety, velocity and volume. It is greater than implementing a new and innovative

technology. But a digitalized mindset of workforce adoption is required for it. Hence, the new skills and techniques will be learned by the workforce. (Savić, 2020).

Now the innovation has become essential for the firms and businesses are being forced to change and innovate themselves and due to this outbreak of COVID-19. There is no need of conventional offices but the virtual office is now the requisite for the people around the globe. And this is now a question of survival physically as well as financially. For the prevention of the virus and protection of the workers, all the employers are instructed to discontinue their offices activities and make the employees enable to work remotely by all the governments around the globe. (Savić, 2020). At the beginning state, the government encouraged social distancing and advised organizations to let their employees telecommuting voluntarily. (Zelinsky, 2020).

As the response to the crisis of COVID-19, all the organizations tend to focus on telecommuting and are implementing the telecommuting programs within their organizations, most of which are those firms who have never offered any type of telecommuting program before and never experienced this. Now, in this pandemic, it has been reported that these organizations now will have to perform their duties remotely means working at their homes. (Barbuto et al., 2020). It's been a half year almost that people now have become used to of social distancing and lockdown in Asia. As it has been restricted to gather people and to avoid large gathering by the government, forced the white-collar employees to telecommute. Meanwhile, educational institutes including schools, colleges and universities are closed for the prevention of widespread of COVID. (Putro & Riyanto, n.d.).

The ability of working at homes is unlikely allocated by skills levels, occupation, income and sector intensely shaped by housing markets and welfare policies. (Reuschke & Felstead, 2020). On the resilience of firms, the impact of remote work in this COVID-19 crisis is ambiguous. (Bai et al., 2020).

When it comes to telecommuting, it is HRM which strikes a stability and balance of employees. There are two authors named Wayne Turmel and Kevin Eikenberry of 'Remote Learning Institute' who offered directions of three steps for helping virtual employees and leaders. The first key is management and leadership. As in working virtually, a face-to-face interaction is not possible, the management needs to add different elements for the enrichment of communication. The second key is technology and methods. For management, a choice of right method is necessary of personal communication. The third and the last key is influence and skills. Mediocre results will be generated if the technological use is not proficient. It is a belief by most of the authors that there is another key; organizational context to be discussed. (Đoković, 2016).

## 2.2. Telecommuting and Job Performance

Job performance in regarded as an essential concern for organizations as they are adopting telecommuting for the employees. There are number of studies where it is observed that telecommuting leads to increased job performance and this increase sustains for a longer period of time. (Butler et al., 2007). It is concluded that employees who work remotely are 4% efficient and productive than those who work at offices. The study shows that there is an increase in the productivity and job performance of employees than traditional employees. They also work for 8 hours within a day. They hardly leave early or are late. (Barbuto et al., 2020).

The research indicated that telecommuting leads to improved job performance of employees. It is concluded by the study of Gartner Group that employees' job performance is improved by 10 to 40 percent when then work remotely and reduces absenteeism. The reduction in absenteeism also improves the performance of telecommuters. Another reason of improved performance is not commuting. When employees don't commute, they don't get exhausted and

work more productively than working at conventional office. (Potter, 2003). It is empirically evaluated that telecommuting seems to improve the performance. (Noonan & Glass, 2012).

The job performance per employee increases when the employees work virtually. They are more concentrated and handle projects effectively. Their absenteeism becomes lower because medical and causal leaves get shorter. (Westfall, 1997a).

It is assumed that telecommuting lead towards high job performance and commitment for the improvement of customer service and enhancement of feasibility of organization. (Peters et al., 2004). Telecommuting is considered as a working arrangement that is flexible in nature for the enhancement of well-being and productivity of workers and it was implemented largely. However, as the word 'telecommuting' infers, the ability of working from homes or at homes is related with the high usage of communication and information technologies and hence, it varies across all the sectors substantially. (Reuschke & Felstead, 2020). It is found by Kariznoee et al., 2012, telecommuting has a positive and significant impact on the job performance.

If the organizations do not know and understand that whether the virtual office or telecommuting is liked by the employees or not, whether the employees are getting benefits from telecommuting or not, the organization cannot provide a good working environment to employees for the better performance of employees. (Zhang, 2016). It is observed that telecommuting results in reducing absenteeism. Like, when the weather conditions are worse and when it does not allow a worker to get out of home and go to the office for performing his or her functions, telecommuters continue to perform his duties and complete his work unless there is a distortion of technology. Additionally, in working remotely, the results after conduction the performance evaluations of employees are found to be more reliable and valid than working traditionally because here, the results of evaluation are not based on physical characteristics, appearance, biasness and are more accurate, objective and faster as greater accuracy and fairness are offered to the telecommuters. (J. Austin & Gamier, 1998).

Those industries who were amenable to work home based are concentrated largely among wage deciles which are high that includes the jobs which are related to computer, legal and management. On the other hand, those industries which were not prepared for home based work are mostly at higher risk and are concentrated among wage deciles which are low that includes the jobs which are related to production, personal care and food services. (Avdiu & Nayyar, 2020). Telecommuting is viewed and observed as the 'Work Practice of High Performance' by replacing the conventional and traditional work practices in organizations which emphasize and focuses on the importance and significance of direct supervision. It is viewed that teleworking leads towards the empowerment of employees and this empowerment leads towards the high job performance of employees which replaces the traditional office. (Bleijenbergh et al., 2010).

It is shown in research that the performance of job and productivity is increased in telecommuting. In the beginning, supervisors were dubious and skeptical of telecommuting because they face difficulties in observing the work performance of employees directly. This entails and necessitates a switch in work culture and shifts to 'results oriented culture' from 'face time culture'. It is documented that a result-oriented culture is considered to increase the personnel performance, less absenteeism, and finds an overall significant improvement in organizational effectiveness. It is also revealed that telecommuting is related to improved productivity of workplace and higher ratings of job performance. It has been found that telecommuters are better than traditional workers to relating to stakeholders and customers. Thus, it benefits the businesses and enhances the job performance. Additionally, the study of IBM by using a research design of quasi experimental showed higher evaluation of performance significantly of those employees who work virtually as compared to the other traditional and conventional one. (Hill et al., 2003).

It is indicated by the empirical evidences that employees who have high score in their job performance are more likely to bring their office work at homes and put their personal needs to one side. (Innstrand et al., 2010).

In addition, one of the most benefits of organization is that the improved performance of employees and the quality of work are associated with teleworking or telecommuting and it is cited the most and found in literature. It is suggested that the performance of an employee is directly linked to the reduction and elimination of conventional and traditional commuting which compensates the

capability of employees to work more and enhances the employees' willingness to work long. (Ismail et al., 2012). The literature on telecommuting includes references which are frequent for the increment of job performance due to information technology. (Westfall, 1997).

IBM Canada conducted a survey and concluded that when their employees work from home, they are 50% more productive as compared to when they work at offices. Pakistan is not left behind in this pandemic and also trying to adopt telecommuting and trying to provide employment opportunities to its employees along with flexible working hours. The importance of telecommuting now has been recognized by IT companies and therefore, the job performance of employees is now increasing to some extent. (Ahmed et al., 2014).

A survey was conducted of two hundred employees of telecommuting in California and it was resulted that their job performance was increased by 13.5% whereas, 10% improvement was reported by the evaluators. It has been observed by the Mountain Bell officials that the telecommuters are found to be more productive 35% to 40% and their performance was views more increased than other employees. Moreover, it was cited in the literature by the travelers insurance company after the survey of eighty teleworkers that their productivity is increased by 20%. Then the HR department came at this figure that telecommuting is the source of attracting and retaining employees in the organization. Furthermore, telecommuting is considered as a kind of modified schedule work and it is believed that a modification in work schedule leads towards an increase in the job performance of an individual. In addition, it has been in debate that people who work at homes face fewer distractions as compared to those who work at offices. Nevertheless, it is concluded that employees who choose that they will work form their homes have good habits and they are more resourceful and considered independent. (DuBrin, 1991).

### **2.3. Telecommuting and Job Satisfaction**

Telecommuting is unique that workers are separated from conventional office and work form their homes typically, which is resulted in an improved experience of work which impacts the job satisfaction of them. (Golden, 2006).

It has been found by the one stream of research that employees who telecommute are tend to be more satisfied. Most recently, it has been in debate and argued by the researchers that telecommuting has a significant positive effect on the job satisfaction of employees because employees have an ability that they can satisfy their desires and need primarily and can adjust their work tasks. Furthermore, it is reported that a decrease in stress is found in telecommuters and they are able to fulfil all the responsibilities which enhances the job satisfaction of job. From this, it would be inferred that the more employees telecommute extensively, the more their organizational and personal need will be satisfied which leads to enhanced job satisfaction. (Golden & Veiga, 2005).

It is observed that employees working at their homes are positive in their attitudes and satisfied than other workers. They tend to show high job satisfaction and always recommend their organizations to others. They feel that they are the recognized employees in their organizations. The survey of Telework America National Telework shows and it has been

indicated that more than 557% of the workers who work from home are likely to be more satisfied with their jobs.

(Potter, 2003). It has been documented that workers who perform their duties at their homes lead to high job satisfaction. (Gao & Hitt, 2003). It is viewed and shown in the research that telecommuting increases the job satisfaction and job motivation of workers. (Hill et al., 2003).

Moreover, it is suggested by several studies that telecommuting is a cause of increasing in general job satisfaction of employees. Like, staffing flexibility is provided by telecommuting where all the staff can work at their homes regardless of the weather, traffic etc. it is telecommuting which provides employees an opportunity of flexibility in schedule like they can work whenever they prefer which make them satisfied and keep them away from stress. (Ismail et al., 2012).

The virtual work i.e. telecommuting provides great flexibility and freedom to the employees. Thereby, it is believed that if the level of autonomy and independency are increased and enhanced for the employees, the working will also be enhanced extensively which is directly linked to the job satisfaction of employees. (Golden & Veiga, 2008).

Many practitioners and researchers have concluded that the effect of telecommuting has focused on the satisfaction of job heavily as a result, because it is believed that telecommuting has a significant effect on the satisfaction of job of employees. The main perspective of job satisfaction is the working hours of employees because they are flexible and it has a better contribution to the work adjustments and in return, it leads to the higher level of job satisfaction. The overall literature about the working hours in telecommuting provides proper support to the closure that the flexibility in working hours has generally a positive significant impact the job satisfaction of employees. (Desrosiers, 2001).

It is reported by Bailey & Foley, (1990) that a survey of 3000 participants were conducted and it was asked to them that they have to describe what their impressions are about the advantages and disadvantages of telecommuting, Most of the participants around more than 70 percent responded that telecommuting leads to the high job satisfaction.

The job satisfaction of telecommuters is measured by Stoner et al., (1991) and Pinsonneault & Boisvert, (2001) and the focused were those variables which were related to the satisfaction and productivity through telecommuting as a larger study. A survey was conducted of 262 telecommuters who were from eleven different private and public corporations and quite high job satisfaction was reported by them. It was reported that some of the telecommuters that they typically work for two to three days in a week. There were other teleworkers who reported that they usually work from different locations other than home.

A survey comprehensively was described by Huws et al., (1990) of managers and their telecommuters. A survey was conducted of 119 telecommuters and it was asked to them they have to make rating of their satisfaction level. Overall, the ratings were positive fairly amongst all the telecommuters.

The impact of teleworking on the job satisfaction of teleworkers was examined by Ramsower, (1985) as larger study. Thirty people were interviewed out of which 16 were telecommuting workers and 14 were managers. During this study, it was noted that the experience of the group of teleworkers is dependent on the days per week they spend working at their homes. Lower satisfaction was reported by the workers within the office and higher satisfaction was reported within the home.

A survey was conducted by DuBrin & Barnard, (1993) for investigating the satisfaction of job among the office workers and telecommuters in New York and high job satisfaction was concluded with the good working conditions, flexible working hours, opportunity of scheduling their hours of working by their own and taking care of family.

The effect of telecommuting on the satisfaction of employees and their morale was examined by Hill et al., (1998). 246 workers were involved in the study. Out of which eighty-nine respondents were telecommuters and the rest were office workers. When they were interviewed, it was asked to them that they have to specify some advantages and disadvantages of their personal and work life. All the responses and comments were viewed favorable and they were seemed highly satisfied.

All the improvements in working conditions are regarded and associated by the telecommuting and this association leads towards life and job satisfaction on employees because all the workers are given control over the production tools and their work. Consequently, it makes them highly satisfied. There are other factors which are connected with teleworking and are contributing to the satisfaction of job potentially. They are provided uninterrupted peaceful environment relatively which is a cause of their satisfaction towards their job. (DuBrin, 1991).

Why working at home leads to higher job satisfaction is greatly explained by Oldham et al., (1976). According to them, there are five dimensions which are core can describe any job. The five dimensions are autonomy, feedback, identity of tasks, skill variety and significance of task. And there are three states of critical psychology which are influenced by these five dimensions. If there are high levels of states of critical psychology, these lead to positive result like high motivation and this high motivation significantly leads to high job satisfaction. (DuBrin, 1991).

It has been found that the relationship between teleworking and the satisfaction of job of an individual also depends on the worker type. Those workers who are high dive and work moderately regarded to be more satisfied. (Virick et al., 2010).

Moreover, it is reported that an increase in job satisfaction is an outcome of balanced work, autonomy, balanced family, less distractions, no involvement in office politics, no involvement of office politics, improved management of time which telecommuters experience. (Arrington, 2007)

## **2.4. Telecommuting and Work Life Balance**

An important question arises why a balance in life and work is important? It has been shown in the research that a balance in work and life plays a significant and vital role in an individual's life. (Lee & Sirgy, 2019).

It is concluded that remote working has led to a great extent in the work life balance of employees. Moreover, there is a decrease in family and work conflicts when employees tend to work at their homes. (Barbuto et al., 2020). When an employee works remotely, his/ her interaction with the members of family is increased. He/she spends most of the time together and handles the home activities together. This results in a maintained work life balance of an employee. (Salomon & Salomon, 1984). Telecommuting increases a balance in demands of better work life with family. (Nicklin et al., 2016). A research of Dutch study has revealed that 'time squeezed' of number of households now have increased. Moreover, it is observed that the time of employees has increased to spend with their children. (Peters et al., 2004). In addition, the employers need to be aware that there must be investment of money in technologies; technology and communication and its maintenance so that the employees will be able to work from their homes. (Leonovica & Licite, 2020).

Virtual and traditional offices are different in capacity for creating and crossing boundaries between home and work roles. In conventional offices, workers tend to work on certain time and on certain places which requires psychological efforts. Sometimes, employees have to stay longer in offices to complete the work at the earliest. Generally, the more the working hours, the more unbalance the work balance would be. (Stich, 2020). In telecommuting, the increased flexibility is offered to the employees in their routine schedule because here, it is not required for

the employees to be physically present so employees has a flexibility for employees that they can distribute and manage their time according to their needs such as meetings in school, the appointment of doctor, exercise, child care, picnics, etc. that so many times interfere in a conventional office in the normal operating hours usually. (J. Austin & Gamier, 1998).

It is further concluded and believed that telecommuting has a potential of attracting, commit, and engaging scare and valuable employees and personnel, improving the effectiveness of organization simultaneously and the work life quality of employees. (Bleijenbergh et al., 2010). It is observed that the daily life of an individual is impacted by the interaction which they have between their work and home and this results in a healthy work life balance. In contrast, a conflict occurs in the balance between work life balance of an individual if the demands of one domain and the other domains are incompatible. Today, it is recognized widely that a understanding of home and work interactions should indulge factors of both facilitation and conflicts and these factors should be considered as bidirectional in such that home life can be interacted with work and work life can be interacted with home respectively. (Innstrand et al., 2010). It is also observed that the telecommuting leads to the improved life and work balance of employees and it is cited and found in literature the most. (Ismail et al., 2012).

Telecommuting can be considered as a good option for all the corporations because it provides employees with flexibility for managing their own working hours along with the objective that this flexibility will be resulted as a positive outcome of more satisfaction, less stress, improved productivity because it offers more time to men to spend with family. Moreover, telecommuting is also seen as an improved quality life of employees. (Mann & Holdsworth, 2003). It has been found after the extensive research on telecommuting in US that a good harmony is observed among employees when they work less than 2.5 per week days with a positive effect on relationships with family. (Ahmed et al., 2014). A less work and family conflict is reported in telecommuting. (K.M. Campbell, 2015).

Telecommuting is a mean and medium for reducing work and family conflicts as telecommuters can organize, schedule, reconcile and plan their personal and professional lives. It is notified that teleworking might help in improving the work and life balance of workers as it provides support to the family of workers by allowing them that they can spend more time with their families. The most important facet of life and work balance is the commonness of life and work conflicts that might occur when there is work interference with the family members or family members interference with work. Therefore, for the prevention of family and work life conflicts, clear boundaries should be established between work and family life. A study of Madsen, (2003) was conducted with 221 participants of American firms to examine the telecommuting effect on the work and life conflicts on employees and the results indicated that telecommuters are found to have low level of family conflicts among the employees of telecommuting. Furthermore, how teleworking effects life and work conflicts was examined with the respondents of 1261 workers and it was resulted that the more telecommuters telecommute extensively, the lower their work and life conflicts be. A study of Chung, (2017), analyzed the autonomy of work and work and life balance flexibility and work and life conflict flexibility relationship with 28 European workers and resulted that it seems that telecommuting decreases conflicts and maintains a healthy balance of work and life. (Sarbu, 2018).

## **2.5. Telecommuting and Mental Health**

As it is known that this pandemic has disrupted the businesses to high extent. Offices are closed. No one is able to work at offices. Hence, there is a major role of organizational policies for the safety of their employees. The management id responsible for the protection and safety of its workers. In order to control this COVID-19 risk and its spread, this outbreak has forced the employers to adopt telecommuting to survive in the market and for the growth of economy.

Therefore, many organizations adopted the system of working at homes and allowed their workers to work remotely so that they can run the organizations smoothly. Telecommuting is the best possible solution for this current situation to run the daily operations of company while assuring the safety and health of the workers during this crisis and for securing an income for the employees who quarantined themselves. However, it leads towards positive outcome because employees believe that they are being taken care. Furthermore, this leads employees to work longer hours. (Hamouche, 2020).

It is suggested that working from home benefits the employees in their mental health. They are free from stress which they face while working at offices. Additionally, employees are found to be healthier if they work flexibly remotely. (Barbuto et al., 2020).

It is hypothesized that telecommuting decreases health issues like anxiety and stress because workers do not commute which is highly stressful. Studies show that commuting has adverse effects on health like high blood pressure, frustration tolerance, mood, illness, short term memory, and stability of job. Commuting even has an effect on those who are easy going and relaxed normally. (Handy & Mokhtarian, 1996). The usage of telephone, internet, and other media like WhatsApp, Google meet and classroom, zoom etc. has made remote work stress less, easy and effort less which has a positive effect on human health. (Onyeukwu et al., 2020).

Time is very essential and an important resource that a worker needs for meeting the demands he or she mostly faces. However, it is often made reduced and scarce due to interruptions in both traditional as well as virtual offices. Like, in conventional offices, proximity and accessibility are more and they increase the closeness and likelihood of employees spontaneously. Sometimes, this physical proximity is useful because colleagues can share crucial information with one another but it has negative consequences too because due to this, a valuable time is lost which could be used effectively working online. Workers can be interrupted further in physical locations due to noises in the backgrounds, and many events which create obstacle and hinder their job performance and last, their achievement of goals. Therefore, a virtual place is suitable for a good health of employees. Another factor of supporting a virtual place of work is the workload stress while working in traditional office. In conventional offices, the workload is more excessive when you lose your time with colleagues and interruptions than virtual work place. Moreover, employees get sick because they are given more tasks when they are apparent in offices. (Stich, 2020).

Likewise, those employees who work from home are more empowered as compared to those who work at a physical location because they can make their decision which are good and beneficial for them because telecommuting empowers employees to take decision on their own helps in reducing the time and mental health disorder which is associated with commuting. Specifically, it is predicted that telecommuters enjoy greater health benefits as compared to the other ones because telecommuting reduces health risks. (Henke et al., 2016).

## 2.6. Training

Training can be defined as an action that teaches, develops in oneself or in anyone a skill or behavior particularly. (Gronstedt, 2008). It refers to teach people new things in doing a job for achieving the goals of organization. Training has an ability that it can change people related to their approach, behavior, ability and awareness. It is one of the important tasks of human resource which aims to better and improve the effectiveness and efficiency of organization so that more skilled and knowledgeable workers can be provided and the performance of workers can be improved for their future. (Norfazlina et al., 2016). Training is regarded as an important element and contributor for the success of organization. (Chou, 2001).

It is a continuous attempt and effort that is designed for improving the performance and skills of employees. (Manzoor et al., 2019). Training for the employees who work from home



involves the instructions of how to use technology and a home office. (Baker et al., 2007). Training is regarded as an essential point during and after this outbreak. It helps in educating the employees about the behaviours which are necessary and their important in preventing the spread of virus. Therefore, training also needs the involvement of managers. In this unexpected outbreak, managers and employees are needed to be trained and coached properly on how a virtual team would be managed with considering the telecommuting concept in order to support the members of virtual teams. Thus, proper strategies should be developed and implemented accordingly. These strategies enclose a continuous proper communication with the supervisors, and co-workers about the progress of work during telecommuting. Employees must be trained on how to utilize the technology for facilitating the work and continuous communication while the employees are away from their actual and conventional workplace. (Hamouche, 2020). According to Khalifa & Davison, (2000), it is found that the telecommuters must be given formal training and they should know that how can they use the time in the best way while working at their homes. Therefore, telecommuters should be focused and trained accordingly.

The success of telecommuting depends upon the adequate training. There are two folds in training. The first and foremost one is that training must be given to telecommuters or workers about using technologies which are necessary and required for performing their job tasks from their homes or any other location. Secondly, proper training must be provided to the IT personnel in which they must be told about the technical support and services to the workers wherever and whenever they need it. Furthermore, it is significant that each employee must have an adequate level of knowledge in computer operations and network applications. Moreover, before the commencement of training program, each participant is advised to give a proficiency exam because this information could be used for screening and it can be found that either the worker needs training or not. (Ye, 2012). It is indicated after searching the literature that there must be a emphasize on the training of employees for functioning effectively while working at homes. Typically, such type of training stresses and highlights the need of positive and clear communication for ensuring and assuring the success of telecommuters. The improvement in communication among the workers, among the management team and between workers and management though the continuous training and focusing attention on the special needs of communication of telecommuters tend in resulting improved relations with both peers and supervisors. (Knight & Westbrook, 1999).

An important element of telecommuting is training so that the management can link their employees to one another and to link the corporation to the personnel and information network worldwide. (Snizek, 1995). The employer of telecommuting is also responsible for providing safety guidelines of home. Therefore, it is a responsibility of employees to must participate in the training and cling to their safety guidelines. (Childre & Healy, 2000). Organizations are now adopting various virtual program as a part of their training. (K. M. Campbell, 2015).

## **2.7. Training and Job Performance**

When employees are given proper training, they become professionally trained. Thus, employees who are properly trained, can share their knowledge, skills and can use their creative minds easily for their better job performance. (Manzoor et al., 2019). Furthermore, Nassazi, (2013) examined the impact of training on the performance of employees in Uganda with 120 respondents and the result indicated that training is beneficial for employees and it has a significant impact on the performance.

The impact of training on performance was explored by Githinji, (2014) in Somalia with 144 employees and it was found that the work engagement and job performance of an employee is improved by training. Clark et al., have found that when telecommuters are provided strong training, there will be greater improvement in their job performance. Manzoor et al., (2019)

concluded that training has a significant moderating effect on the job performance of employees.

It has been concluded that training the employees moderates the relationship with job performance to survive in the market globally. (Kariznoee et al., 2012) and (Norfazlina et al., 2016).

## **2.8. Training and Job Satisfaction**

Training is found rare for telecommuters and it is sparse. In addition, training is an important factor and moderates the relationship with the job satisfaction of employees. (Baker et al., 2006). In Pakistan, it is observed by the researchers that employees are made aware that they are the most valuable asset of the organization when they are given training. Hence, it is necessary for organizations understand the need of training of staff because the job satisfaction of employees increases with proper training. (Githinji, 2014). It is also noted that those employees are considered more gratified while teleworking who obtain training than those who do not participate. Moreover, it is argued that training moderates the relationship between telework and job satisfaction because it helps in reducing the frustration, anxiety and depression of employees which is brought to them and makes them satisfied by their job. (Ocen et al., 2017).

Training of employees has a mediation effect while they work from home with the job satisfaction is such way that the skills, awareness and abilities of employees are enhanced by training and this factors lead to the increased satisfaction of employees while working remotely because these skills are required to them for their existing job as it also helps in the development of career of employees. (Ashar et al., 2013) and (Hafeez & Akbar, 2015).

## **2.10. Theoretical Framework**

### ***2.10.1. Job Characteristics Theory***

This theory is originated by Greg R. Oldham and J in 1982. The job characteristics theory influences and effects variety of job tasks. There are some benefits of telecommuting described by this theory. It is proposed that more work motivation, job satisfaction, high job performance, improved work life balance and inner satisfaction are experienced by the employees of telecommuting. (O'brien, 1982).

### ***2.10.2. Sociotechnical Systems Theory***

This theory was developed in 1985 by Enid Mumford. The sociotechnical systems theory examines and inspects the relationship between factors related to technology and people. It explains that the job satisfaction of an employee is enhanced and the job performance of employees is increased when the work or task is designed in such way. The theory is applied significantly on telework. (Appelbaum, 1997).

### ***2.10.3. Adaptive Structural Theory***

This theory is developed in 1989 by Anthony Giddens. As the technology is advancing, several variations are found in organizations. These variations are studied by this theory. It says that the traditional work places are altered by teleworking like diverting to e-commination from face to face interactions. (Şafak, 1989).

### ***2.10.4. Motivator-Hygiene Theory***

Motivator-Hygiene theory is proposed in 1959 by Frederick Herzberg. This theory differentiated between motivators and hygienes. Motivating factors are motivators and dissatisfying factors are hygienes. This theory supports teleworking in accordance with the

hygiene factors such as work conditions and explains that flexibility in work are had to teleworkers and thus, the working conditions are improved when the employees work from their homes. (Whitsett & Winslow, 1967).

**2.10.5. Social Exchange Theory**

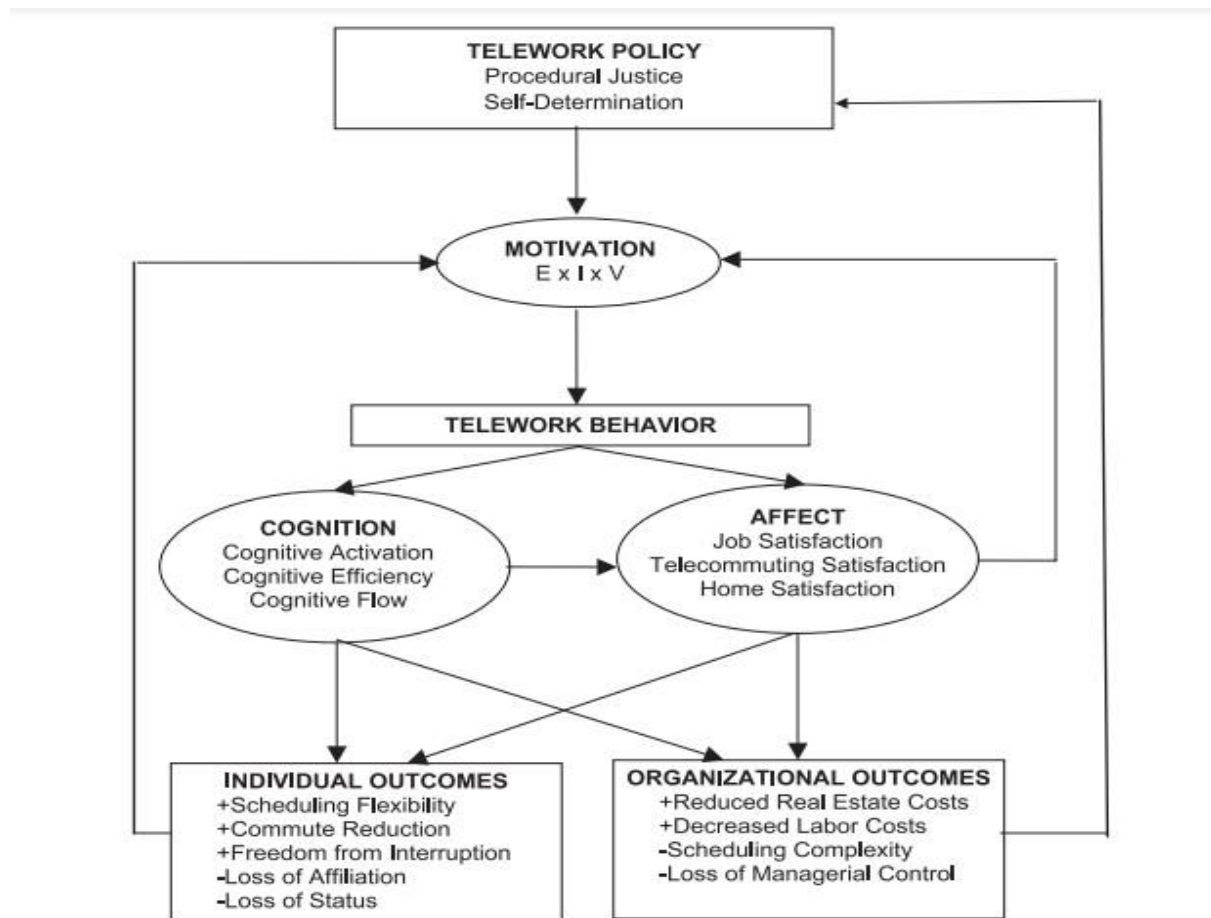
The theory is originated in 1958 by George Homans. The social exchange theory has been used frequently in the teleworking context. It explains the relationship between telecommuting, job satisfaction and productivity. Moreover, telecommuting is regarded as discretionary benefits for employees and helps them in maintaining and balancing their life and work and thus there is a high chance that they would stay in the organizations for long time. (Emerson, 1976).

**2.10.6. Neo-institutional Model**

The theory is proposed by Daniel et al in 2001. It helps in explaining that why telecommuting is adopted by organizations. The theory suggests that there are various embedded networks of organizations which influence the adoption of teleworking. It was observed by Green, (2014) that telecommuting will be adopted by organizations soon if it is found that all the organization goals are being met and resources are being used efficiently. A series of proposition were proposed by him that predicts about the adoption of telework. The one of the propositions was:

*The early adoption of telecommuting practices will be encouraged if a threat of natural disaster is found. (Alvesson & Spicer, 2019)*

**2.10.7. Telework Behavior Model**



**Figure 9**

The model is proposed by Hunton & Harmon, (2004). It addresses the motivation of people in adopting telecommuting. The model allows employees to make choices on their own in accordance with the policy of telecommuting.

### 2.10.8. System Theory

The system is proposed in 1940s by Ludwig von Bertalanffy. This theory is discussed widely by the researchers in the literature and has been used occasionally in research of teleworking. In this framework, the employees are considered as a productive and effective system and it believes that there are various factors such as interference of family in work and the work interference in family affect this effective system and its result would be the reduced and low performance of employees. (Von Bertalanffy, 1956) and (Madsen, 2003b).

### 2.10.9. Work-Family Border Theory

The theory is originated in 2000 by Clark, S. This theory is one of the most discussed and acceptable frames of theories. The theory explains how the people navigate their life and work domains and manage them for striking a balance between them. It is argued in this theory that the connection between family and work system primarily is human but not emotional. This frame is an attempt for explaining the interaction which is complex between an individual's work and family lives so that a framework to attain a balance can be given. (Leung & Zhang, 2017) and (C.S. Campbell, 2000).

### 2.11. Conceptual Framework

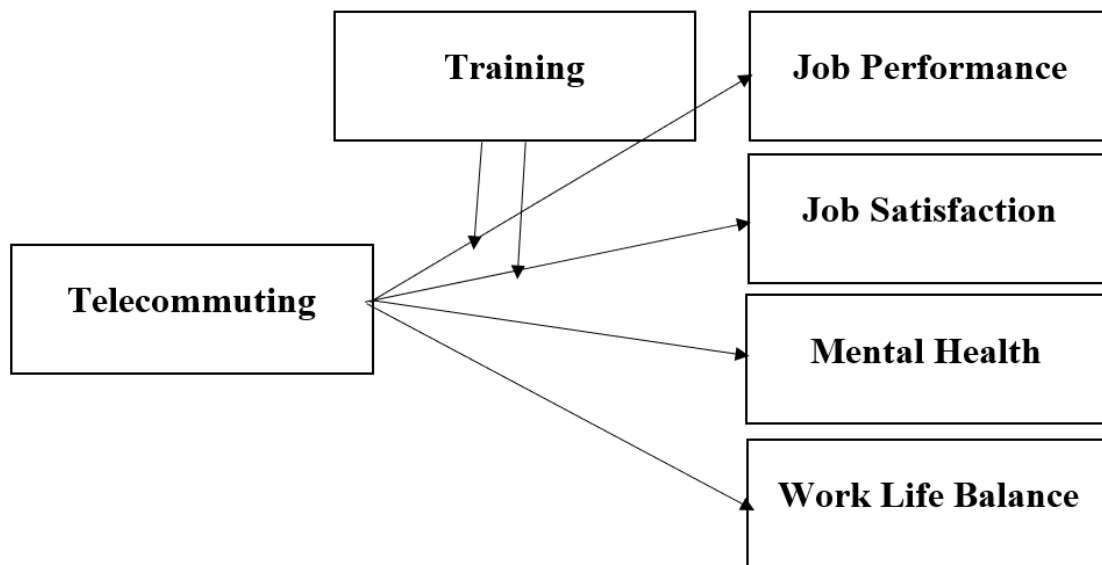


Figure 10

### 2.12. Hypotheses Development

H<sub>1</sub>: There is a positive significant effect of telecommuting on job performance of employees in COVID-19.

H<sub>2</sub>: There is a positive significant effect of telecommuting on job satisfaction of employees in COVID-19.

H<sub>3</sub>: There is a positive significant effect of telecommuting on work life balance of employees in COVID-19.

H4: There is a positive significant effect of telecommuting on mental health of employees in COVID-19.

H5: Training moderates the relationship between telecommuting and job performance in COVID-19.

H6: Training moderates the relationship between telecommuting and job satisfaction in COVID-19.

### **3. METHODOLOGY**

#### **3.1. Introduction**

The study is to examine the impact of telecommuting in COVID-19 on employees. The research is conducted to inspect how the pandemic of COVID-19 has affected the organizations and how they adopted the system of telecommuting to operate their business effectively. The research is investigating the impact of telecommuting on the job performance, job satisfaction, work life balance and mental health of employees in COVID-19 because due to the sudden pandemic, the business operations of many organizations have been affected.

#### **3.2. Research Design**

The method of study is quantitative in nature. The reason of choosing this method is that the attitudes, behaviors and opinions and variables will be quantified so that the facts of data can be articulated. In addition, the study is cross sectional. Therefore, statistical tools are used for the derivation of results.

#### **3.3. Population**

In this study, the target population is general and are from all those organizations who have adopted telecommuting system and allowed their employees to work from home. The employees are evaluated through the instrument having one independent and four dependent variables along with two moderators. Respondents are told that the research we are doing is for academic purpose and were asked to fill the questionnaire anonymously.

#### **3.4. Sample Size and Sampling Technique**

In sampling, non-probability sampling is used. The population is unknown that is why this technique is being used as non-probability sampling technique. Under this method, convenience sampling method is used. The sample is the employees from different organizations who are working remotely in COVID-19. We will use a structured questionnaire for collecting the information via web designed.

#### **3.5. Variables**

There is one independent variable that is telecommuting in this study, four dependent variables that are job performance, job satisfaction, work-life balance and mental health and the moderator that is training.

#### **3.6. Scale and Measure**

Questionnaire is used as a tool to collect primary data for the research. The data collection through questionnaire helps the researchers in the quantitative part of the research. The questionnaire is adapted. The likert scale will be used for the collection of data. The data will be analyzed through SPSS and Smart PLS. The questionnaire which is used in this study is comprised of seven sections. First section is comprised of demographical information of the respondents which is based on four questions i.e. age, gender, qualification and current job title

of employee. Second section is based on 1<sup>st</sup> construct, telecommuting which is divided into four items. The third section is comprised of 2<sup>nd</sup> construct, job performance which is divided into four items. The fourth section is based on 3<sup>rd</sup> construct, job satisfaction which is divided into four items. The fifth section is comprised of 4<sup>th</sup> construct, work life balance which is divided into four items. The sixth section is based on 5<sup>th</sup> construct, mental health which is divided into eight items. The seven section is comprised of 6<sup>th</sup> construct, training which is divided into seven items. The questionnaire is based on thirty one items. In this study, independent variable, telecommuting is measured through categorical and likert scale. The first three items are measured through categorical scale and the rest four items through likert scale starting from 1 (Terrible) to 5 (Doing Great). Likewise, the dependent variables, job performance and job satisfaction are measured through likert scale starting from 1 (Strongly Disagree) to 7 (Strongly Agree). Another dependent variable, work life balance is measured through likert scale. The first item scaling starts from 1 (Yes) to 5 (Never) and the rest four items scaling starts from 1 (Yes, Certainly) to 6 (No, not at all). Similarly, the dependent variable, mental health is measure through likert scale starting form 1 (All the time) to 5 (Not at all). Lastly, the moderator, training is measured through likert scale starting 1 (Strongly Disagree) to 5 (Strongly Agree).

### 3.7. Reliability of Instrument

The instrument is significantly reliable. (Bulut & Culha, 2010), (Pejtersen et al., 2010), and (Bélanger, 1999).

## 4. DATA ANALYSIS

After the coding of data, a preliminary test is conducted for the checking of normality, validity of data and reliability. SPSS and SmartPLS are used as data analysis tools.

### 4.1. Descriptive Analysis

On the demographics, descriptive analysis is conducted for helping in comparing the limitations and results. The average mean, standard deviation, skewness and kurtosis are calculated:

**Table 3** Descriptive analysis

	N	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Telecommuting	303	13.32	4.252	-.467	.140	-.535	.279
Job Performance	303	19.37	6.659	-.841	.140	-.629	.279
Job Satisfaction	303	19.83	6.673	-.844	.140	-.653	.279
Work Life Balance	303	13.37	4.486	-.237	.140	-.942	.279
Mental Health	303	27.41	7.410	-.219	.140	-.978	.279
Training	303	24.43	6.473	-.475	.140	-.597	.279
Valid N	303						

In table 1, average mean values of these variables: Telecommuting, Job Performance, Job Satisfaction, Work Life Balance, Mental Health, and Training are 13.32, 19.37, 19.83, 13.37, 27.41 and 24.43 respectively which shows that all the variables are observed correctly. All the statements were mentioned correctly and all the employees responded accordingly about agreeing and disagreeing. In the above table, the standard deviations are good which depicts that the variables are understood easily and clearly by involving the instrument and statements. The negative values of skewness depict that the data is left skewed means that the tail is relatively long. The negative kurtosis shows flatter distribution than a symmetrical and the

positive kurtosis depicts that the distribution is heavier than the normal one having the same mean and SD.

### 4.2. Reliability

We use Cronbach alpha for testing the reliability of all the scales and measures which are used in this study. The reliability of each variable is defined in the table:

**Table 4** Reliability coefficient Cronbach Alpha and Composite Reliability

Variables	Total Items	Cronbach Alpha	Composite Reliability
Telecommuting	4	0.954	0.967
Job Performance	4	0.966	0.976
Job Satisfaction	4	0.958	0.970
Work Life Balance	4	0.883	0.920
Mental Health	8	0.959	0.966
Training	7	0.934	0.948

The Cronbach Alpha of telecommuting with 4 items in 0.954 which indicates that it is very good and has relevance in all items. The Cronbach Alpha of job performance with 4 items is 0.966 indicates the highest relevance in all items. The Cronbach Alpha of job satisfaction with 4 items is 0.958 which shows the higher relevancy. The Cronbach Alpha of work life balance with 4 items is 0.883 which depicts good relevance. The Cronbach Alpha of mental health with 8 items is 0.959 which indicates that it is very good and has relevance in items. The Cronbach Alpha of training with 7 items is 0.934 depicts significant relevance in items.

The Composite Reliability of telecommuting is 0.967 which is quite significant. The Composite Reliability of job performance is 0.976 which is the most significantly good and indicates the highest relevance in all items. The Composite Reliability of job satisfaction is 0.970 which depicts good relevancy. The Composite Reliability of work life balance is 0.920 which is good and has relevance. The Composite Reliability of mental health is 0.966 which shows higher relevancy. The Composite Reliability of training is 0.948 depicts significant relevance in items.

### 4.3. Correlation Analysis

Correlation analysis is a measurement tool which is used to check the correlation between variables. The more the relationship means that it has a strong connection. The correlation value between 1 or -1 shows that it has a perfect relationship either positive or negative. But if the value is zero means it is indicating that there is no relationship. The analysis of correlation is shown in the Table 3 mentioned below.

**Table 5** Bivariate Correlation among all variables

	Telecommuting	Job Performance	Job Satisfaction	Work Life Balance	Mental Health	Training
Telecommuting	1					
Job Performance	.802**	1				
Job Satisfaction	.818**	.874**	1			
Work Life Balance	.692**	.631**	.668**	1		
Mental Health	.679**	.616**	.672**	.837**	1	
Training	.750**	.790**	.830**	.669**	.664**	1

The Impact of Telecommuting on Job Performance, Job Satisfaction, Work Life Balance, and Mental Health of Employees in Pakistan in COVID-19: Analyzing the Moderating Effect of Training

The correlation analysis depicts that telecommuting is significantly and highly correlated to job performance, ( $r = 0.802, p < 0.01$ ), job satisfaction, ( $r = 0.818, p < 0.01$ ), work life balance, ( $r = 0.692, p < 0.01$ ), mental health, ( $r = 0.679, p < 0.01$ ) and training ( $r = 0.750, p < 0.01$ ). In contrast, job performance is significantly correlated to job satisfaction, ( $r = 0.874, p < 0.01$ ), work life balance, ( $r = 0.631, p < 0.01$ ), mental health, ( $r = 0.616, p < 0.01$ ), and training, ( $r = 0.790, p < 0.01$ ). Likewise, job satisfaction is greatly correlated to work life balance, ( $r = 0.668, p < 0.01$ ), mental health, ( $r = 0.672, p < 0.01$ ), and training, ( $r = 0.830, p < 0.01$ ). Conversely, work life balance is highly correlated to mental health, ( $r = 0.837, p < 0.01$ ), and training, ( $r = 0.669, p < 0.01$ ). Similarly, there is a significant correlation of mental health to training, ( $r = 0.664, p < 0.01$ ).

#### 4.4. Discriminant Validity

Table 4 shows the explanation of the variance square that there is a line (diagonal) which is greater than each pair of correlation squares and it confirms that the data represents the discriminant validity requirements.

**Table 6** Discriminant Validity

	Job Performance	Job Satisfaction	Mental Health	Telecommuting	Training	Work Life Balance
Job Performance	0.953					
Job Satisfaction	0.875	0.943				
Mental Health	0.616	0.671	0.822			
Telecommuting	0.802	0.818	0.680	0.938		
Training	0.799	0.838	0.669	0.757	0.854	
Work Life Balance	0.632	0.668	0.838	0.693	0.677	0.862

#### 4.5. Hypothesis Testing

**Table 7** Hypothesis Testing Before Moderation Effect

Path	Coefficient	T-Value	P-Value	R <sup>2</sup>	Decision
Telecommuting-> Job Performance	0.803	23.3	0.000	0.644	Supported
Telecommuting-> Job Satisfaction	0.819	37.5	0.000	0.670	Supported
Telecommuting-> Mental Health	0.680	18.4	0.000	0.463	Supported
Telecommuting-> Work Life Balance	0.693	20.9	0.000	0.480	Supported

**Table 8** Hypothesis Testing Before Moderation Effect

Path	Coefficient	T-Value	P-Value	Decision
Telecommuting-> Job Performance	0.442	7.864	0.000	Supported
Telecommuting-> Job Satisfaction	0.403	7.891	0.000	Supported
Telecommuting-> Mental Health	0.680	17.814	0.000	Supported
Telecommuting-> Work Life Balance	0.693	20.933	0.000	Supported
Moderating Effect-> Job Performance	-0.114	2.712	0.000	Not Supported
Moderating Effect-> Job Satisfaction	-0.162	5.848	0.007	Not Supported

### 5. DISCUSSION AND CONCLUSION

The geography of workplace has fundamentally been changed due to the crisis of COVID-19 and forced a population of a large proportional to work at home during this great lockdown. As the response to the crisis of COVID-19, all the organizations tend to focus on telecommuting



and are implementing the telecommuting programs within their organizations, most of which are those firms who have never offered any type of telecommuting program before and never experienced this. Now, in this pandemic, it has been reported that these organizations now will have to perform their duties remotely means working at their homes. (Barbuto et al., 2020).

There were many researches have been done on telecommuting with other variables but the impact of telecommuting in the outbreak of COVID-19 is not yet identified and examined. The study examined the impact of telecommuting on job performance, job satisfaction, mental health, and work life balance of employees in COVID-19 along with the moderating effect of training. It has shown that telecommuting has an effect on all the dependent variables either positive or negative which is mentioned in all the hypotheses. The results show that telecommuting leads to high job performance and job satisfaction of employees and there is a positive significant relationship of telecommuting with the work life balance and mental health of employees. When employee work remotely, they have a balanced work and life and their mental health becomes significant and positive. Conversely, there is no moderating effect of training for increasing the job performance and job satisfaction while telecommuting in COVID-19.

## 6. LIMITATIONS

In the future, the data should be collected by using large sample sizes and from different populations for replication. Second, longitudinal or experimental methods can be used in future research. Third, only a few items were considered and examined. Researchers can look into other outcomes like motivation, job efforts, etc. And at last, it will be worth examining the variables which are mediators. Fourth, all the variables including dependent and independent in this study are psychological and these can be defined and interpreted in various ways. Moreover, the moderating effect was examined on two variables; job performance and job satisfaction. The moderation can be checked on the other two variables; mental health and work life balance. Finally, for data, questionnaires were used for collection. Here, observations and interviews can be considered better and accurate. For the calculation, the survey questionnaire may not only be reliable and correct totally.

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