

Czech University of Life Sciences Prague

Faculty of Economics and Management

Department of Management



Diploma Thesis

**Impact of Work From Home on Employee Performance
during Covid Pandemic in the Indian IT sector**

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DIPLOMA THESIS ASSIGNMENT

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Economics and Management

Thesis title

Impact of work from home culture during covid pandemic period in IT sector in India

Objectives of thesis

The key objective of thesis is to assess the impact of "work from home" on the performance of employees during COVID-19 Pandemic period in India. This research will determine how the particular elements of work from home (Work-life stability, and emotional well-being) are influenced and correspond with the job performance for IT industry employees working from home during COVID-19 pandemic.

It is expected that, from the results of this research, the conclusion will identify whether the work from home culture will be appropriate for the future of the IT sector in India.

Methodology

This thesis contains two main parts: Theoretical and Practical.

The theoretical part contains a thorough review of recent academic and other reliable literature.

The practical part will be based on the (primary) data collection method, in order to find answers to three research questions:

- a) What variables are substituted for social connections with co-workers to give a better work-life stability and maintain employee commitment?
- b) How has working from home during COVID-19 pandemic affected the mental health of IT employees?
- c) What effect has working from home during COVID-19 pandemic had on workplace performance?

Primary data will be collected from employees and representatives of their companies.

The data will be analysed using appropriate techniques, leading to the conclusions ie: the answers to the research questions.

The proposed extent of the thesis

approx 60-80 pages

Keywords

IT companies, employees' mental health, workplace performance,

Recommended information sources

ANISMAN, H. *Stress and your health : from vulnerability to resilience*. Chichester, West Sussex: Wiley Blackwell, 2015. ISBN 978-1-118-85028-2.

ARMSTRONG, M. *Armstrong's essential human resource management practice : a guide to people management*. London: Kogan Page, 2010. ISBN 978-0-7494-5989-5.

KURTZBERG, T R. *Virtual teams : mastering communication and collaboration in the digital age*. Santa Barbara: Praeger, 2014. ISBN 978-1-4408-2837-9.

MULLINS, L J. *Management and organisational behaviour*. Harlow: Financial Time Prentice Hall, 2010. ISBN 9780273728610.

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Declaration

I declare that I have worked on my diploma thesis titled "**Impact of Work From Home on Employee Performance during Covid Pandemic in the Indian IT sector**" by myself, and I have used only the sources mentioned at the end of the thesis. As the author of the diploma thesis, I declare that it does not break the copyrights of any person.

In Prague on 26.03.2023

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Impact of Work From Home on Employee Performance during Covid Pandemic in the Indian IT sector

Abstract

The thesis is about determining whether there is an impact of work from home culture on performance of employees during covid-19 pandemic. It also focuses on assessing which factors affects the most while working from home. It assesses the advantages and disadvantages of working from home. The analysis is conducted by interviewing four hundred Indian respondents who are IT professionals, and all the respondents are selected randomly. The data collected from survey is analysed using SPSS software. There is various analysis are performed such as one variable analysis, descriptive statistics analysis and hypothesis are formed which are analysed through Anova, Chi-square and Correlation test. The results indicate that work from home significantly affects the performance of employees. Emotional as well as physical well-being of employees are affected the most as compared to other factors. Employees are facing major issue in terms of communication and collaboration with other employees. The respondents also felt mentally ill because they were isolated at home due to lockdown which led to feeling of loneliness. Thus, the company should make sure that it reduces the stress and feeling of loneliness by organizing various activities virtually and by reducing the workload of employees during covid-19 crisis. The company should make an implement a hybrid culture at the workplace. In addition to this, the company should conduct webinars and seminars for its staff members about how to improve their emotional as well as mental well-being.

Keywords: Work From Home, Employee Performance, Covid Pandemic, Indian IT Sector, Remote Jobs, Work Culture

Vliv práce z domova na výkonnost zaměstnanců během pandemie Covid v Indickém IT sektoru

Abstrakt

Práce se zabývá zjištěním, zda má kultura práce z domova vliv na výkonnost zaměstnanců během pandemie covid-19. Zaměřuje se také na posouzení, které faktory nejvíce ovlivňují práci z domova. Posuzuje výhody a nevýhody práce z domova. Analýza je prováděna na základě rozhovorů se čtyřmi sty indickými respondenty, kteří jsou IT profesionály, a všichni respondenti jsou vybráni náhodně. Data získaná z průzkumu jsou analyzována pomocí softwaru SPSS. Provádí se různé analýzy, například analýza jedné proměnné, analýza popisné statistiky a vytvářejí se hypotézy, které se analyzují pomocí Anova, chí-kvadrát a korelačního testu. Výsledky ukazují, že práce z domova významně ovlivňuje výkonnost zaměstnanců. V porovnání s ostatními faktory je nejvíce ovlivněna emocionální i fyzická pohoda zaměstnanců. Zaměstnanci se potýkají s velkým problémem, pokud jde o komunikaci a spolupráci s ostatními zaměstnanci. Respondenti se také cítili psychicky špatně, protože byli doma izolováni kvůli výluce, což vedlo k pocitu osamělosti. Společnost by tedy měla zajistit, aby snížila stres a pocit osamělosti tím, že bude organizovat různé aktivity virtuálně a sníží pracovní zátěž zaměstnanců v době krize covid-19. Společnost by měla zavést hybridní kulturu na pracovišti. Kromě toho by společnost měla pro své zaměstnance pořádat webináře a semináře o tom, jak zlepšit jejich emocionální i duševní pohodu.

Klíčová slova: Práce z domova, výkonnost zaměstnanců, pandemie Covid, Indický IT sektor, práce na dálku, kultura práce

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1. Introduction

Around the world, 213 countries and territories have been impacted by COVID-19. The ongoing COVID-19 pandemic is drastically altering whether and how people choose to work. Because of shelter-in-place orders or to prevent the sickness, many people have remained in their houses (Brynjolfsson et al., 2020). People are losing their jobs across the world as many firms close. Following a state-wide lockdown to stop the spread of COVID-19, the CMIE weekly report states that in April 2020, 27 million young people in the age range of 20 to 30 lost their jobs (Sharma, 2020).

Fewer employees will be working from offices in businesses around the world in the future. Work from home (WFH) is working incredibly well, according to Muruges, chief executive of business process management player WNS. There will be a substantial impact overall with the kind of efficiencies we have begun providing on WFH (Financial Express, 2020).

According to Deorah (2020), this is one of the biggest transformations the world has ever seen. It begs the question, "Is WFH the new normal?" Is WFH preferable to working at a specific location of employment? Is it a long-term solution or just a stopgap measure? Why are businesses reluctant to open now? Since many businesses in India and around the world have been using the WFH concept, working from home is nothing new.

Many businesses, including OYO and Zomato, are considering providing permanent WFH settings for their staff (Dash, 2020). Does working from home increase productivity, for instance? These and other crucial concerns are raised by the study. Productivity also involves making more mistakes and wasting resources on things that are not necessary (Paulise, 2020).

Women who work from home can manage their job and family responsibilities more effectively, but at the cost of greater perceived work-family conflict. Contrarily, males bring work time into the home (Van der Lippe & Lippe'nyi, 2018). Flexible work arrangements may widen rather than narrow the gender wage gap (Chung & Van der Horst, 2018).

The world of today is undergoing a massive transformation that will drastically alter career and life patterns. The coronavirus (COVID-19) pandemic has influenced how crucial it is to make changes and keep a healthy balance in life. Most businesses use the "work from

home" strategy, which is now popular, to allow employees to conduct their business without interfering with corporate goals.

As a result, many people abruptly began working from home without much planning. Because they believed that tasks could not be accomplished, many businesses in the past did not permit flexible working. Due to the Covid-19 epidemic and the development of information technology, the value placed on a workplace's physical location has been gradually declining.

The rise in the number of people working from home has also increased the employee retention rate. People used to think that the business sectors were the only ones that utilized the work from home approach in the past. The pandemic crisis has altered the general public's viewpoint on working from home and forced individuals in a variety of industries to work remotely. To stop the virus from spreading, the Indian government, led by Prime Minister Narendra Modi, issued a state-wide lockdown order on March 24, 2020.

Since that time, several laws and enforcement measures have been in place throughout the nation to protect the public. One of the biggest effects on the Indian information technology (IT) industry is the acceptance of a flexible workforce model, which helps to maintain the productivity levels among the employees even in this pandemic situation. Since the lockdown began, 90% of the Indian workforce has moved to work from home (Sridevi, 2021).

The IT sector, which pioneered the idea of working from home, was one of the first to reboot as numerous industries and sectors battled to keep up. According to Stanford Professor Nicholas Bloom, "work from home" programmes have a 13% boost in productivity and even lower attrition rates. The only flexible approach a business can take in the present day, as well as given the existing circumstances, is the "work from home" approach. Both good and negative results from this model are possible.

Positive effects include a shorter commute time to work, cost savings, and day-care (if the employee is a parent). While the drawbacks include a lack of effective co-worker communication, health problems, and a lack of effective face-to-face support. Most IT businesses allow workers to work from home as part of their leave policies to boost productivity (Sridevi, 2021). This study tries to comprehend the effects of working from home amid the Covid pandemic in India's IT sector.

2. Objectives and Methodology

2.1 Objectives

The primary objective of the thesis is to assess the impact of work from home on performance of employees during covid-19. The secondary objectives of thesis are as follows:

- ✓ To identify the factors affecting employees working from home during Covid-19.
- ✓ To find out the problems faced by employees during work from home.
- ✓ To analyse the impact of Covid-19 on employees' performance while working from home.
- ✓ To determine how the elements of work from home such as work life stability and emotional well-being are influenced and correspond with the job performance.

2.2 Methodology

This thesis focuses on examining the effect of work from home on employee performance at the time of Covid-19 pandemic. Firstly, the thesis provides theoretical knowledge regarding the topic where the information is collected from secondary sources like journals, periodicals, websites, magazines, articles, and online publications. After that, the thesis consists practical part. In practical part, the primary data is analysed using different statistical tools. The primary data is analysed using different statistical tools in the valuable element. The preliminary information is collected by conducting survey with four hundred respondents from the IT sector of India with the help of a structured questionnaire. The statistical tools used for analysis are one variable analysis & hypothesis testing. The hypothesis testing uses Pearson's correlation, chi-square and Anova. Further, the findings are drawn based on estimation. Lastly, the conclusion is formed, which provides a snapshot of the whole thesis. The sample size for finite population has been calculated, taking into consideration the values of Confidence Interval = 95% & Standard Error = 5%. Thus, author has decided to go for four hundred Respondents.

3. Literature Review

3.1 Background Study

The concept of working from home is known by a variety of names, including remote working, teleworking, and telecommuting. Working from home, as defined by the Commission, is when an individual spends all or a portion of their regular working hours in their primary house. This definition was modified from Allen et al. (2015) and the International Labor Organization. By doing this, individuals cut down on their commute time and may be able to work more flexible hours.

Before COVID-19 broke out, many businesses and organizations were already using WFH, giving their employees freedom. WFH is not abnormal in any way (Deorah, 2020). Working remotely is defined as a procedure that is made possible by technology that cuts down on travel time and increases productivity. Flexibility, independence, and the convenience of working in your own place are just a few of the benefits that WFH offers to its employees (O'Hara, 2014).

The manner that organizations previously viewed the WFH, and its efficacy has changed as a result of the COVID-19 pandemic. Google will probably continue to permit staff to work remotely and adjust some of their reopening plans as COVID-19 continues to increase across the USA, particularly in Google's home state of California (Moreno, 2020). Even Twitter just revealed that it intends to have its staff work remotely on a permanent basis, joining companies like Facebook, Google, Microsoft, and Amazon in extending its WFH policy (Ghosh, 2020).

Permanent remote work is done by employees (Ghosh, 2020). According to the government's directive, the Indian IT sector required employees to "Work from Home" (WFH) during the lockdown. As a result, 90% of workers did their jobs from home, with 65% doing so from homes in big cities and the other 35% from homes in small villages (Mitta, 2020).

Working from home enables businesses to lower their real-time costs, increase the talent they can recruit and retain, and access talent sources outside of their main office locations (Bendor-Samuel, 2020).

3.2 Influencing Factors

Understanding the elements influencing employees' view of the work-from-home environment is essential to comprehending the link between work-from-home and employees (Factors determining employees' work from home attitude, 2021). The numerous factors affecting employees during work from home are as follows:

Gender - When compared to men, female employees were shown to be more amenable to the work-from-home scenario. The following factors are indicated as the causes of this association (Factors affecting employees' attitude toward working from home, 2021): Because they have domestic obligations at home, female employees have demonstrated a greater interest in working from home. People can benefit from flexibility and convenience in a work-from-home setting. Increased freedom, autonomy in balancing work and family obligations, and a sense of accomplishment from working from home. When they are most productive, they work (when they are out of domestic constraints)

Marital Status - Employees who are married are more suited to working from home than their peers. The demand for time flexibility among married employees, which enables them to manage their family commitments while at work, may be the cause of this. The time saved from travelling can be used to spend time with family, which could help them have better family relationships. This is the other main benefit of working from home. Working from home, especially for moms of young children, gives them a flexible work environment that they may better use for their involvement with family and to raise their children without sacrificing their careers. Additionally, it was discovered that married workers were more productive than their single counterparts when given the choice to work from home. Some married men prefer to spend more time with their families and children and place a higher importance on their families than on their careers. These men may choose to work from home so that they can actively contribute to taking care of their loved ones. This can raise their level of satisfaction at work. To successfully combine their obligations at work and at home, married employees may find working from home to be a convenient work environment (Factors affecting employees' work from home attitude, 2021).

Job Insecurity - Job insecurity is the level of uncertainty a person has regarding the future of their position or a particular component of their work. Employee job security is under threat due to shifting worker dynamics and escalating corporate competitiveness. Insecurity regarding one's position within an organization is caused by growing

organizational demands for up- and re-skilling, technological prowess, and many other abilities. When employees work from home, they are more likely to feel insecure since they are less familiar with the demands of their employers. Additionally, working from home necessitates expertise in virtual technology applications, endangering their job security. Due to the negative impact, it has on career progression chances due to a lack of information, or out of sight and out of mind syndrome, work-from-home is considered as a key source of threat to employee job security (Factors affecting employees' work from home attitude, 2021). Employees believe that working remotely will impede their professional development and limit their career options. This is since they are not physically present at work, which may cause them to lose out by preventing them from having visibility and direct physical contact with their immediate managers. The supervisors' absence from face-to-face interactions during work hours and during appraisals is the other issue that employees feel is deprived in a work-from-home setting. Employees who consider their opportunities for career progress as being threatened by such a situation are therefore more likely to have a less favourable attitude toward work-from-home arrangements (Factors impacting employees' work from home attitude, 2021).

Organizational Commitment - A person's level of belief in and acceptance of an organization's ideals and objectives is referred to as organizational commitment. It is the willingness of an employee to put their skills and abilities to use and to make a significant contribution to the growth of the firm. If their firm implements a work-from-home environment, an employee with higher commitment will tend to follow or will have a cheerful outlook and will actively participate and embrace the program's adoption. To make work-from-home a successful approach, firms need concentrate more on increasing employee commitment. Employees who are more devoted to the organization will take on any task to maintain their relationship with it (Factors influencing employees' attitude toward working from home, 2021).

Support Factors - For the programme to be successful, management philosophies and managers' perspectives on work-from-home are crucial. Positive management and supervisory attitudes frequently show in their interactions with workers who choose to participate in work-from-home programmes. Support from co-workers and supervisors has a significant impact on how people feel about working remotely. Employees who believe that their managers and co-workers are supportive are more likely to favour working from

home than their peers. When forming their attitude toward the work-from-home environment, employees considered the comprehension, concern, and acceptance of their immediate managers/supervisors to be more significant and valuable. The assumption that workers are disciplined enough to complete their tasks when working from home should be upheld by supervisors. To encourage workers to perform better, managers should emphasize the value of working from home (Factors affecting employees' work-from-home attitude, 2021).

Opinion Differences - According to several studies, the lack of a clear separation between work and personal life has a negative impact on work-life balance. The lack of a stop button when working from home causes employees to become workaholics. Employers' lack of interest in work-from-home arrangements may result in a mismatch between expectations and performance as well as trust-related problems. When working from home, employees have an added strain of keeping up with technology advancements. Not every work can be successfully completed from home. The work-from-home environment has been the subject of ongoing disputes between industries. Compared to product-based businesses, service-based companies are more suited to this new work environment (Factors affecting employees' work-from-home attitude, 2021).

3.3 Major Advantages

The benefits of working from home for employees are as follows (NI Business Info, 2020):

Flexibility & Agility - Workplace flexibility and agility are increased by working from home. Employees may be better suited and more willing to work flexible hours, such as earlier or later in the day or even on the weekends, if they are no longer confined to an office. This could assist them in meeting particular business needs, such as when dealing with clients who are in different time zones.

Improved Employee Retention - Working from home can aid in employee retention as the flexibility of working from home allows workers to fulfil childcare needs, cut down on commuting time, and fit work around personal obligations. Staff that is permitted to work from home will also feel more trusted by their employer, which can enhance staff loyalty.

Draw New Talent - A person may provide the opportunity to work from home as a reward, which will aid in bringing in fresh talent for his company. A person will have an

advantage over rivals who do not give their employees the choice of working from home on the job market even if they only offer that option.

Enhanced Productivity - Since there are less interruptions than would often be present in an office setting. In contrast, working from home offers a more tranquil setting that may promote more concentrated work. Additionally, some workers may want to work more hours than they were contractually required to make up for time they used to spend travelling to and from work.

Increased Staff Motivation - Staff will feel more trusted by their company if they work from home because the working relationship is not as closely watched, and employees are given some degree of autonomy to conduct their tasks. The development of a homework assignment schedule that works better for the staff will also make them happy, which may help them feel more inspired to perform at their best.

Workforce Health & Wellbeing - Working from home eliminates the need for a stressful commute. These kinds of time savings also allow employees to improve their health more by getting more sleep, spending more time with their families, exercising, or cooking healthier foods.

Financial Benefits - Savings on office space, office supplies, utility costs, and other expenses are financial advantages. The tax benefits offered by HM Revenue & Customs (HMRC) for working from home may also be accessible to employees.

Convenience - A person may have employees who frequently visit clients' locations and are not always in the office. It can be more convenient for them to base themselves at home, which also results in further time and money savings.

Better Work/Life Balance - A better work-life balance can be achieved by workers who work from home. For example, personnel who would have had to commute can now utilize that time for themselves, establishing the foundation for a better work-life balance. Additionally, employees can incorporate domestic tasks into their schedules, providing them extra time in the evenings for leisure activities like loading or unloading the dishwasher or cooking lunch.

Technology - The internet has made it feasible for personnel to remain constantly connected to the office, which is made easier by technology. Communication between co-

workers and teams has become more easier thanks to tools like Skype, which occasionally can result in meetings that are more productive and efficient.

Less Sickness Absences - Less time missed due to illness because employees are happier and more energized when working from home, which reduces the risk of burnout having a detrimental influence on their immune systems. Additionally, because workers are working alone, there is a lower risk of an illness spreading than there would be in an office setting.

3.4 Major Disadvantages

The drawbacks of working from home for employees are as follows (NI Business Info, 2020):

Suitability Concern - Not everyone is suited to working from home; not everyone's personality or skill set is suitable to working from home. Some workers might appreciate the routine and structure that an office setting offers. Some employees can prefer face-to-face communication with coworkers and find that receiving direct direction from their manager is very helpful in completing tasks and reaching goals. Additionally, keep employees with disabilities in mind. The support they require to perform their job may suffer if they work from home. Additionally, not everyone's family life will mesh well with working from home. For example, some people may have young children who may not know when to respect limits and disrupt their workday. Some people might not have the available room to set up a good, dedicated working location.

Isolated Feeling - People who work from home could have the same sense of isolation from their coworkers and the company as a whole as they would in an office setting. Employers could make sure that communication is more frequent to overcome this problem. Therefore, personnel are given additional opportunities to feel active and part of the team by scheduling fast catch-ups by phone or regular team meetings through other technologies like Skype. More casual and social get-togethers might also aid in reducing any feelings of loneliness.

Performance Monitoring - Monitoring performance may be challenging since managing and overseeing home workers may be challenging. Additionally, different personalities may react to surveillance in different ways. So that you can detect and address

any performance concerns at an early stage, you can consider defining goals and targets for employees that can be easily measured.

Home Distractions - Despite the fact that working from home eliminates potential office distractions, if a person doesn't have a suitable, peaceful workspace at home, they may be easily distracted by household noises or other members of their household.

Burnout Risk - Since there is no physical barrier between work and family life when working from home, employees may find it difficult to distinguish between the two. Employees may find it difficult to know how to switch off from work as a result, which could result in longer workdays, more stress, and eventually burnout.

Additional Cost - The initial expenditures of training and providing proper equipment, such as computers, mobile phones, and other IT equipment, are associated with working from home. To meet health and safety regulations, a person must also think about adjustments.

Staff Development - It may be challenging to sustain personnel development and upgrade skills when staff are not physically close to one another. The workforce might be encouraged to take advantage of online events and courses to pick up new skills, though.

Information Security - When employees operate remotely, information security issues could be more likely to develop. With laptops being brought home and the requirement for personnel to access servers remotely, there is an increase in danger. Employers need to make sure they put safeguards in place to secure corporate data by installing encryption software and remote-wipe programmes in the event that employee-provided mobile devices are lost or stolen. Additionally, virtual private networks encrypt the data and offer secure online access to a distant computer. This keeps information safe while yet being available to personnel.

Mental Health - If a worker is unable to establish a routine that works for them, finds it difficult to draw a line between work and home life, or feels lonely, the decision to work from home may have negative effects on their mental health. Encourage workers to establish a work schedule, designate an area for their job, and establish boundaries with other family members as ways to assist.

Employee Morale - When workers are working alone at home, it might be more difficult to retain a sense of team. A person should be aware that depending on where his

team lives, they might not have access to internet speeds that would allow them to perform their jobs efficiently, for example, rural broadband is frequently quite slow. This has an impact on how long workers stay on a task and resulting in a lack of drive to finish it on time (Kumar, 2021).

The isolation from people and society that results from working from home is one of the main problems that the employees experience. Human interaction decreased as a result of protracted and frequent lockdowns. Employees said they are nervous about the future, concerned about their jobs, and concerned about their financial situation. Since almost everything was being done with the aid of the internet, it was essential for the employers to make sure that the necessary infrastructure should be there for the employees to work effectively.

Most people acknowledged that the social contact was a breath of fresh air for them and stressed the importance of it on their well-being (Kumar, 2021). Online communication tools, fast internet, and the equipment, information, and technology needed to conduct activities were all necessary (Kumar, 2021). Businesses now need to reinvent their processes and put new policies into place in order to manage and regulate the workflow when workers work from home. As it is challenging and impractical for employers to oversee employees in the same manner as they once did (Kumar, 2021) it is now essential to strike a balance and come up with clever solutions to manage and maintain effective control over the operations. For firms, maintaining the employees' enthusiasm and motivation is another difficulty. Particularly for businesses where face-to-face communication is essential.

When employees work from home, it may be difficult to maintain the same degree of engagement and connection. Communication is essential for the efficient operation of organizational activities. The ability of many departments to work together effectively may be hampered by improper communication. To ensure proper communication within the company, necessary action must be performed right away. Working from home results in a detachment of people from their employers. Employees must think about generating clear and concise communications, and organizations must discover the best way to have efficient flow of communication (Kumar, 2021). There is no absence of competition in the home. It has an impact on how psychologically connected employees are to their company.

3.5 Global Perspective

Research by Dingel & Neiman (2020) indicated that almost one third of all US employment may be conducted totally at home," including the traditional knowledge labor of the IT industry, as the epidemic caused society to lock down. According to research among white collar workers (Berstein et al., 2020), productivity dropped right away once the lockdowns were put into place. Every time there is a significant shift, like the lockout, this (a decline in production) might be anticipated. After a few months, the productivity decline was reversed, and the staff discovered that they were working an additional 10 to 20% of the time. The productivity and wellbeing of workers in a traditional Italian company with blue- and white-collar employees increased, according to a study from Italy (Angelici & Profit, 2020). Even the arrangement of working one day per week from home (what they refer to as "smart-working") increased productivity.

According to Birkinshaw et al. (2020), a study of knowledge workers in the US, productivity increased primarily as a result of employees spending less time in meetings and more time interacting with clients and business partners, while non-essential activities decreased by 25%. However, a Purdue University study of a cross-section of US workers revealed that while workload increased by around three hours per week during the lockdowns, there was a 38% loss in productivity, primarily because of technology and connectivity issues.

According to The Economist (2020) magazine, employees were working longer hours and finding working from home less convenient than anticipated. The report cited additional studies to claim that, while working at their usual jobs, Israelis worked, on average, 47 minutes longer than they did before the pandemic, South Koreans worked seven minutes longer, and Japanese workers worked 16 minutes longer. This was the finding of a poll (PWC, 2020), which also indicated that managers and employees had different perspectives on productivity.

While 44% of managers claimed that employee productivity had grown, only 28% of employees said the same. An intriguing study (Quito, 2020) discovered that while working from home during a lockdown, employees were using about 80% more emojis, including some recently invented emojis, to describe feelings and emotions (for example, to convey Wi-Fi problems at home). Working from home, or telecommuting as it was known then, was

predicted to be problematic if concerns with communication and the availability of sufficient physical resources were not resolved as early as the 1980s.

D'Cruz & Noronha noted the crucial role played by supervisors in developing interpersonal relationships, communications, and enhancing job satisfaction during WFH, when the employee may be feeling lonely, in a qualitative study of WFH among Indian call center employees (prior to COVID-19) (Patanjali & Bhatta, 2022). According to Berstein et al. (2020), managers of staff members who worked from home should greatly boost communication with those staff members in order to make expectations and directives clear and prevent misunderstandings. They proposed appointing a "chief repetition officer" to oversee the regular distribution of communications.

Giurge and Bohns (2020) suggested that employees create boundaries while working from home by engaging in easy activities like taking a walk during their typical commuting time and dressing more formally even when working from home. Microsoft is reportedly creating tools to assist employees who miss out on, say, the commute time from home to the office by integrating a virtual commute into their schedules, according to an article (Deighton, 2020).

According to a Brookings analysis (Guyot & Sawhill, 2020), WFH will likely continue in the near future. Business executives like Bill Gates, the founder of Microsoft, believed that WFH would continue with some fresh methods of operation even while the pandemic continued (PIT, 2020b). In a study of Baidu workers who worked from home during COVID-19, the researchers (Bao et al., 2020) discovered that not all employees benefited equally from WFH and that the gain in productivity was inconsistent. The staff involved in the bigger initiatives suffered the most.

In a "unique" study, the authors (Beno & Hvorecky, 2021) noticed a decline in productivity of employees while working from home, which was caused by the challenges of juggling the many domestic activities. The authors used this word to acknowledge the coincidence of studying similar employees before and during the pandemic.

3.6 Pre-Pandemic Scenario

A US scientist named Jack Nilles proposed the idea of using computers and phone lines to transfer some work out of traditional offices in 1976, and he is now known as the "father of telecommuting," which later developed into WFH. In response to increased gas

prices, another business issue, WFH made a similar recommendation, saying that employees may save money by working from home. This suggestion appeared in a prominent American newspaper (Patanjali & Bhatta, 2022).

According to a study of US workers across all industries who work from home, this number nearly doubled by 2000. Particularly among jobs that relied on information technology, this was true (Oettinger, 2011). The author also discovered that the decline in the cost of working from home was a major factor in this increase. Management guru Peter Drucker claimed in a 1989 Wall Street Journal essay that all the necessary infrastructure was now in place for knowledge work to transfer from offices to employees' homes (Waters-Lynch, 2020).

According to a UK study of IT and non-IT workers, being able to work from home enhanced employees' motivation and independence. In contrast to their coworkers who worked in offices, teleworkers who worked from home demonstrated lower productivity, according to US research (Linos, 2020). To comprehend the impact of WFH on the call center staff, researchers from the University of Stanford conducted a ground-breaking experimental study (Bloom et al., 2015) in a travel agency in China. They discovered that when staff began working from home, call center productivity increased by 9% and turnover decreased by 50%. (attrition). However, they also discovered that because they might not be noticeable to management, employees were concerned about their possibilities of promotion. According to a German study (Kira & Beckmann, 2016), employees who worked from home put in more effort.

According to a different survey, knowledge workers opted for WFH to fulfil their family obligations, avoid regular trips, and minimize office disruptions (OWL Labs, 2017). According to global research published in the Harvard Business Review (Schawbel, 2018), the majority of knowledge workers who worked from home and made up about two-thirds of the workforce did not feel engaged in their jobs. The author discussed his own years-long experiences working from home, during which he felt extremely positively about a variety of things, including independence, but also lonely and alienated.

3.7 During Pandemic Scenario

A few Indian studies on the effects of the COVID-19 on Indian workers, especially those in the IT sector, have been published. According to a survey of Bengaluru-based IT workers, two out of every three employees worked longer hours during WFH, which

increased productivity and enhanced work-life balance. Singh et al. (2020). According to Seema et al 2020.'s research of Indian employees of multinational corporations, 50% of participants claimed better productivity and around 27% reported poorer output. According to a study conducted across a big industrial complex (Jaiswal & Arun, 2020), employees' inventiveness enhanced to some extent while the workplace was under lockdown. However, due to a breakdown in communication with their bosses and coworkers, there was a rise in employee insecurity. A sizable portion (about 23%) believed that working from home would have a negative impact on their evaluations.

According to research (Haridas et al., 2021) of IT workers who were working remotely during the pandemic, regular communication and substantial teamwork were the factors most strongly associated with productivity. A different study conducted during COVID-19 found that autonomy was positively correlated with employee performance, however a poor work-life balance and associated stress could have a detrimental impact on the employees' output.

According to Farooq & Sultana's study, women workers were negatively impacted by working from home since they had to juggle domestic responsibilities, in contrast to men who could spend more time working without interruptions. Research of female doctors in India (Aggarwal et al., 2021) discovered that home obligations restricted the amount of time women doctors could spend on themselves. They then make a number of recommendations to help women employees of WFH deal with these issues, including "psychological counseling."

Another study (Haridasan et al., 2021) conducted on female employees at WFH during the pandemic indicated that they were more productive and produced better quality work when working from home because there was less interruption. The president of India's Nasscom, Debjanj Ghosh, expressed optimism when he remarked that the mentality that requires women to work (outside the home) and independently manage the home "needs to change" (Rai, 2020).

Employees should be present in their offices, according to Mr. Rishab Premji, chairman of Wipro. The founder of Infosys, Mr. N. R. Narayana Murthy, concurs that WFH cannot be a long-term solution (Chandra, 2020). (Ghosh, 2020). Meanwhile, sources suggest that all the major corporations, including TCS, Infosys, Wipro, and others, are prepared for a

scenario in which a sizable section of the workforce would continue to work without pay (WFH) long after the lockdowns had ended (PIT, 2020a).

Alon et al. (2020), who conducted a thorough analysis of the WFH paradigm's effects, conclude that in the long run, WFH may benefit female employees since businesses will start spending more on childcare, flexible scheduling, and other choices to ensure that they remain productive. Men would simultaneously pick up the additional duties of childcare and, to a certain extent, lessen the pressure on the female workforce.

3.8 Post Pandemic Scenario

The changes take place in workplace due to Covid-19 pandemic are mentioned below (Kumar, 2021):

People Connections - People were in a state of despair when the first lockdown was ordered, and they returned to their village not knowing when it would all be over. With their staff absent, businesses and industries were powerless to act. This challenge has to be faced and overcome by HRs in order to resume production and get people back to work as quickly as feasible. Because of this, businesses that enabled remote workers had to ensure that their staff members had the necessary abilities to operate the complex web management system from home. Not everyone has a private workspace, a fast internet connection, a high-quality headset, and a video camera to facilitate effective communication and work. The only choice left was to educate staff members about the technology and support them as they learn about and adapt to it. People had to overcome this difficulty while taking care of their families, kids, and selves. Employers may greatly assist employees in overcoming obstacles by promoting optimism, resilience, and psychology (Pandey, 2020).

Creating Normalcy - In a situation of crisis, restoring normalcy is a difficult endeavor. It was crucial for the companies to set the groundwork for their staff members to work remotely. A few elements that could serve as a yardstick to gauge normalcy include taking time for the family, finishing tasks prior to their due dates, consistently fulfilling the jobs that have been assigned, and slowly but steadily improving work performance. Employers must ensure that their remote workers are improving and learning new skills on a regular basis. The ability to effectively communicate was essential for maintaining employee motivation and assisting them in keeping on the right path.

Job Security - Employers must make sure that their staff members are working in a secure setting. Many businesses deal with information that needs to be kept confidential and doing business from home puts that information at danger. To keep the information safe, you should think about getting the correct antivirus software, installing Windows Firewall, and keeping your devices updated with the latest security software. Employers must require security and encryption to be enabled on all devices in order to prevent security breaches. This will ensure that crucial data is protected even if a device is lost or stolen. Additionally, staff members need to be instructed on what to do if they discover malware on their device, phishing efforts, or other cyberattacks (Ahmad, 2020).

Emotional Wellbeing - The most underappreciated part of this pandemic is loneliness and isolation. People working long hours while cooped up in their houses have a detrimental effect on their mental health. Companies need to find solutions to this problem if they want to make working from home more common in the future. With the aid of technology, it is not very difficult for businesses to hold gatherings for their employees to celebrate a milestone, an employee's birthday, or to express their congratulations on a noteworthy accomplishment. Colleagues can get to know one another through icebreaker activities. This approach's warmth will make workers feel less alone or lonely, as well as reduce stress and enhance their general welfare (Kumar, 2021).

3.9 Employee Productivity

Productivity refers to the quantity of output that comes from performance behavior in addition to external contextual and opportunity elements (Zhang et al.,2020). According to Sole & Schiuma (2010), the issues with the use of performance measures can be attributed to the dearth of efficient measures and the measures' selective development. Employee productivity has been referred to in a variety of ways, including organizational performance (Farooq, 2014), employee performance (Anitha, 2014), corporate performance (Dana et al., 2021), and new product development performance. According to Wanyama & Mutsotso (2010), employee productivity depends on both the length of time an individual is physically present at a job and the degree to which he or she is "mentally present" or effectively functioning while present at work. Employee performance is the measure of an employee's financial and non-financial results that have a direct impact on an organization's performance (Anitha, 2014).

Although there are many ways to define performance measurements, the distinction between objective and subjective measures has proven to be the most common. Numerous research has employed both subjective and objective assessments (Vij & Farooq, 2014). (Vij & Bedi, 2016). Subjective productivity measurements can be used to compare across industries; however, they can have issues with common method bias, societal desirability, and supervisor biases (Vij & Bedi, 2016). Because managers can utilize relative measurements of performance, subjective measures of productivity are preferred over objective measures.

Increasing employee productivity is one of the key goals of businesses because better levels of production can benefit both people and organizations (Hanaysha, 2016). Bendor-Samuel (2020) suggests that before an organization tries to improve its productivity (even in the WFH model), it should understand how to measure and monitor productivity on a continuous basis. Desyatnikov (2020) notes that many people already worked from home before the pandemic hit, but the way we measure employee productivity has been evolving for years. Without a doubt, although not always, longer working hours would boost employee productivity, but doing so would put more of a load on the workers, according to Menon (2020).

During the COVID-19, staff productivity can be affected by working hours. Employee monitoring may be one of the finest methods to monitor employee performance and productivity, according to Ghosh (2020). To determine who is working and who is not, nevertheless, seems to be a difficult process if staff are working from home. Knowing the overall number of productive and unproductive hours worked can help organizations. The COVID-19 pandemic has altered how businesses previously viewed remote workers.

Organizations can increase employee productivity, though, by encouraging staff to create a plan for knowledge sharing, choose the best channel for communicating their message, continue socializing, and assess production rather than hours worked (Ludema & Johnson, 2020). According to Bendor-Samuel (2020), it is crucial to comprehend that a variety of factors, such as labor talent, communications with the tech stack, and individual choice rights, influence, and drive productivity.

Most studies on the effects of WFH to date have concentrated on work-life balance, burnout, and occupational status (Kramer & Kramer, 2020). The study of WFH and employee productivity is, in fact, still in its early stages. Businesses don't care whether

employees are productive at work or at home. In comparison to 45% of workers in offices, 30% of all employees claim to be more productive when working from home (Pickard-Whitehead, 2020). Employees who worked from home were 13% more productive than their office-bound counterparts (O'Hara, 2014).

Leaders who may have previously resisted giving staff the choice of working remotely out of concern that it will have a detrimental impact on productivity were relieved to see the contrary, according to Stallard & Stallard (2020). Pang (2020) contends that despite the surge in confirmed COVID-19 cases, the government and industry are preparing to reopen the economy and create a purported "new normal." Corporate executives are concerned that the current state of affairs would reduce employee productivity because of WFH problems such as improper connectivity, data distribution, and remote cooperation.

The most widespread misconception is that people who work from home are less productive than people who work in offices. However, research by Bloom (2014) shows that not only were work-from-home employees happier and less likely to quit, but they were also more productive. Thus, Stieg (2020) draws the conclusion that working from home improves your performance at some jobs while degrading it at others. Everyone contributes less when a team works remotely because they believe they will be less effective. According to Bloom et al. (2015), the overall effect of WFH was noteworthy.

The company increased overall factor production by 20% to 30% while cutting costs by around \$2,000 annually each WFH employee. The reduction in office space accounted for about two thirds of this increase, with the remaining percentage coming from improved employee productivity and lower turnover. According to Babar & Pramanik (2020), after being compelled to move from an office to a WFH due to the COVID-19 pandemic, a heated discussion about productivity and cost-efficiency in the long run has arisen in organizations after it was discovered that it had mixed results for both the employees and the organizations.

However, it may negatively affect employee performance due to lack of colleague contact, absence of routine, and financial pressure. According to Elshaiekh et al. (2018), "One of the most observable changes which occurred as a result of the COVID-19 pandemic has been the shift of many employees to WFH arrangements across occupations" (Kramer & Kramer, 2020). Due to the COVID-19 pandemic, an increasing number of organizations are switching to a work from home policy, at least through the end of the year. Organizations

may face a number of difficulties with the WFH model in terms of employee monitoring, work visibility, and control (Scalerandi, 2020).

Only 5% of American workers telecommuted prior to the pandemic. That percentage skyrocketed to almost 60% in May 2020. According to numerous surveys conducted in India, between 16 and 65% of employees worked remotely during the pandemic. Since technology has advanced to the point where remote work is feasible, many individuals and business owners alike have started working from home. This is the standard for a rising number of Americans. The majority of businesses and their employees are now following suit in the wake of the recent COVID-19 epidemic, prompting the question: Is this working environment productive? (Desk, 2022).

One study found that remote workers put in 1.4 more days of work per month than their office-based counterparts, adding up to more than three extra weeks of labor annually. 31% of remote workers claimed they've needed to take a day off for their mental health, and 29% stated they struggle with work-life balance. By taking breaks throughout the day, employees may stay productive in one of the best ways possible. One technique for allowing workers to unwind for a minute and refocus when they return is the Pomodoro Technique (Desk, 2022).

Working from home boosts productivity by 13%, according to a Stanford study of 16,000 employees over a 9-month period. Employees reported greater job satisfaction in this study, and attrition rates were reduced by 50%. (Desk, 2022). According to a Connect Solutions poll, 77% of those who work remotely at least occasionally report higher productivity, with 30% producing more work in less time and 24% producing more work in the same amount of time (Desk, 2022).

3.10 Indian IT Sector

With a considerable impact on the GDP and welfare of the nation, the IT & BPM sector has emerged as one of India's most important economic drivers. In 2020, the IT sector contributed 8% of India's GDP, and by 2025, it is anticipated to make up 10% of India's GDP. India's standing in the 2021 edition of the Global Innovation Index increased by four spots to 46th place (GII).

Industry Size - India holds a 55% market share of the US\$ 200–250 billion global services sourcing industry in 2019–20, making it the top sourcing location in the world. IT & BPM Industry in India: Market Size, Opportunities, Growth, Report | IBEF, 2022) estimates that the Indian IT industry's sales reached US\$ 227 billion in Financial Year (FY) 22, representing a 15.5% YoY (Year on year) growth.

Gartner forecasts that India's IT spending would rise from an estimated US\$ 81.89 billion in 2021 to US\$ 101.8 billion in 2022. By 2025, it is anticipated that the Indian software products market would be worth \$100 billion. Indian businesses are concentrating on making investments abroad to broaden their worldwide reach and improve their global delivery hubs. In FY20, the market for data annotation in India was valued at \$250 million USD, with the US market accounting for 60% of that total. Due to the rising domestic demand for AI, the industry is anticipated to reach \$7 billion by 2030 (IT & BPM Industry in India: Market Size, Opportunities, Growth, Report | IBEF, 2022).

In FY21, the Indian IT sector exported goods worth US\$149 billion. The largest contributor, accounting for more than 51% of all IT exports, has been the export of IT services (including hardware). In terms of total IT exports during FY21, BPM, Engineering and R&D (ER&D), and software product exports each contributed 20.78%. By 2022, the ER&D market is anticipated to reach US\$ 42 billion. The number of people employed in the IT sector increased by 4.45 lakh in FY22, bringing the total to 50 lakhs (IT & BPM Industry in India: Market Size, Opportunities, Growth, Report | IBEF, 2022).

Indian IT Industry Vital Investment

- ✓ Indian IT has received significant investment from important nations and corporations due to its fundamental skills and strengths (IT & BPM Industry in India: Market Size, Opportunities, Growth, Report | IBEF, 2022):
- ✓ Between April 2000 and March 2022, India's computer software and hardware industry received cumulative foreign direct investment (FDI) inflows totaling US\$ 85.51 billion. According to data given by the Department for Promotion of Industry and Internal Trade, the industry came in second for FDI inflows (DPIIT). 14.53% of total FDI inflows are made up of computer hardware and software.
- ✓ In collaboration with Tech Mahindra, the Union Bank of India (UBI) debuted a Metaverse Virtual Lounge and Open Banking Sandbox environment in July 2022.

- ✓ Z Stack International, a market leader in cloud computing, IaaS, and PaaS solutions globally, declared in June 2022 that it was expanding into India and the SAARC Region.
- ✓ In order to promote the use of cloud computing in India, Redington India, an IT provider, and Amazon Web Services (AWS) engaged into a multi-year strategic partnership in June 2022.
- ✓ Experian, an American-Irish provider of consumer credit reports, intends to significantly expand its global innovation Center (GIC) in Hyderabad over the course of the following three to five years, adding roughly 4,000 new staff. In the banking, financial services, and insurance (BFSI) industry, GIC will focus on using cutting-edge technologies including cloud computing, big data analytics, artificial intelligence, and machine learning.
- ✓ PE investments in the IT sector were \$23.4 billion in 2021.
- ✓ In 2021, private enterprises in India's IT startup ecosystem got record investments totaling about US\$ 36 billion, up from US\$ 11 billion in 2020.
- ✓ The largest tech-first, fresh animal protein company in India, Licious, raised US\$ 150 million in a Series F2 fundraising round in March 2022.
- ✓ Byju's received US\$ 800 million in fundraising in March 2022 as part of a pre-IPO deal, valuing the Bengaluru-based business at over US\$ 22 billion.
- ✓ An investment round headed by Insight Partners, B Capital Group, and Dragoner Investment Group in March 2022 secured US\$ 137 million for the debt marketplace Cred Avenue, raising its valuation to US\$ 1.3 billion.
- ✓ Hasura, a software firm that provides tools for developers, raised \$100 million in a new investment round headed by Greenoaks Capital in February 2022, making it a unicorn.
- ✓ In order to advance India's digital ecosystem, Google announced plans to spend \$1 billion in Bharti Airtel Ltd. in January 2022.
- ✓ In order to market Amazon Web Services (AWS) to its clients, Amazon has teamed with Airtel. Amazon also plans to invest US\$ 1.6 billion in two future data centres in Hyderabad.
- ✓ In order to increase network automation, efficiency, flexibility, and dependability for communication service providers (CSPs), Wipro and TEOCO teamed together in November 2021.
- ✓ In the Nelson Hall NEAT for CX Services in Banking, Financial Services, and Insurance, Tata Consultancy Services was recognized as a leader in August 2021. (BFSI).

Indian IT Industry Government Programs

- ✓ According to the report IT & BPM Industry in India: Market Size, Opportunities, Growth, Report | IBEF, 2022, the following are some of the significant steps the government has taken to boost the IT and ITeS sector in India:
- ✓ The Indian Computer Emergency Response Team (CERT-In) released directives in April 2022 to improve the nation's cybersecurity.
- ✓ The amount allotted for the IT and telecom sector in the Union Budget 2022–23 was Rs. 88,567.57 crore (US\$ 11.58 billion).
- ✓ The government established the STP Scheme, a fully export-oriented programme for the creation and export of computer software, including the export of expert services via physical or electronic medium.
- ✓ To improve the caliber of internet services in the state of Uttarakhand, the government introduced the Internet Exchange in November 2021.
- ✓ To support the state's developing technology sector, the Karnataka government has inked three memorandums of understanding totaling US\$ 13.4 million (Rs. 100.52 crore).
- ✓ For the "Online Capacity Building Programme on Crime Investigation, Cyber Law and Digital Forensics," which aims to improve cyber security skills, the Indian government announced plans to construct a cyber-lab in September 2021.
- ✓ The Ministry of Electronics and Information Technology (MeitY) hosted a workshop in September 2021 with the slogan "Connecting all Indians" to increase interest in the nation among public and corporate partners and provide the internet to more rural areas.
- ✓ In order to improve service delivery and governance in the state and turn Meghalaya into a high-income state by 2030, the Indian government launched the Meghalaya Enterprise Architecture Project (MeghEA) in September 2021.
- ✓ To promote research in 42 emerging technologies in information technology (IT), electronics system design & manufacturing (ESDM), and information technology enabled services, the Indian government established Phase II of the Visvesvaraya PhD Scheme in September 2021. (ITES).
- ✓ To increase the number of training facilities and job prospects, the Indian government opened five National Institute of Electronics and Information Technology (NIELIT) Centers in three North-Eastern states in September 2021.

- ✓ To create technologies for globally competitive manufacturing in India, the Ministry of Heavy Industries and Public Enterprises created six technology innovation platforms on July 2, 2021. IIT Madras, Central Manufacturing Technology Institute (CMTI), International Centre for Automotive Technology (iCAT), Automotive Research Association of India (ARAI), BHEL, and HMT, in collaboration with IISc Bangalore, developed the six technology platforms.
- ✓ An MoU was signed by the Ministry of Communications of Japan and the Department of Telecom of India to further their cooperation in the areas of 5G technology, telecom security, and submarine optical fiber cable systems.

Indian IT Industry Future Perspective

- ✓ India is the most popular offshore location for IT companies worldwide. Emerging technologies are now opening up a whole new range of options for leading IT firms in India, who have already demonstrated their ability to provide both on-shore and off-shore services to clients worldwide. According to a report by IBEF titled "IT & BPM Industry in India: Market Size, Opportunities, Growth, Report," the country's IT and business services sector is predicted to reach US\$ 19.93 billion by 2025.
- ✓ The Indian IT sector excelled in its competitive strength with little government meddling, said Mr. Piyush Goyal, Minister of Commerce and Industry, Consumer Affairs, Food and Public Distribution, and Textiles, in November 2021. He continued by saying that by 2030, service exports from India might reach US\$ 1 trillion (IBEF, 2022) (IT & BPM Industry in India: Market Size, Opportunities, Growth, Report).

One of the most prosperous industries in the world is IT outsourcing. However, a mixed effect is anticipated on the IT outsourcing sector as a result of the coronavirus pandemic. Revenue creation for the majority of businesses across all industries has been impacted as many economies remain in lockdown as a result of the Covid-19 crisis, and the jobless rate has also crept up. In order to use their own resources for the assigned task while avoiding worsening economic conditions, the countries and businesses who rely heavily on outsourcing are attempting to regulate the importation of IT services. For instance, two large Australian corporations, Telstra, and Optus, as well as Virgin Media in the United Kingdom, which had partnered with India and the Philippines for process outsourcing, have decided

that they will exclusively hire candidates from the host nation (Overview of Indian IT and IT enabled Service Industry and Impact of Covid-19 - Blogs, 2020).

India is one of the 15 economies that has been most negatively impacted by the COVID-19 epidemic, according to a UN assessment. The pandemic's disruption of global trade is predicted to have a trade impact of USD 348 million on India, despite being very low compared to its counterparts in Europe (including the UK), the US, Japan, and South Korea, where it is expected to have a much greater impact. While there have been no contract cancellations by service partners in various geographies thus far, many clients have requested reduced support for application and maintenance services (Overview of Indian IT and IT enabled Service Industry and Impact of Covid-19 - Blogs, 2020).

Companies are anticipated to notice a considerable slowdown in their growth as a result of the difficult scenario brought on by the pandemic that the IT industry is currently experiencing. The demand from clients in the US and Europe, which are most severely impacted by COVID-19, is anticipated to decline, placing major businesses like TCS, Infosys, and HCL Technologies at the forefront to absorb the worst shock. The slowdown in decision-making, the delay in pipeline conversion, the project execution, and the price impact on core business are predicted to have a significant negative impact on revenue, which is anticipated to fall by roughly 2-7%.

However, many companies that have never considered outsourcing could take advantage of this circumstance to partner with a few outsourcing companies during this moment in order to spread their wings. As more businesses adopt remote working practices, they need additional cloud services and IT tools to efficiently strengthen and improve the security of their information against cyber-attacks. There are many areas within the IT sector where outsourcing is likely to rise at a time when pressure on new contracts and pricing is expected to affect the Indian IT industry. Challenges in the short term continue, but the same issues may present fresh opportunities for those in the outsourcing services sector (Overview of Indian IT and IT enabled Service Industry and Impact of Covid-19 - Blogs, 2020).

4. Practical Part

The thesis focuses on analyzing the effect of work from home culture on employees work performance during covid-19 crisis. The objectives of thesis include identifying the factors affecting employees working from home during Covid-19 and to find out the problems faced by employees during work from home. The thesis also determines how the particular elements of work from home like emotional well-being and work life balance are influenced with respect to job performance.

The thesis contains primary data and secondary data. The secondary data is obtained from various sources like periodicals, online publications, websites and many more. The secondary data helps in understanding the topic more effectively. The data collected from secondary sources are described in literary part of thesis whereas the primary data is used for practical part of thesis. The primary data is collected from 400 respondents who are residing in India at the same time in IT Industry.

The respondents are selected randomly and the data gathered from them has been analysed using SPSS software. The demographic factors are also assessed which includes age, gender, marital status, qualification, position of working in an organization and no. of years of experience. The frequency analysis, descriptive statistics analysis and hypothesis testing has been performed. The Anova test, Chi-square test, Pearson's correlation and Spearman's correlation are used for testing hypothesis. The major insights of analysis are covered under the head of result and discussion chapter. The summary of all the chapters are covered in conclusion chapter of thesis.

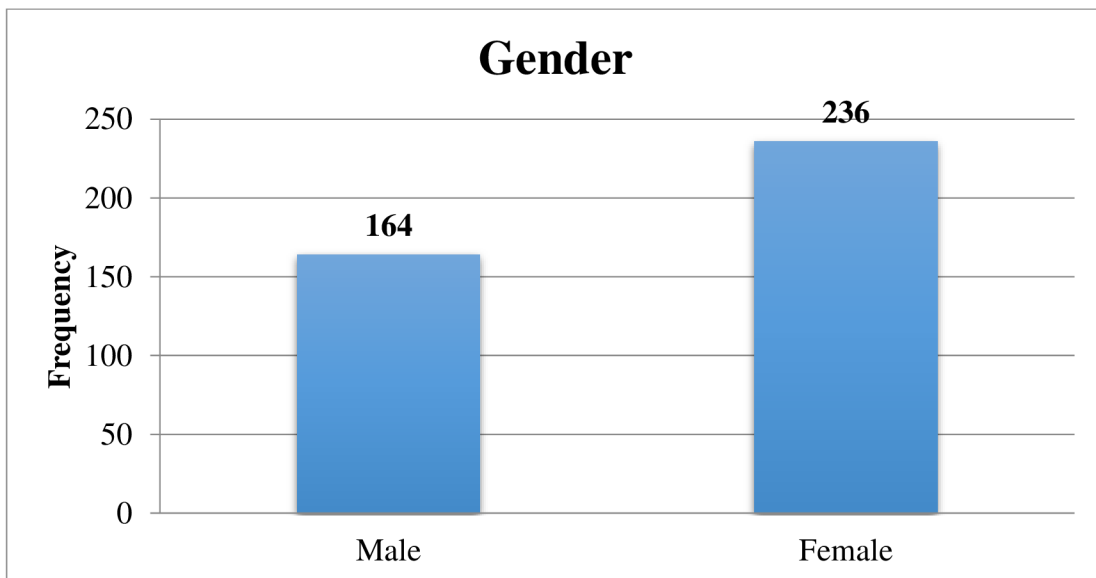
4.1 Descriptive Analysis

Gender

Table 1 - Gender

Particulars		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	164	41.0	41.0	41.0
	Female	236	59.0	59.0	100.0
	Total	400	100.0	100.0	

Source: Based on own calculations



Graph 1 - Gender

Source: Based on own processing

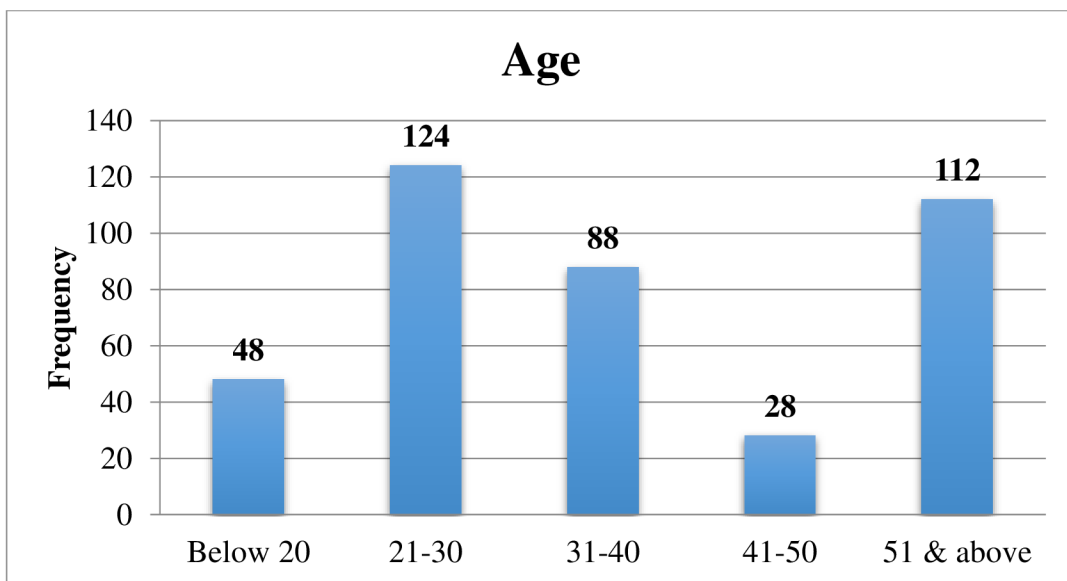
The figure 1 indicates gender of respondents. There are 400 respondents have been interviewed for survey which includes 236 female respondents and 164 male respondents.

Age

Table 2 - Age

Particulars		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Below 20	48	12.0	12.0	12.0
	21-30	124	31.0	31.0	43.0
	31-40	88	22.0	22.0	65.0
	41-50	28	7.0	7.0	72.0
	51 & above	112	28.0	28.0	100.0
	Total	400	100.0	100.0	

Source: Based on own calculations



Graph 2 - Age

Source: Based on own processing

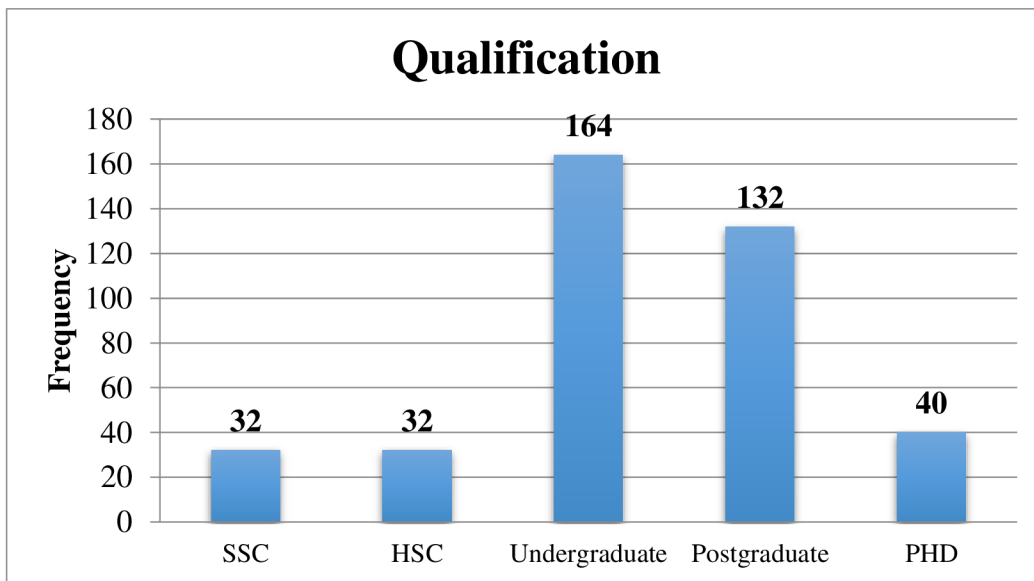
The age group of respondents is shown in figure 2. The survey has been conducted for respondents who are from five different age groups. 124 respondents have their age between 21 to 30. There are 88 respondents who fall into the age group of 31-40. There are 112 respondents who are having an age of 51 & above. 48 respondents have their age below 20 and remaining respondents fall into the category of 41-50 age group.

Qualification

Table 3 - Qualification

Particulars		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	SSC	32	8.0	8.0	8.0
	HSC	32	8.0	8.0	16.0
	Undergraduate	164	41.0	41.0	57.0
	Postgraduate	132	33.0	33.0	90.0
	PHD	40	10.0	10.0	100.0
	Total	400	100.0	100.0	

Source: Based on own calculations



Graph 3 - Qualification

Source: Based on own processing

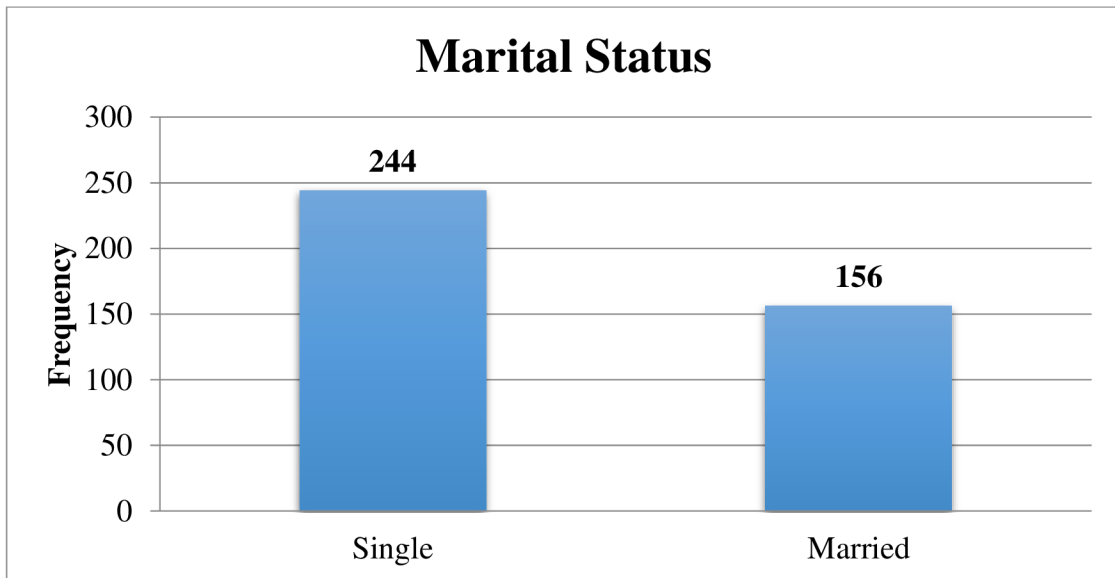
The education level of respondents is mentioned in figure 3. It has been observed that more than 164 respondents are undergraduate. 132 respondents are postgraduate whereas 40 respondents have done PHD. There are 32 respondents who have completed Secondary School and remaining respondents studied till higher secondary.

Marital Status

Table 4 - Marital Status

Particulars		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Single	244	61.0	61.0	61.0
	Married	156	39.0	39.0	100.0
	Total	140	100.0	100.0	

Source: Based on own calculations



Graph 4 - Marital Status

Source: Based on own processing

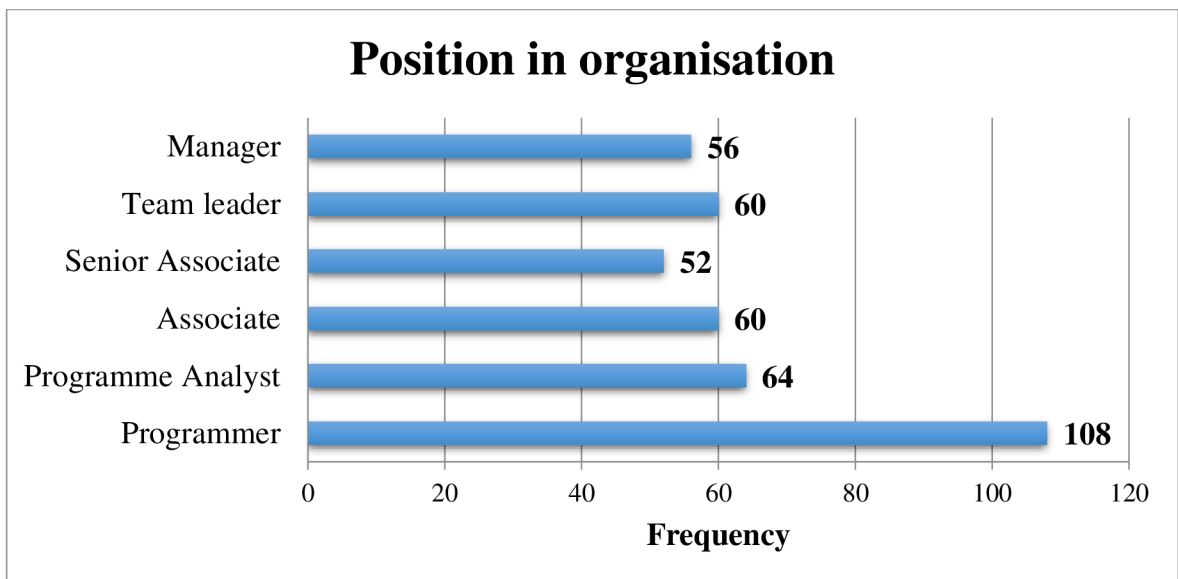
The figure 4 shows marital status of respondents. There are 244 respondents who are single. While 156 respondents are married.

Position in the organization

Table 5 - Organization Position

Particulars		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Programmer	108	27.0	27.0	27.0
	Programme Analyst	64	16.0	16.0	43.0
	Associate	60	15.0	15.0	58.0
	Senior Associate	52	13.0	13.0	71.0
	Team leader	60	15.0	15.0	86.0
	Manager	56	14.0	14.0	100.0
	Total	400	100.0	100.0	

Source: Based on own calculations



Graph 5 - Organization Position

Source: Based on own processing

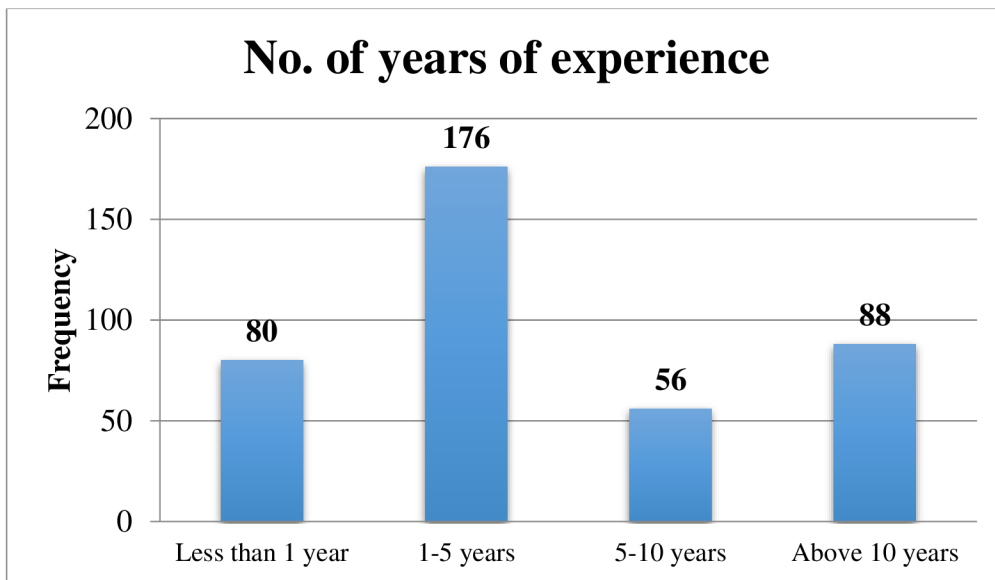
The figure 5 indicates the various positions at which the respondents are working in their respective organisations. Majority of respondents are working as a programmer. 64 respondents are programme analyst and 15 respondents are working as associates. There are another 60 respondents who hold the position of team leader whereas 52 respondents are working as Senior Associate. The position of manager is assigned to 56 respondents in their respective organisation.

No. of years of experience

Table 6 - Experience

Particulars		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than 1 year	80	20.0	20.0	20.0
	1-5 years	176	44.0	44.0	64.0
	5-10 years	56	14.0	14.0	78.0
	Above 10 years	88	22.0	22.0	100.0
	Total	400	100.0	100.0	

Source: Based on own calculations



Graph 6 - Experience

Source: Based on own processing

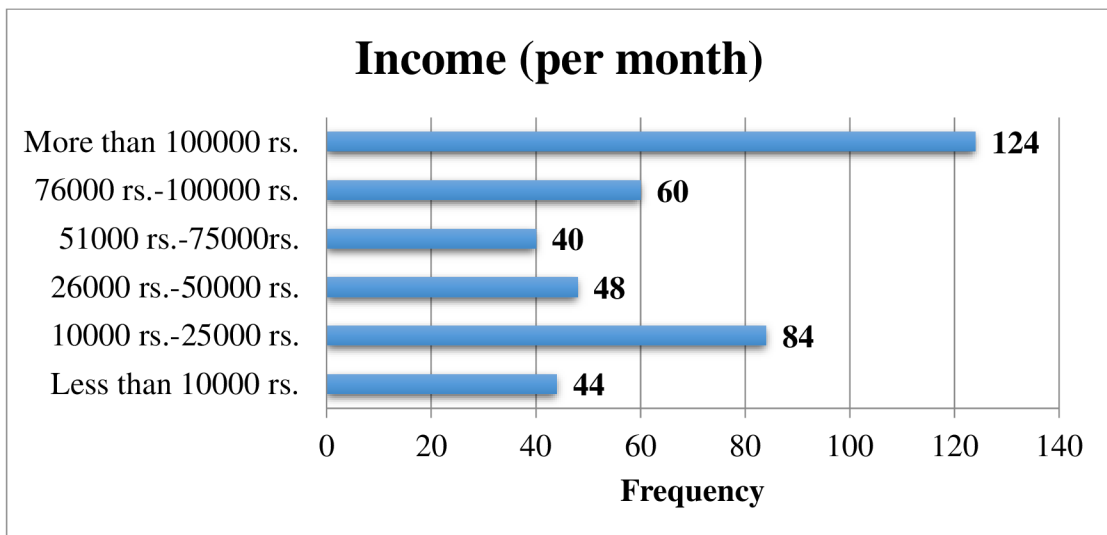
The number of years of working experience of respondents is depicted in figure 6. Out of 400 respondents, 176 respondents have working experience between 1 to 5 years. 88 respondents said that they are working since more than a decade. There are 80 respondents who have an experience of less than a year and 56 respondents are working from last 5 to 10 years.

Income (per month)

Table 7 - Income

Particulars		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than 10000 rs.	44	11.0	11.0	11.0
	10000 rs.-25000 rs.	84	21.0	21.0	32.0
	26000 rs.-50000 rs.	48	12.0	12.0	44.0
	51000 rs.-75000 rs.	40	10.0	10.0	54.0
	76000 rs.-100000 rs.	60	15.0	15.0	69.0
	More than 100000 rs.	124	31.0	31.0	100.0
	Total	400	100.0	100.0	

Source: Based on own calculations



Graph 7 - Income

Source: Based on own processing

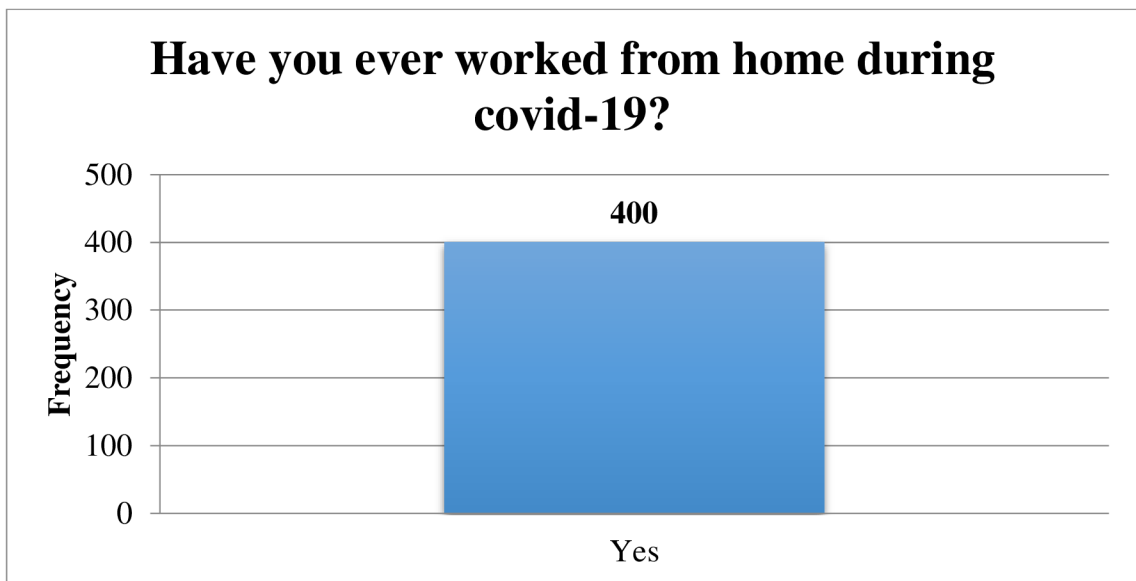
The figure 7 displays income earned by employees per month. There are 124 respondents who have earning of more than 100000 rs. per month. 84 respondents are earning between the range of 10000 rs. to 25000 rs. per month. 60 respondents have their monthly income between 76000 rs. to 100000 rs. 48 respondents have income of 26000 rs. to 50000 rs. per month. There are 44 respondents who are earning less than 10000 rs. per month. 40 respondents are earning between 51000 rs. to 75000 rs. per month.

Have you ever worked from home during covid-19?

Table 8 - Work from Home

Particulars		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	400	100.0	100.0	100.0

Source: Based on own calculations



Graph 8 - Work from Home

Source: Based on own processing

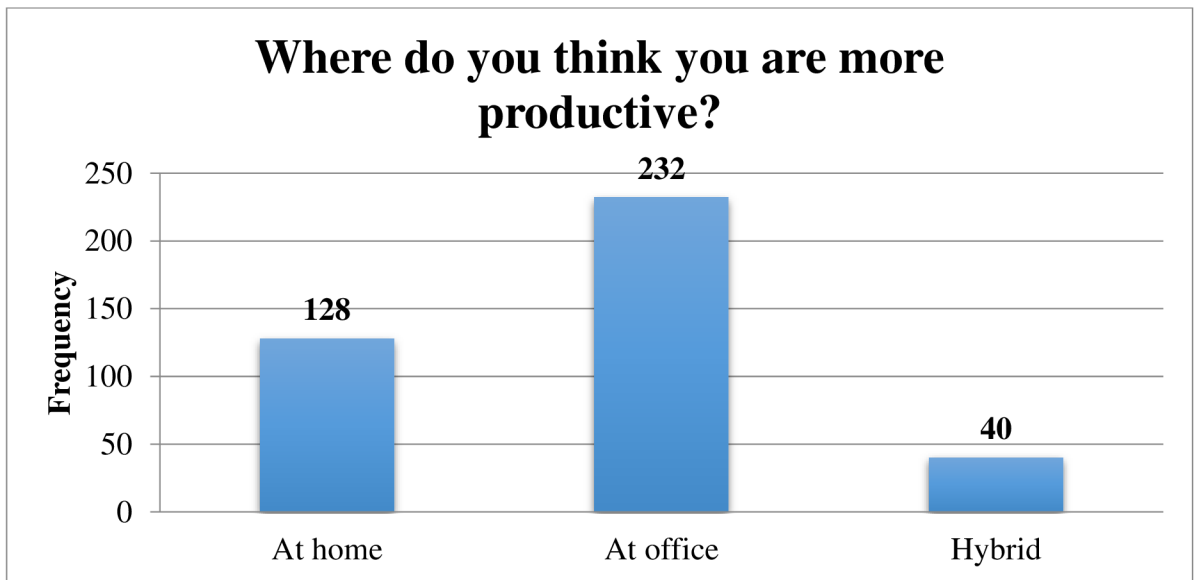
The figure 8 shows whether the employees have worked from home during covid-19. It is observed that almost all the respondents have worked from home during pandemic.

Where do you think you are more productive?

Table 9 - Productivity

Particulars		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	At home	128	32.0	32.0	32.0
	At office	232	58.0	58.0	90.0
	Hybrid	40	10.0	10.0	100.0
	Total	400	100.0	100.0	

Source: Based on own calculations



Graph 9 - Productivity

Source: Based on own processing

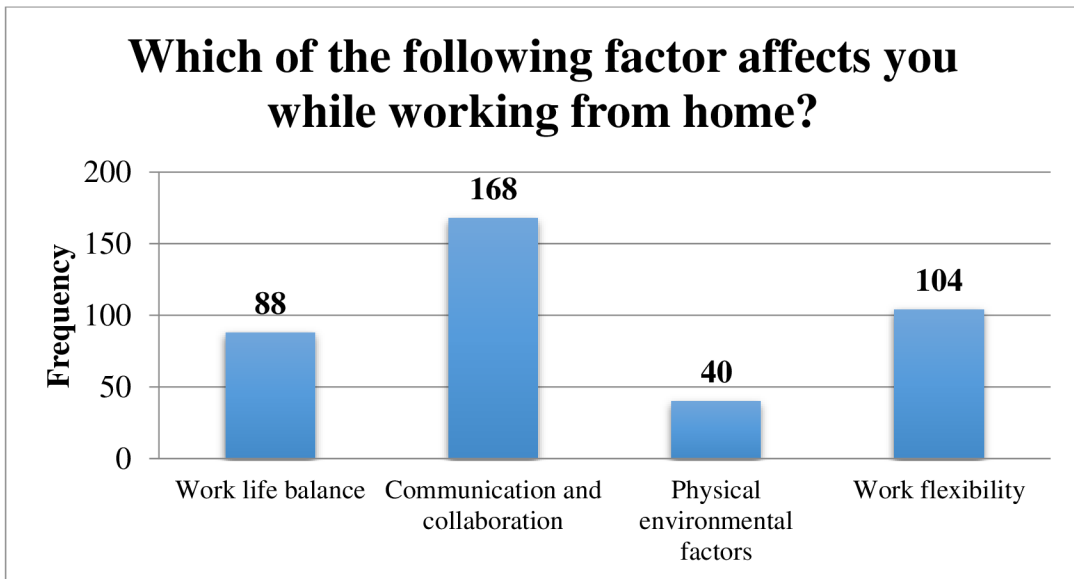
Figure 9 displays the opinion of respondents about whether they are more productive either at home or at office or else at both. There are 232 respondents who said that they are more productive at office as compare to home. While 128 respondents said that they feel more productive at home while working. However, 40 respondents said that they are more productive not only at home but also at office.

Which of the following factor affects you while working from home?

Table 10 - Affecting Factor

	Particulars	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Work life balance	88	22.0	22.0	22.0
	Communication and collaboration	168	42.0	42.0	64.0
	Physical environmental factors	40	10.0	10.0	74.0
	Work flexibility	104	26.0	26.0	100.0
	Total	400	100.0	100.0	

Source: Based on own calculations



Graph 10 - Affecting Factor

Source: Based on own processing

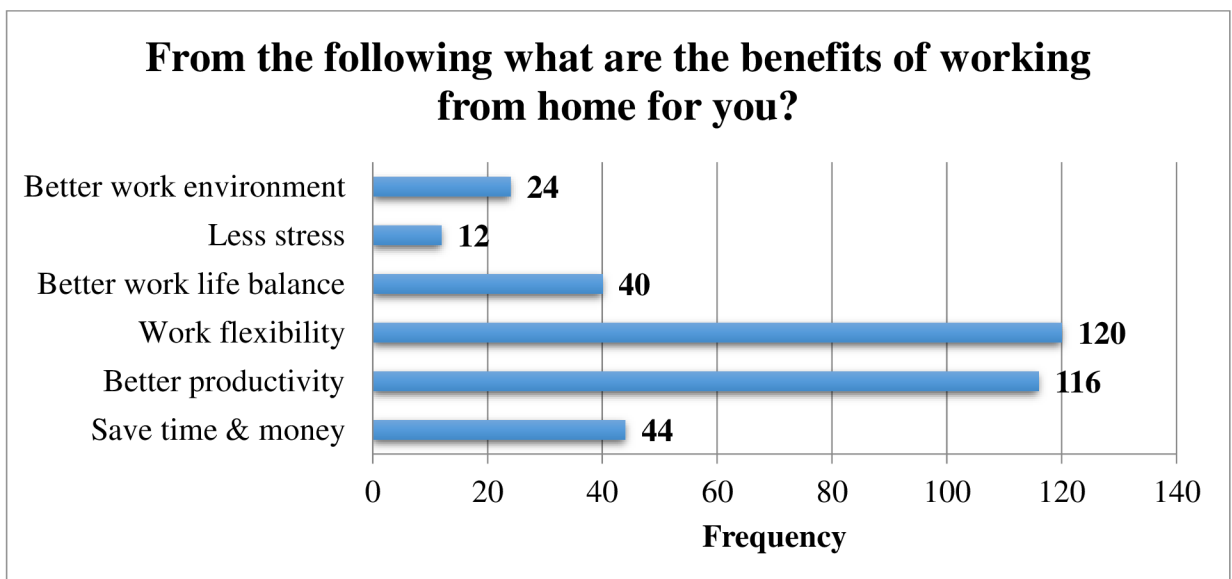
The figure 10 shows different factors influencing employees during work from home. 168 respondents said that they are getting affected by the problem of communication and collaboration with other employees while working from home as compare to other factors such as work life balance, physical environmental factors and work flexibility. 104 respondents are getting affected by work flexibility among other factors. Work life balance is major influencing factor according to 88 respondents. Moreover, physical environmental factors are affecting 40 respondents in comparison to remaining respondents.

From the following what are the benefits of working from home for you?

Table 11 - Benefits

Particulars		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Save time & money	44	11.0	11.0	22.0
	Better productivity	116	29.0	29.0	51.0
	Work flexibility	120	30.0	30.0	81.0
	Better work life balance	40	10.0	10.0	91.0
	Less stress	12	3.0	3.0	94.0
	Better work environment	24	6.0	6.0	100.0
	Total	400	100.0	100.0	

Source: Based on own calculations



Graph 11 - Benefits

Source: Based on own processing

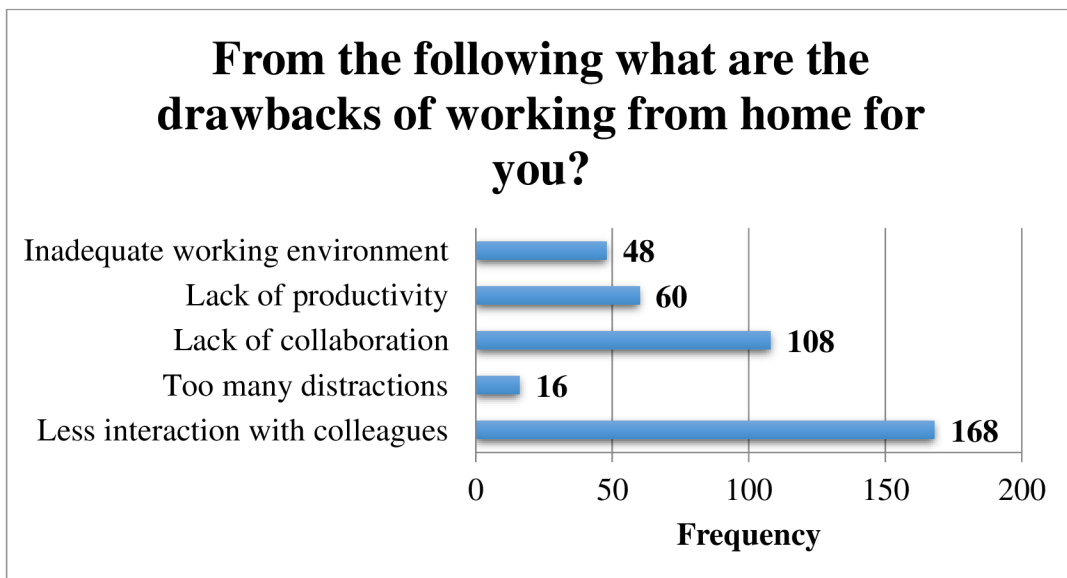
The benefits of work from home are described in figure 11. As it has been observed that work flexibility is the major benefit for 120 respondents. 116 respondents think that their productivity has increased due to working from home. 88 respondents said that working from home is good for them because it saves time as well as cost of commute.

From the following what are the drawbacks of working from home for you?

Table 12 - Drawbacks

Particulars		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less interaction with colleagues	168	42.0	42.0	42.0
	Too many distractions	16	4.0	4.0	46.0
	Lack of collaboration	108	27.0	27.0	73.0
	Lack of productivity	60	15.0	15.0	88.0
	Inadequate working environment	48	12.0	12.0	100.0
	Total	400	100.0	100.0	

Source: Based on own calculations



Graph 12 - Drawbacks

Source: Based on own processing

The cons of work from home are listed in figure 12. There are many disadvantages of working from home but the major disadvantage is less interaction with colleagues among others because the employees don't able to communicate with their colleagues as they used to do. In addition to this, respondents are not able to adequately collaborate with their colleagues due to work from home according to 108 respondents. The productivity of employees also gets decreased while working from home as per 60 respondents.

Given below are some statements factors, you are requested to state how the following factors are affecting your productivity while working from home during pandemic on a 5-scale point?

Frequency Analysis

Table 13 - Frequency Analysis I

Particulars	Affecting positively	Neutral	Affecting negatively	Affecting both positively & negatively	Not applicable	Total
Doing house chores	20	144	80	156	-	400
Having other people around	80	32	160	128	-	400
Having children around	52	84	140	56	68	400
Having pets around	148	12	32	84	124	400
More comfortable clothing	236	56	-	108	-	400
Being isolated	-	-	216	184	-	400
Physical well-being	72	24	232	72	-	400
Mental well-being	60	8	116	216	-	400
Emotional well-being	56	-	112	232	-	400
Work life balance	192	60	88	60	-	400

The above table shows number of factors affecting employees while working from home and the degree of affection for each factor is also covered. The results of analysis indicate that 156 respondents get affected positively as well negatively while doing house chores. 144 respondents said that they neither have positive effect nor have negative effect of performing house chores on their productivity. The productivity of 80 respondents is got affected by doing house chores during work from home. There are only 20 respondents who said that they have positive impact of doing house chores on their productivity.

160 respondents said that they get negatively affected by people around them while working from home. 128 respondents said that they get affected by both positively as well as negatively. 32 respondents have neutral opinion whereas 80 respondents are positively affected by having people around them.

There are 140 respondents who got negatively affected by children around them during working from home. 84 respondents have neutral opinion about the same. 52 respondents are positively affected and 56 respondents are affected positively as well as negatively when children are around them during work. There are 68 respondents for whom this factor is not applicable because they may don't have children at their home.

148 respondents said that they are positively affected when they have pets around them during work from home. 84 respondents get affected positively as well as negatively by pets around them. 124 respondents don't have pets at home that's by they have not applicable among five options. 12 respondents have neutral opinion and 32 respondents are negatively affected by pets around them.

There are 236 respondents who said that they have positive effect when they wear comfortable clothes which in turn enhance their productivity at work. 56 respondents are neutral about the same and remaining respondents have positive as well as negative effect of comfortable clothes on their performance.

216 respondents feel negativity while they were isolated at home during lockdown. While 184 respondents said that they feel sometimes positive and sometimes negative during isolation at home due to pandemic.

Physical well-being of 232 respondents got affected negatively during covid-19 as they were not able to go for walk, gym and outside for exercise due to lockdown. 72 respondents said that they have positive as well as negative effect on them in terms of physical well-being. 24 respondents are neutral and 72 respondents have positive effect in context of physical well-being despite of lockdown as they said that they were doing exercise regularly at their home.

As per 216 respondents their mental well-being was affected positively and negatively while working from home during pandemic. 116 respondents have a negative impact on their mental health due to pandemic because of that their productivity got affected. 8 respondents were neutral about the same and 60 respondents said that they have positive impact on their mental well-being.

After physical well-being, emotional well-being is a major factor as it has a massive impact on productivity of employees as compare to other factors. Emotional well-being of 232 respondents got affected positively as well as negatively during covid-19. 112 respondents said that they have a negative impact on their work performance because they were emotionally not well. While 56 respondents replied that they were emotionally well during covid crisis.

Work life balance is one of the crucial factors which has a positive impact on performance of employees after more comfortable clothing. 192 respondents said that their productivity was enhanced because of proper balance between their personal and professional life. There was negative impact of work life balance on 88 respondents. 120 respondents had neutral opinion about the same.

Descriptive Analysis

Table 14 - Descriptive Analysis

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Doing house chores	400	1	4	2.93	.977
Having other people around	400	1	4	2.84	1.089
Having children around	400	1	5	3.01	1.251
Having pets around	400	1	5	3.06	1.728
More comfortable clothing	400	1	4	1.95	1.298
Being isolated	400	2	4	3.18	.716
Physical well-being	400	1	4	2.76	.955
Mental well-being	400	1	4	3.22	1.060
Emotional well-being	400	1	4	3.30	1.030
Work life balance	400	1	4	2.04	1.145
Valid N (listwise)	400				

Source: Based on own calculations

Descriptive statistics describe the basic features of a dataset and its measurements. It helps a researcher to understand the data better. The analysis of descriptive statistics include mean, standard deviation, minimum and maximum which has been measured for the various factors listed in table. The respondents were requested to state their level of affection for each factor on five point likert scale.

Here, the five points consist affecting positively, neutral, affecting negatively, affecting both positively and negatively and not applicable. The analysis shows the minimum value of 1 for all the factors except one factor where 1 denotes affecting positively. While the maximum value is 4 for all factors which denotes affecting both positively and negatively.

However, there are 2 factors who have maximum value of 5 which depicts not applicable. The calculation of mean shows that emotional well-being is one of the most influential factor among other factors as it has the highest mean value of 3.30. This means the productivity of employees is massively affected by emotional well-being because during lockdown people are isolated in their homes and they might have been alone at home or else might have felt loneliness due to lack of social gatherings and interactions.

That's why they might not feel well in terms of emotional health which has resulted into reduction in productivity. While more comfortable clothing has the lowest mean of 1.95 as compare to other factors. In terms of standard deviation, having pets around while working from home has the highest value of 1.728 which means that the data is more dispersed in relation to its mean value. The data for factor called being isolated is less spread out from its mean as it has the standard deviation of 0.716 which is lowest among other factors.

Given below are some statements, you are requested to state your degree of agreement/disagreement on each of the statement as mentioned below on a 5-point scale?

Frequency Analysis

Table 15 - Frequency Analysis 2

Particulars	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	Total
Work from home						
Employees are expected to work overtime on a regular basis during pandemic.	124	96	84	64	32	400
In my company, women are allowed to reduce their working hours temporarily due to covid-19 pandemic as compare to men.	24	136	108	60	72	400
Work environment						
I am satisfied with the working environment at home.	112	164	104	20	-	400
I have a dedicated work space at home.	120	44	108	44	40	400
My home environment is free from interruptions and distractions.	84	76	72	108	60	400

I have all necessary equipment & high quality internet for work at home.	100	144	76	40	40	400
Employee productivity						
I have a high work performance during covid-19 pandemic.	56	136	136	52	20	400
I accomplish tasks quickly and efficiently during lockdown.	120	116	80	56	28	400
Job satisfaction						
I am satisfied with receiving the proper recognition for carrying out my responsibilities throughout the pandemic.	144	124	92	40	-	400
I am satisfied with my salary during covid-19 pandemic.	108	108	92	28	64	400
Work motivation						
My employer gives me complete freedom to set up my work schedule.	136	120	112	32	-	400
I can work more efficiently because I don't have to commute to the office.	124	64	124	44	44	400

My company offers me an opportunity to get promoted.	56	116	124	80	24	400
My job allows me to grow as a person which keeps me entertained during pandemic.	112	180	72	36	-	400

Source: Based on own calculations

The table no. 15 indicates enormous factors including work from home, work environment, employee productivity, job satisfaction and work motivation. Further, some statements regarding each factor are covered under the head of respective factors. The likert scale has been used for assessing the responses of respondents. Thus, the respondents are instructed to show their degree of agreement or disagreement about each mentioned statement on five point scale which stands for strongly agree, agree, neither agree nor disagree, disagree and strongly disagree.

First is work from home factor whose results shows that employees are expected to work overtime on a regular basis during pandemic because 124 respondents strongly agreed with the statement. While 136 respondents agreed that women working in their companies are allowed to reduce their working hours temporarily due to covid-19 pandemic in comparison to men which in turn suggests gender inequality.

The second factor is work environment where 164 respondents agreed that they are satisfied with their working environment and 120 respondents strongly agreed that they have dedicated work space at home. 108 respondents showed disagreement with the statement as they face interruptions and distraction while working from home. 144 respondents agreed that they have all the essential equipment and high quality internet for their work at home.

The third and the most important factor is employee productivity. 136 respondents agreed with the statement as they have reported high work performance during covid pandemic whereas other 136 respondents have neutral opinion about the same. 120 respondents strongly think that they accomplished tasks quickly and efficiently during lockdown.

Job satisfaction is fourth factor which shows that 144 respondents are satisfied with the recognition given to them by respective company and 108 respondents are strongly satisfied with their salary during pandemic.

The fifth and last factor is work motivation. The employer gives freedom to employees for setting up their work schedule as per their flexibility according to 136 respondents. 124 respondents strongly agreed and said that they can work more efficiently as they don't need to commute everyday from home to office. Apart from this, 124 respondents have neutral opinion about the statement that their company offers them enough opportunity to get promoted. 180 respondents agreed and said that they get an opportunity to grow personally as well as professionally which keeps them entertained during covid-19.

4.2 Hypothesis Analysis

H0: There is no significant difference between age and effect of work from home on emotional well-being of employees.

H1: There is a significant difference between age and effect of work from home on emotional well-being of employees.

Table 16 - Hypothesis Analysis 1

Test of Homogeneity of Variances			
Emotional well-being			
Levene Statistic	df1	df2	Sig.
1.036	4	395	.393

Source: Based on own calculations

ANOVA					
Emotional well-being					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2.621	4	.655	.608	.658
Within Groups	102.379	395	1.078		
Total	105.000	399			

Source: Based on own calculations

The analysis of variance known as one-way analysis of variance (or simply one-way ANOVA) compares the population means of two or more independent groups with a view to ascertain whether or not there is statistical evidence to suggest that the means of the associated populations are significantly different. The one-way analysis of variance is a type of parametric test.

The purpose of Levene's test of homogeneity of variances is to determine whether or not the score distribution is the same across all of the groups being compared. If the value of Significance is higher than 0.05, it can be concluded that the assumptions of homogeneity of variance and vice versa have not been violated. This is the case when the Significance value is greater than 0.05.

According to the findings of the Anova test, there is not a significant difference between age and the effect of working from home on the emotional well-being of workers. Since the F value is 0.608 and the significance value is 0.658, this indicates that the significance level is greater than the 5% threshold. As a result, the null hypothesis has been shown to be correct while the alternative hypothesis has been shown to be incorrect.

H0: There is no significant difference between age and the impact of work from home on performance of employees during pandemic.

H1: There is a significant difference between age and the impact of work from home on performance of employees during pandemic.

Table 17 - Hypothesis Analysis 2

Test of Homogeneity of Variances			
I have a high work performance during covid-19 pandemic.			
Levene Statistic	df1	df2	Sig.
1.763	4	395	.143

Source: Based on own calculations

ANOVA					
I have a high work performance during covid-19 pandemic.					
	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	4.112	4	1.028	.942	.443
Within Groups	103.678	395	1.091		
Total	107.790	399			

Source: Based on own calculations

The test of homogeneity of variance indicates that significance value of 0.143 is more than 0.05 which means the assumptions of homogeneity of variance are met. From the analysis of Anova, it has been found that the F value is 0.942 and the p-value is 0.443 which is more than 0.05. This indicates that there is no significant difference between age and the impact of work from home on performance of employees during pandemic.

H0: There is no significant relationship between marital status and effect of work from home on work life balance of employees.

H1: There is a significant relationship between marital status and effect of work from home on work life balance of employees.

Table 18 - Hypothesis Analysis 3

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.899 ^a	3	.407
Likelihood Ratio	2.844	3	.416
Linear-by-Linear Association	.379	1	.538
N of Valid Cases	400		
a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 5.85.			

Source: Based on own calculations

Symmetric Measures					
		Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Interval by Interval	Pearson's R	.062	.099	.614	.541 ^c
Ordinal by Ordinal	Spearman Correlation	.065	.100	.649	.518 ^c
N of Valid Cases		400			
a. Not assuming the null hypothesis.					
b. Using the asymptotic standard error assuming the null hypothesis.					
c. Based on normal approximation.					

Source: Based on own calculations

The p-value of the statistics was calculated to be 0.407, which is greater than the level of significance of 5%, as determined by the calculation of the chi-square analysis. As a result, we can conclude that the null hypothesis is correct. This indicates that there is no significant correlation between employees' marital status and the impact of working from home on their ability to maintain a healthy work-life balance.

The Pearson correlation coefficient is a test statistic that measures the statistical relationship or association between two continuous variables. This statistic was named after its creator, Karl Pearson. If the value of correlation is close to 1, then it is said to be a perfect correlation, which indicates that as one variable increases, another referred to also increase and vice versa. If the value of correlation is further away from 1, then it is not considered a perfect correlation.

When the value of the coefficient falls anywhere within the range of 0.5 to 1, it is said that there is a strong correlation between the two variables. The value of the correlation is considered to have a medium correlation when it falls somewhere in the range of -0.30 to -0.49, inclusive. When the value of the correlation is less than +.29, it is said that there is a slight correlation between the variables in question. If the correlation value is equal to zero, then it can be concluded that there is no correlation between the two variables.

The results of the calculation of Pearson's correlation show that the P value is 0.541, which is greater than the significance level of 0.05. As a direct consequence of this, the null hypothesis has been validated, whereas the alternative hypothesis has been discredited. The value of r is 0.062, which indicates that there is a strong positive correlation between the variables that are dependent on each other and the variables that are independent of each other. In this case, the marital status of the respondents is the independent variable, and the effect of working from home on the overall work-life balance of employees is the dependent variable. The value of spearman's correlation is 0.065, and this value also indicates that there is a strong positive correlation between variables.

H0: There is no significant relationship between gender and factors affecting employees while working from home.

H1: There is a significant relationship between gender and factors affecting employees while working from home.

Table 19 - Hypothesis Analysis 4

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.708 ^a	3	.635
Likelihood Ratio	1.677	3	.642
Linear-by-Linear Association	.012	1	.912
N of Valid Cases	400		
a. 1 cells (12.5%) have expected count less than 5. The minimum expected count is 4.10.			

Source: Based on own calculations

Symmetric Measures					
		Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Interval by Interval	Pearson's R	-.011	.100	-.110	.912 ^c
Ordinal by Ordinal	Spearman Correlation	-.016	.100	-.155	.877 ^c
N of Valid Cases		400			
a. Not assuming the null hypothesis.					
b. Using the asymptotic standard error assuming the null hypothesis.					
c. Based on normal approximation.					

Source: Based on own calculations

Following the completion of the investigation, it was found that the P-value for the chi-square test is 0.635, which is greater than the level of significance set at 5%. As a result, the null hypothesis has been shown to be correct, and the alternative hypothesis has been shown to be incorrect. This finding suggests that there is no significant connection between gender and the factors that influence employees while they are working from home.

Since the P value for Pearson's correlation is 0.912, which is greater than 0.05, it can be concluded that the null hypothesis is correct. On the other hand, the calculated value of Pearson's correlation is -0.011, and the calculated value of Spearman's correlation is -0.016. These values indicate that there is a very slight inverse correlation between gender and factors that affect employees while they are working from home, though it is only a very slight correlation.

5. Results and Discussion

The investigation was conducted by collecting primary data through the interrogation of four hundred different respondents. The responses of respondents were analysed with a variety of statistical tools, including frequency analysis, descriptive statistics, chi-square, Anova, and correlation, amongst others. The demographic factors have been evaluated to accomplish the purpose of the analysis. When conducting an analysis of various demographic factors, factors such as a person's age, gender, marital status, qualification, number of years of experience, and position within an organisation are taken into consideration.

According to the findings of the demographic composition, there have been a total of four hundred respondents who have been interviewed for the survey. Of those respondents, there have been 236 female respondents and 164 male respondents. Most respondents are between 21 and 30 years old and have attained their high school diplomas. Most respondents are employed as programmers in their respective companies and have an experience level ranging from one to five years. More than half of the respondents are single. Most respondents have monthly earnings that are greater than one hundred thousand rupees.

Only those respondents who have ever worked from home during a pandemic were included in the survey; those respondents who have never worked from home during a pandemic were not asked to participate. The survey included a total of four hundred participants. In their responses, the respondents indicated that they are more productive at the office as opposed to working from home because working from home presents them with the challenge of a lack of interactions with their co-workers. In addition to this, respondents are not able to collaborate with their co-workers in an adequate manner because they work from home, which leads to low levels of productivity.

In addition to its cons, working from home also has some advantages. One of the primary advantages of working from home for employees is increased flexibility in their work schedules. While there are some respondents who reported an increase in their productivity while working from home, most respondents reported no such change. When compared to other factors such as work-life balance, physical environmental factors, and work flexibility, the factor of communication and collaboration has the greatest impact on the respondents. This is because the respondents were unable to effectively communicate and collaborate with their colleagues virtually because they were isolated at home.

When employees are given the opportunity to perform their jobs from home, there are a multitude of factors that influence their performance. Most of the respondent's report being affected both positively and negatively in terms of their mental well-being as well as while performing chores around the house. Respondents claimed that while working from home, they are adversely impacted by the presence of others, particularly children. In addition, they experienced negative emotions while they were confined to their homes during the lockdown. Since they were prevented from going for walks, to the gym, or outside to exercise because of the lockdown, the respondents' physical well-being suffered during the COVID-19.

After an employee's physical well-being, an employee's emotional well-being should be considered a major factor because it has a greater influence on that employee's productivity than any other factor. Some of those who participated in the survey mentioned that they feel better when they are surrounded by animals and when they are dressed in loose-fitting clothes. After more comfortable clothing, the work-life balance of employees is one of the most crucial factors that has a positive impact on the performance of those employees. The findings of descriptive statistics indicate that an individual's emotional well-being, among a number of other factors, is one of the most influential factors. Having pets in the house while working from home results in data that is more spread out in comparison to its mean. This is measured by the standard deviation.

The findings of the study revealed that workers are expected to put in consistent extra hours while the pandemic is in effect. On the other hand, respondents believed that women employed by their companies were permitted to temporarily cut back on the number of hours they worked due to the covid-19 pandemic. Respondents agreed that they are satisfied with their working environment because they have a dedicated workspace along with all the required equipment's and high-quality internet at home, where they do not face any kind of interruptions and distractions.

Respondents have reported high work performance throughout the course of the COVID pandemic because they were able to complete tasks quickly and effectively. They are pleased with both the financial reward and the recognition they have received from the company. In the context of work motivation, the employer gives employees the freedom to set up their work schedule according to their own flexibility. In addition to this, the employer offers employees numerous opportunities to gain experience personally as well as

professionally, which motivates employees to perform better on the job. Some of the respondents mentioned that because they do not have to travel from their homes to their offices daily, they are able to get more work done.

According to the results of the Anova test, there is not a significant difference between age and the effect of working from home on the emotional well-being of workers. There is no significant difference between age and the impact of work from home on performance of employees during pandemic. This was the conclusion drawn from the testing of the hypothesis. The chi-square analysis revealed that there is no significant correlation between employees' marital status and the impact that working from home has on their ability to maintain a healthy work-life balance.

It also showed that gender does not play a significant role in the factors that influence employees while they are working from home. According to the findings of Pearson's correlation test, there is a significant degree of favourable association between an employee's marital status and the impact that working from home has on their overall level of work-life harmony. It also indicated that there is a very slight inverse correlation between gender and factors that affect employees while they are working from home. This correlation was very slight, but it did indicate that there is a correlation between the two.

6. Conclusion

The purpose of this thesis is to investigate the influence that working from home has on the productivity of employees during the COVID-19 pandemic. The primary purpose of this thesis is to investigate the impact that working from home had on the overall performance of employees in India during the COVID-19 pandemic. In addition, it seeks to determine how the specific aspects of working from home, such as a healthy work-life balance and emotional well-being, are influenced by and correspond with job performance. In addition to this, the thesis identifies a variety of factors that influence the job performance of employees as well as issues that employees face during pandemics in terms of the culture of working from home.

Both primary and secondary sources of information are incorporated into the thesis. Getting an in-depth understanding of the topic is accomplished by using the secondary data, and the primary data is gathered from four hundred individuals currently employed in the information technology industry in India. The SPSS software is used to perform the analysis on the primary data. On the primary data, a number of analyses, including frequency analysis, descriptive statistics, and hypothesis testing, have been conducted. The Chi-square test, the correlation test, and the Anova test are used in the process of evaluating the hypothesis.

According to the findings of the study, there were significantly more female respondents than male respondents. Most respondents pointed out that working from home presents them with the challenge of missing opportunities to interact with their co-workers, and as a result, they can get more done when they are in the office. They are also incapable of effectively collaborating with the other members of their team, which results in a lack of productivity. On the other hand, employees who have the option to work from home benefit from increased work flexibility. Communication and collaboration have a major influence on the work performance of employees as compared to other factors such as work life balance, physical environmental factors, and work flexibility. This is because employees who work from home were unable to effectively communicate and collaborate with their co-workers due to the isolation that comes with working from home. Nevertheless, during a pandemic, both the employees' physical health and their mental health are likely to suffer to a significant degree. The respondents also felt mentally ill because they were isolated at home due to lockdown which led to feeling of loneliness. However, a healthier balance

between work and personal life, in addition to more comfortable clothing, is associated with improved job performance among employees.

According to the descriptive statistics, an individual's emotional well-being is one of the factors that, among others, has the most significant impact. Aside from this, employees are expected to work regular overtime during the pandemic, and they believed that women working in their companies were permitted to temporarily reduce their working hours due to the covid-19 pandemic. Both beliefs were incorrect. Most respondents expressed contentment with the conditions under which they work from home. They are pleased not only with the compensation but also with the recognition that is given to them by the company, which leads to an increase in the work performance of employees during lockdown. In addition, employees are motivated to perform more effectively when their employer provides them with sufficient opportunities for personal as well as professional development.

According to the findings of the Anova test, the results of the testing of the hypothesis indicated that there is no significant difference between age and the effect of working from home on the emotional well-being of employees. The chi-square analysis revealed that there is no significant correlation between employees' marital status and the impact that working from home has on their ability to maintain a healthy work-life balance. It also showed that gender does not play a significant role in the factors that influence employees while they are working from home. According to the findings of Pearson's correlation test, there is a significant degree of favourable association between an employee's marital status and the impact that working from home has on their overall level of work-life harmony. It also indicated that there is a very slight inverse correlation between gender and factors that affect employees while they are working from home. This correlation was very slight, but it did indicate that there is a correlation between the two.

In general, the insights from the practical part indicate that even though there are so many benefits associated with working from home during the COVID-19 pandemic, there is an impact on employee performance. Respondents will find it simpler to strike a healthy balance between their professional and personal lives because of this study. However, both the respondents' physical and emotional well-beings were negatively impacted, which is not good for the respondents' health because it will lead to an increase in stress level and may cause depression or any other disease. Additionally, it may result in a decrease in overall

productivity. Because of this, the company ought to try to implement a hybrid culture at the place of business. This would entail giving employees the option of working from home for a portion of the week while mandating that they come into the office for the other days of the week. In addition to this, the company ought to hold webinars and seminars for its staff members about how to improve their emotional as well as mental well-being, which may assist them in terms of their personal development and may also result in improved productivity. The company should make sure that it reduces the stress and feeling of loneliness by organizing various activities virtually and by reducing the workload of employees during covid-19 crisis.

7. References

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8. Appendix

Questionnaire - Impact of work from home on Employee Performance during Covid-19 Pandemic in the IT sector in India

Dear Sir/Madam, I am a student from Czech University of Life Sciences, Prague. I will be very thankful if you can spare 5 minutes from your valuable time to answer the questionnaire which will help me to know about the impact of work from home on employees performance. Please answer the entire question honestly and without any forced influence.

Disclaimer: This questionnaire is prepared for the purpose of research project. The information will be kept confidential and will not be used for any other purpose than project.

Name *

Your answer

Email-ID *

Your answer

Gender *

- Male
- Female
- Other

Age *

- Below 20
- 21-30
- 31-40
- 41-50
- 51&above

Qualification *

- SSC
- HSC
- Undergraduate
- Postgraduation
- PHD

Marital Status *

- Single
- Married

Position in the organization *

- Programmer
 - Programme Analyst
 - Associate
 - Senior Associate
 - Team leader
 - Manager
 - other
-

No. of years of experience *

- Less than 1 year
- 1-5 years
- 5-10 years
- Above 10 years

Income (per month) *

- Less than 10,000 rs.
- 10,000-25,000 rs.
- 26,000-50,000 rs.
- 51,000-75,000 rs.
- 76,000-100,000
- More than 1,00,000 rs.

Have you ever worked from home during covid-19? *

- Yes
- No

Where do you think you are more productive? *

- At home
- At office
- Hybrid (a mix of working at home as well in office)

Which of the following factor affects you while working from home? *

- Work life balance
- Communication and Collaboration
- Physical environmental factors
- Work flexibility

From the following what are the benefits of working from home for you? *

- Save time & money
- Better productivity
- Work flexibility
- Better work life balance
- Less stress
- Better work environment

From the following what are the drawbacks of working from home for you? *

- Less interaction with colleagues
- Too many distractions
- Lack of collaboration
- Lack of productivity
- Inadequate working environment

Given below are some statements factors, you are requested to state how the following factors are affecting your productivity while working from home during pandemic on a 5-scale point?

Particulars	Affecting positively	Neutral	Affecting negatively	Affecting both positively & negatively	Not applicable
Doing house chores					
Having other people around					
Having children around					
Having pets around					
More comfortable clothing					
Being isolated					
Physical well-being					
Mental well-being					
Emotional well-being					
Work life balance					

Given below are some statements, you are requested to state your degree of agreement/disagreement on each of the statement as mentioned below on a 5-point scale?

Particulars	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
Employees are expected to work overtime on a regular basis during pandemic.					
In my company, women are allowed to reduce their working hours temporarily due to covid-19 pandemic as compare to men.					
I am satisfied with the working environment at home.					
I have a dedicated work space at home.					
My home environment is free from interruptions and distractions.					
I have all necessary equipment & high quality internet for work at home.					
I have a high work performance during covid-19 pandemic.					
I accomplish tasks quickly and efficiently during lockdown.					

I am satisfied with receiving the proper recognition for carrying out my responsibilities throughout the pandemic.					
I am satisfied with my salary during covid-19 pandemic.					
My employer gives me complete freedom to set up my work schedule.					
I can work more efficiently because I don't have to commute to the office.					
My company offers me an opportunity to get promoted.					
My job allows me to grow as a person which keeps me entertained during pandemic.					