Impact of Work from Home on Job Stress, Employee Productivity, and Work Life Balance among Female Workers in Pakistan: Supervisor Support as a Moderator

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Abstract

The primary goal of this study is to thoroughly investigate the effects of work from home on job stress, employee productivity, and work-life balance in the perspective of Pakistan's telecommunications industry, with supervisor support serving as a moderator. The goal of the study is to ascertain the impact that these variables have on Pakistan's female telecom workers. To successfully accomplish this goal, the study first provides a thorough and logical overview of the earlier research on the subject. Second, the current study uses a combination of descriptive and explanatory research and adheres to a quantitative, and cross-sectional approach. The target demographic is only the female employees who work in the corporate offices of Pakistan's four largest telecom companies, and the analysis is conducted on an individual basis. Two hundred and seventy-nine respondents, chosen using the probability sampling technique, make up the study's sample size. Self-administered questionnaires are the only tool used to gather data from participants in a survey research approach. The acquired data are subjected to descriptive statistics analysis, reliability analysis, correlation analysis, and regression analysis using SPSS software in order to test the given hypotheses. According to the findings of this study, work-from-home practices have a considerable, negative influence on employee productivity and work-life balance. However, Work from Home has a significant but positive impact on Job Stress. Furthermore, the findings indicate that Supervisor Support positively moderates the relationship between Work from Home and Job Stress, Employee Productivity, and Work Life Balance, respectively.

Keywords: WFH, Job Stress, Employee Productivity, Work Life Balance, Supervisor Support, Female Workers.

Topic: Impact of WFH on job stress, employee productivity, work life balance with the moderating role of supervisor support among female workers in the Telecommunication sector in the twin cities of Pakistan.

Chapter 1: Introduction

1.1 Background:

A novel coronavirus was discovered in Wuhan, China, in December 2019. The viral infection became a global pandemic in a relatively short period of time (Bavel et al., 2020). The virus killed over 337,736 individuals and infected more than 52,066,14 people worldwide in 216 nations and territories in less than three months (WHO). In light of the novel Coronavirus-related epidemic, millions of individuals all around the world have unanticipatedly switched to working from home. The World Health Organization (WHO) proclaimed Covid-19 a global pandemic on March 11, 2020, in light of the significant impact on human life. The Pakistani Prime Minister issued a complete national lockdown due to the dire public health condition. The lockdown period drastically altered the working environment, forcing many businesses worldwide to quickly adapt to the "new standard" of working from home. Several businesses in practically every sector decided to permit employees to work remotely, primarily from home, to decrease social contact (Prasad, Rao, Vaidya, & Muralidhar, 2020).

Due to the COVID-19 global epidemic, WFH is now the norm everywhere. Employees in industrialized countries were already familiar with the idea of remote work before the pandemic. However, WFH was a rare occurrence in emerging nations like India. (Lonska et al., 2021). Additionally, organizations in developing nations lacked the necessary infrastructure to support remote working. As per, Irshad et al. (2021), almost all of the institutions have been obliged to move to WFH as a result of the global epidemic, despite the fact that the infrastructure does not support such a quick change. One of the unexpected effects of the pandemic was how quickly and effectively businesses implemented the change to remote work. (Williams, 2021). Although

it was first believed to be temporary, the majority of individuals were still working from home as of the beginning of 2021 because 93% of them lived in nations where workplace closures of some kind were still in effect (International Labour Organization, 2021). Additionally, organizations are considering how to best use telework as a common work paradigm following the pandemic as they have understood that it may be a long-term or permanent change.

According to Sandoval-Reyes (2021), both companies and employees might not have been physically, intellectually, or technologically equipped to handle all of the issues that came with working from home. This is true because remote work requirements during a lockdown are different. Remote workers had to contend with other family members staying at home and a great deal of worry over their jobs, health, and the economy. Work, specifically remote work in this example, and perceived workplace stress were no longer related. When the pandemic hit, both the husband and wife moved their offices indoors, and the kids' schools moved inside as well. The line between work and non-work became blurrier as the home-based job increased, making it more difficult for the women to maintain this balance (Del Boca et al., 2020; Feng and Savani, 2020).

The telecom sector, which employs at least 1.36 million people overall, was clearly impacted by the lockdown. The telecommunications industry of Pakistan is an important sector that contributes fairly to the national GDP and economy through taxes and employment opportunities. All of the telecommunications providers that offer internet services support Pakistan's digitization effort both directly and indirectly. Pakistan's telecom sector is crucial to the country's GDP. For their efficient operation, Pakistan's government, educational system, healthcare system, business, transportation, and socializing all rely heavily on the telecom industry (Harianawala, 2017).

1.2 Problem Statement:

Due to the COVID-19 epidemic, working women have experienced significant changes and instability. One of the biggest issues working women confront, among others, is achieving a harmonious role balance. Women need help to achieve a satisfying role balance since they are required to carry out an excessive number of domestic duties. The extent and volume of domestic work have greatly expanded as a result of the global spread of COVID-19, along with the

number of dependents to be cared for, the number of children out of school, and the amount of cleaning and health services required (United Nations, 2020).

According to research among American parents, the coronavirus outbreak has led to increased stress and poor mental health since working women may have spread the illness (Hamel & Salganicoff, 2020). This research implies that working women may shoulder a more significant proportion of the load, which puts them in a difficult situation in terms of juggling their roles. Additionally, many working women have been unable to access childcare and other support services throughout the lockdown, adding to the pressure on women and decreasing their capacity to work. Bloom et.al., (2015) stated that employees who work from home cause two problems, namely productivity and profitability, as well as worsening work-life balance. Female employees experience more conflicts between work and family in terms of productivity and work-life balance since they must juggle two responsibilities—household chores and work—along with the demands of the job. It becomes harder to balance the demands of doing the housework and the work simultaneously. Therefore, women who work and perform activities at the same time have conflicts in their many jobs.

Uddin (2021) also reports that women in Muslim patriarchic societies like Pakistan and Bangladesh faced more challenges in WFH due to lack of available time, sociocultural and family norms, and gender stereotypes. Moreover, the existing literature provides inconsistent evidence regarding WFH impacts from the perspective of Pakistani working women. In addressing this gap, this study may enrich the existing literature by providing an understanding of the impact of WFH on working women's job stress, productivity and work-life balance.

1.3 Research Objectives:

- To examine the impact of WFH on Job Stress among female workers.
- To examine the impact of WFH on Employee Productivity among female workers.
- To study the impact of WFH on Work Life Balance among female workers.
- To investigate the moderating role of supervisor support between WFH and job stress, employee productivity, work life balance.

1.4 Research Questions:

- What is the impact of WFH on job stress among female workers?
- What is the impact of WFH on employee productivity among female workers?
- What is the impact of WFH on Work Life Balance among female workers?
- Does supervisor support moderate the relationship between WFH and job stress among female workers?
- Does supervisor support moderate the relationship between WFH and employee productivity among female workers?
- Does supervisor support moderate the relationship between WFH and work life balance among female workers?

1.5 Research Gap & Significance of the Study:

This study focuses on female workers in the telecommunication industry in Pakistan's twin cities (Rawalpindi and Islamabad). Numerous studies have emphasized the issues that women confront in Western and industrialized countries (Zhanget et al., 2020), but there needs to be more emphasis on Eastern and developing societies (Lewis, 2020). Additionally, research during COVID-19 has focused on the work-life balance of dual-earner couples (Craig & Churchill, 2020), the burden of caring on women (Power, 2020), employee adjustment and well-being (Carnevale & Hatak, 2020), and teachers' methods of coping. As a result, this study contributes to the literature by identifying the difficulties of WFH among female workers and by outlining ways to get past those constraints. In addressing this gap, this study may enrich the existing literature by providing an understanding of the impact of WFH on working women's job stress, productivity, and work-life balance.

Chapter 2: Literature Review

2. Work from Home

According to Bolisani et al. (2020), "Working from home" (WFH) has various names, including "telework," "smart work," "telecommuting," and "remote work," and while there is no universal definition, it is typically regarded as a way to conduct business "away from the office" through electronic connections. The term "remote working" was adopted by Baker et al. (2007) because it has been investigated under a variety of labels with no agreed-upon definition. He clarified that terminology is used inconsistently and interchangeably among studies and that definitions and procedures for acquiring data varied. WFH refers to the ability of employees to perform job-related tasks remotely, in this context, from home, using technology. (Grant et al., 2019). Working from any location other than the designated space supplied by the employer is what Aczel et al. (2021) classified as WFH. The term "working from home" is utilized in this report because that is the subject at hand of the study.

Before the epidemic, discussions about the future of work-life balance were murky and frequently questioned, according to Vyas and Butakhieo (2021). However, COVID-19 arrived and made everyone swiftly adjust, which led to numerous firms choosing to try WFH. The authors further added that WFH was not previously viable and was a significant difficulty for those residing in tiny homes in Hong Kong because it necessitates a private and designated area for conducting business.

Several studies report that WFH has positive outcomes for both employees and employers. These include reduced commuting time, reduced office politics, using less office space, increased motivation, improved gender diversity, healthier workforces with less absenteeism and turnover, higher talent retention, job satisfaction, and better productivity. (Lakshmi et al., 2017; Vyas & Butakhieo 2021). Similarly, other studies indicated that WFH can increase employees' productivity, job engagement, job performance, job satisfaction, autonomy, work flexibility, reduce work-life conflict and commuting (Grant et al., 2019; Delanoeij & Verbruggen 2020; Purwanto et al., 2020). However, other several studies report that WFH can pose many challenges and drawbacks. Working from home can increase feelings of isolation, high job

stress, increased distractions due to young children or family members, decreased productivity and reduced job satisfaction and can blur line between work and family and lead to overwork (Kazekami 2020; Grant et al., 2019). Purwanto et al., (2020) argued that employees working at home have to pay for electricity and the internet costs themselves. Eddleston and Mulki (2017) also revealed that WFH can cause inability of remote workers to disengage from work and disrupting their work life balance.

In comparison to males, women frequently adopt less flexible work options, including telecommuting, and instead choose to work less hours due to cultural expectations, according to Wheatley's (2017) research. He said that it is more likely that female employees will use such arrangements to manage their domestic chores and mothering responsibilities, turning an otherwise "ideal" arrangement into one that is "restrictive." According to Van der Lippe and Lippényi (2018), having high expectations for one's job can make work-family disputes worse. The authors contend that WFH causes more work-family problems for women based on their observations. Women are expected to be more involved as parents by society than are men. Support networks within the company, particularly those that include female coworkers, may help to mitigate some of this. The authors further assert that in order to maximize the advantages of telecommuting, organizations that offer it must be aware of any potential effects of WFH on women. Women should also be involved in discussions about the arrangements and settings for telecommuting, including how it should be set up at home. According to Hamel and Salganicoff (2020) study, the coronavirus outbreak has caused working mothers to experience increased stress and poor mental health. This research implies that working women may shoulder a more significant proportion of the load, which puts them in a difficult situation in terms of juggling their roles. Additionally, many working women have been without access to childcare and other support services during the lockdown, which adds to their stress and reduces their productivity and ability to work effectively and efficiently.

Also, as per Uddin (2021), women in Muslim patriarchal societies like Pakistan and Bangladesh have more significant difficulties in WFH as a result of time constraints, sociocultural and family standards, and gender stereotypes. Additionally, there is conflicting information addressing the effects of WFH from the perspective of Pakistani working women in the research that is currently available. By addressing this gap, this study may contribute to the body of research by

illuminating how WFH affects working women's productivity, work-life balance, and workplace stress.

2.1 Work from Home and Job Stress

As per Vijayan (2018), job stress is a result of or a reaction to specific environmental stressors. Additionally, he included a list of some of the key elements that can contribute to workplace stress, including job stability, autonomy, role conflicts, shift work, low compensation, technological advancements, low morale, and a lack of recognition. Job stress , according to Wolor (2021), is a phenomenon that a person experiences when what is expected does not materialize and this state puts strain on his life. Employee work stress can be attributed to three different factors: environmental, organizational, and individual. Environmental factors include environmental uncertainty that affects organizational change and technological advancements, organizational factors like high task demands, and individual factors like the employee's personal issues. Employee stress can also be influenced by familial circumstances, such as having little or no family support and a lack of stability in one's home (Robbins & Judge, 2019; Ahmed & Ramzan, 2013).

With the COVID-19 pandemic currently underway, work from home has increased in popularity as a result of organizational and governmental measures aimed at reducing social isolation. These measures have been linked to detrimental impacts on stress levels, mental health, and health-related behaviors. Covid-19 affected many people who dealt with a wide range of psychological issues, including stress, worry, and frustration, according to many recent studies. Stress and weariness have a negative impact on employee productivity and work-life balance, according to a research of health professionals (Yldrm & Solmaz, 2020). Separating employees from their coworkers can also be difficult and lower employee morale (Lim & Teo, 2000).

Previous studies on the relationship between work-life balance related stress and remote work suggested that employees who swiftly transition to remote work may experience difficulties. Role stress, role overload from juggling work and home obligations, perceived organizational support concerns, the effect of the physical environment on job performance, and the effect of subjective time experiences on work stress are a few examples of these problems. Each of these fields of study adds to and supports beliefs that stress is probably brought on by "role strain,"

"role overload," and "spillover" from one's home to their workplace and vice versa (Duxbury et al., 2018; Eldor et al., 2017). Conversely, some studies imply that work-related occurrences might have a positive effect on families; often, spillover causes or makes work-family disputes worse (Duxbury et al., 2018). According to Liu and Lo (2018), WFH frequently causes employees to lack distinct boundaries between their personal and professional lives. They experience work overload, which makes them more stressed. Also, as per Fan et al. (2019), stress between work and home life frequently results from deeply ingrained gender norms around family and work, making women and men from lower socioeconomic groups the most vulnerable. Women were found to be disproportionately affected by work-family stress and burnout, according to a poll conducted in the early stages of the pandemic (LeanIn.org & Survey Monkey, 2020). In particular, women who work full-time and have children or a spouse reported providing care for 20 more hours per week on average than men, with women of color and single moms reporting significantly higher amounts.

When compared to office job, WFH has a negative impact on emotions including loneliness, irritation, concern, and guilt, according to Mann et al. (2020). Additionally, they discovered that WFH team members had a somewhat higher level of stress-related mental and physical health problems. Galanti et al. (2021) made the case that WFH had a significant impact on remote workers owing to the presence of partners and children involved in work and school activities, the interruption of child-care and education services witnessed during the pandemic, and the need to assist to household chores, aid children to engage with their online distance teaching in the morning, support with their homework in the afternoon, etc. in addition to their own job tasks. Greater family-work conflict forced employees to work longer hours, adding to their stress levels. According to a study by Arwin et al. (2021), as many as 65% of female employees who had worked from home for two weeks started to feel overwhelmed and stressed as a result of the mounting workload and their domestic responsibilities, which increased their stress levels in both their work and personal lives.

Lastly, Akmal et al. (2021) noted that Indonesian married women who worked from home during the pandemic faced significant levels of stress because of societal expectations, a lack of family support, and organizational assistance. Their work-family conflict increased as a result of the need to juggle work schedules with those of other family members. Thus according Craig and

Churchill (2020), higher time pressure for multitasking needs, including gendered responsibilities and job tasks, may be the reason why women tend to encounter higher stress and disruption of work-family interfaces during WFH.

H1: WFH is positively associated with job stress among female workers, such that the more WFH is, greater is the job stress.

2.2 Work from Home and Employee Productivity

Employee conduct and performance in the workplace result in employee productivity, which contributes to the profitability of the company and the achievement of its objectives. Productivity has also been described as a crucial management tool for defining performance standards and goals and inspiring employees to maintain the long-term viability of the company. It may also be described as a ranking system that most businesses use to assess the skills of their employees (Hartini et al., 2019; Van Nguyen et al., 2021).

According to Patanjali et al (2022) survey of Indian IT professionals conducted in 2022, they reported that WFH's IT staff members were more productive than they had been previously because of the efficient use of commute time and the need to fulfil higher standards. They came to the conclusion that organizational elements including autonomy and empowerment, employee independence, and a supportive atmosphere were essential for assuring employees' productivity—even in a WFH context. Bloom et al., (2015) conducted a study on of the effect of WFH among call center employees in China. Their findings demonstrated that when call center workers began working from home, their productivity climbed by 9% and turnover decreased by 50%. However, they also discovered that because they might not be noticeable to management, employees were concerned about their possibilities of promotion. Another study by OWL Labs (2017) found that knowledge workers favored WFH over the workplace in order to minimize daily commutes, lessen office disruptions, and to fulfil family obligations. An Italian study by Angelici and Profeta (2020) looked at how "smart working" affected both white- and blue-collar workers at a standard Italian corporation. They discovered that when workers were given the option of working remotely even one day per week, their productivity and wellbeing increased. Another research of knowledge workers conducted in the US during WFH by Birkinshaw et al. (2020) discovered that productivity rose as a result of workers spending less time in meetings

and much more time interacting with clients and business partners. They also reported a 25% decrease in non-essential activity. Another finding from the Kira & Beckmann (2016) study was that employees who worked from home put in more effort.

However, several studies reported a significant loss in productivity among employees when working from home. Linos (2020) reported in his US-based research that whereas teleworkers who were working from home had a decrease in productivity, their colleagues who worked in offices demonstrated an increase in production. A cross-sectional research of US employees was carried out by Wu and Chen (2020). They blamed technical and connectivity issues as well as a three-hour weekly workload increase after the lockdowns for the 38% drop in productivity. The Economist (2020) magazine also discussed the topic of employees working longer hours and finding working from home to be less pleasant than anticipated. In a study of Baidu staff who worked from home during COVID-19, the researchers (Bao et al., 2020) discovered that not all workers benefited equally from WFH and that the rise in productivity was inconsistent. The staff involved in the bigger programs started suffering the most. Mustajab et al., (2020) conducted a study on the impacts of working from home on employee productivity in Indonesia. According to their findings, telecommuting has both benefits and drawbacks for both the employer and the employee. Additionally, it was determined that Work From Home was to blame for the decline in worker productivity as a result of a lack of workplace facilities and services like computers and internet networks as well as some other disruptions like feeling stressed and overwhelmed after spending a considerable amount of time in one place with few opportunities for socializing. In addition, they stated that there is not a strong work culture supporting working from home in many Indonesian firms, and few businesses and employees are prepared to implement WFH. As a result, working from home cannot be widely accepted in Indonesia.

There is also a gendered perspective about the decline of work productivity among women. Numerous studies have shown how the pandemic reduced the scholarly productivity of female academic faculty. Faculty members who are mothers of young children reported fewer first author submissions than they did before to the pandemic. But men said that there had been no shift in scholarly measures (Andersen et al., 2020; Krukowski et al., 2021). Although Haridasan et al. (2021) discovered that women workers were far more productive when working from home since there was less obstruction, and the quality of their work was also higher. In qualitative

research of Indonesian workers at Work From Home during the pandemic, the authors (Mustajab et al., 2020) discovered that the lockdowns and the unrealistic standards of society and family had a negative impact on the women workers who were forced to shoulder the entire strain of the household chores in the absence of domestic help. (Beno & Hvorecky, 2021) also observed a decline in employee productivity when working from home, which was brought on by the challenges of juggling the many domestic responsibilities. In their study, Farooq and Sultana (2021) found that women employees were adversely affected by working from home since they had to juggle domestic responsibilities, in contrast to men who could dedicate more time working without interruptions, while working from home.

Bhattacharya (2021) also covered the fact that women workers frequently suffer additional work pressure even when they gain from the ability to work from home. It has been noted that women employees who work from home must reconcile their professional obligations with household chores, childcare, and other responsibilities. The female employees may experience problems with their physical and emotional health as a result, which will lower their productivity.

H2: WFH is negatively associated with productivity among female workers, such that the more WFH is, lesser is the productivity.

2.3 Work from Home and Work Life Balance

Both businesses and employees have commended remote employment for enabling a better work-life balance. Remote work is a type of work situation that enables employees to carry out their responsibilities and activities outside of the office, providing them greater freedom and control over the manner in which they choose to work. By doing this, it enhances labor engagement and work-life balance (Sandoval-Reyes et al., 2021). Additionally, the authors discussed how highly mobile teleworking and experience with working remotely lead to work-family conflict, which has a detrimental impact on work-life balance. Working remotely may involve more family responsibilities for the individual working from home, which raises the possibility of family matters interfering with work-related matters. One of the effects of shutdown in the first year of the epidemic was that everyone in the household remained at home, which raised the prospect of being required to take on more family obligations and disrupted the harmony between work and life.

Managing work and family responsibilities for working women has become more difficult as a result of COVID 2019 (Anderson and Kelliher 2020). Additionally, Powell and Craig (2015) noted that the increased flexibility offered by working from home assists in preventing family responsibilities from conflicting with professional responsibilities, making it simpler to juggle work and family obligations with really no journey to work and far more time and energy for recreational activities.

In his study, Uddin (2021) addressed how prior research identified flexibility and work-from-home options as two major factors affecting women's capacity to improve their work-life balance during COVID-19. The participants rationally saw "working from home" as a two-edged tool for promoting flexibility in the workplace and effectively managing family duties and care. The results show that work-family conflicts among working women have also been exacerbated by excessive work hours and the unavailability of personal staff during COVID-19. Women often had trouble managing their time and resources between job and family responsibilities. The participants cited gender preconceptions, sociocultural and family norms, and spouses' unwillingness to help with domestic duties as major obstacles to women's ability to reconcile work and family life. Similarly, Mustajab et al. (2020) stated that while engaging in WFH, many employees experience a sense of balance in managing their professional and social lives and are able to split their time between the two. They also explained how important the work-life balance is for male employees because they can work well and use the downtime to engage in social activities with their families and coworkers. However, married female employees are exempt from this rule. Work-life balance is impossible for married women since they have more domestic responsibilities at home, which means that when they finish their office work, they typically have to finish household chores like caring for the kids and cleaning up after them. This makes it tough for married women to blend work and social activities.

According to a Polish and Swedish study, the sociocultural setting posed the biggest obstacle to women achieving their ideal work-life balance (Kurowska, 2018). The study also identified a significant gender gap as one of the main obstacles women faces. According to a study of Pakistani women entrepreneurs, WLB's main techniques include time management, task delegation, and maintaining the goodwill of their husbands and families (Rehman and Roomi,

2012). The study included creating vision and dedication as well as compartmentalizing activities as important techniques for women's Work Life Balance.

H3: WFH is negatively associated with work life balance among female workers, such that the more WFH is, lesser is the work life balance.

2.4 Supervisor Support as a moderator

The level of assistance given to subordinates by their boss is known as supervisor support (Maertz et al., 2007). The authors (D'Cruz & Noronha, 2008) of a qualitative study on WFH among Indian call center workers highlighted the crucial role served by supervisors in fostering interpersonal relationships, discussions, and enhancing job satisfaction during WFH, when the worker may be feeling lonely. According to Berstein et al. (2020), supervisors of staff members who worked from home should communicate with those members of staff much more frequently in order to make clear expectations and directives and prevent misunderstandings. They proposed appointing a "chief repetition officer" to oversee the regular distribution of communications. After conducting a thorough analysis of the WFH paradigm's effects, Alon et al. (2020) came to the conclusion that in the long haul, WFH may benefit female employees because businesses will start spending more on daycare, flexible work schedules, and other alternatives to help make sure that workers of the female gender preserve productivity. Men would simultaneously pick the additional duties of childcare and, to some measure, lessen the pressure on the female employees. According to a study conducted across a big industrial complex (Jaiswal & Arun, 2020), employees' inventiveness enhanced to some degree while the workplace was under lockdown. Unfortunately, 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 detrimental effect on their evaluations. According to research (Haridas et al., 2021) of IT workers who were working remotely during the pandemic, constant communication and substantial teamwork were the factors most strongly associated with productivity.

According to Van der Lippe and Lippényi (2018), having high expectations for one's job can make work-family disputes worse. The writers claim that there is a significant gendered influence in the perks of telecommuting, with WFH increasing work-family conflicts for women.

Because society expects women to be more involved as parents than men, limits are held to a far higher standard for women. As per to the same authors, this could be mitigated in part using support networks within the company, particularly those that include female coworkers. They further assert that, in order to deliver the most benefits, any firm that offers telecommuting must be mindful of the potential effects of WFH on women. To this end, women should be involved in discussions on telecommuting options and settings, especially setup at home. On the other hand, Van der Lippe & Lippényi (2018) emphasize that managerial assistance is essential for reducing the likelihood of work-family conflict.

Employees believe that their bosses either have a beneficial or bad impact on the stress they experience (Bono & Ilies, 2006; Johnson, 2008). Employees who don't feel supported by their manager experience greater stress and worse job satisfaction. Kmieciak (2021) reported employees feeling more stressed, declining productivity and decrease in work life balance due to work overload and lack of support from supervisor.

H4(a): Supervisor Support positively moderates the relationship between WFH and Job Stress.

H4(b): Supervisor Support positively moderates the relationship between WFH and employee productivity.

H4(c): Supervisor Support positively moderates the relationship between WFH and WLB.

2.5: Theory

According to Caplan and Van Harrison (1982), the Person-Environment Fit theory is one of the earliest interactional theories of job-related psychological discomfort. This theory contends that stress at work results from a mismatch between an individual's abilities, resources, and skills and the expectations of the workplace In this situation, interactions between environmental variables and individual variables as well as between objective realities and subjective perceptions may take place. In this situation, it has been asserted that stress might happen when there is an imbalance between the degree to which an employee's attitudes and talents match the requirements of the job or the degree to which the work environment satisfies the needs of the workers. (French, Rodgers and Cobb 1974). However, the Job Demand-Control (JDC) theory postulates that the interaction of a number of psychological job demands related to workload,

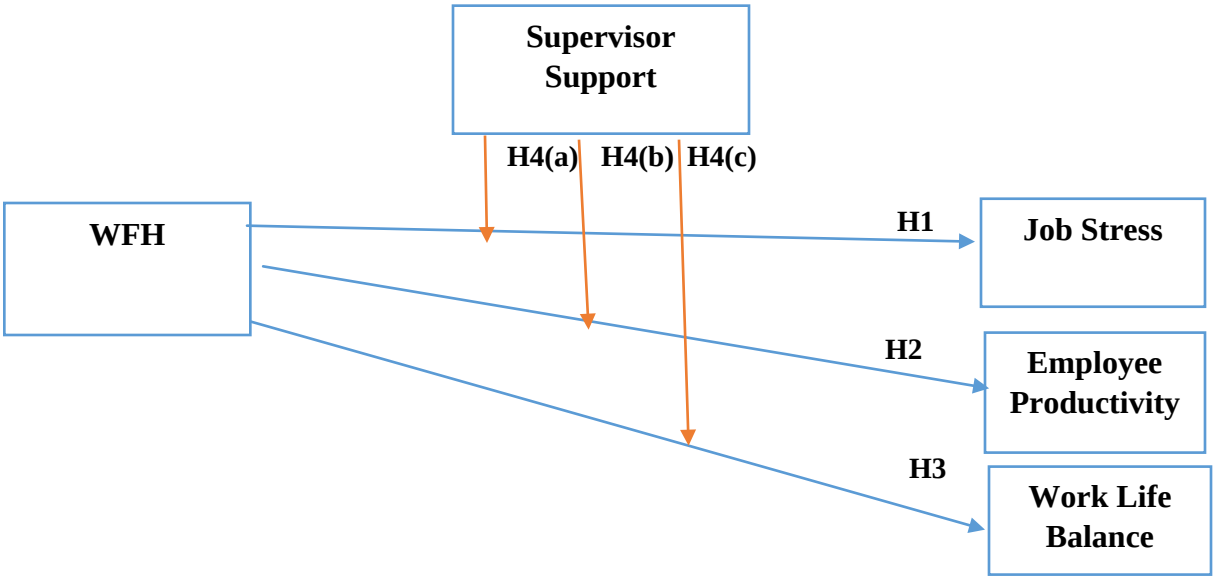
such as cognitive and emotional demands, interpersonal conflict, and job control related to decision authority (agency to make work-related decisions) and skill discretion (breadth of work-related skills used), can lead to work-related stress (Karasek Jr 1979). According to the JDC model, which aims to forecast psychological strain's results, employees who have to deal with high demands and little control are more likely to experience psychological strain and discomfort at work (Beehr et al. 2001).

The role theory is a theory that aids the reader in comprehending the theoretical underpinnings of work-life, according to Soman and Mohanan (2022). According to the hypothesis, people divide their time between taking care of their families and their jobs. Each function carries a unique combination of rights, obligations, and responsibilities. The social position that each person occupies has an impact on their behaviour. Organizations assist their employees in striking a better balance between their home and work responsibilities by incorporating the theory into management discourse (Edwards and Rothbard, 2005).

Similarly, the opposition or incompatibility theory is another name for the inter role conflict theory. According to Greenhaus and Beutell (1985), it alludes to difficulties in conforming to the criteria in one field as a result of incidents in the other field. In other words, it refers to role tensions. When the demands of one role interfere with the ability to meet the demands of another, a person experiences inter-role conflict (Greenhaus & Beutell, 1985). The two examples of inter role conflict includes Work-to-family conflict, which happens when work obligations conflict with family obligations, and family-to-work conflict, which happens when obligations to one's family conflict with obligations to one's employer. (Love et al., 2010).

Lastly, according to organizational support theory (OST), employees form a general opinion of how much their employer values their contributions and is concerned about their well-being, According to Rhoades and Eisenberger's meta-analytic review from 2002, Perceived Organization Support is linked to job performance, affective organizational commitment, fairness, and supervisor support as its main hypothesized predictors as well as other attitudinal outcomes like job satisfaction and satisfaction with one's job. (Rhoades & Eisenberger, 2002).

2.6: Theoretical framework



In this figure it is illustrated that Work from Home is the independent variable. The dependent variables are Job Stress, Employee Productivity, and Work Life Balance. Lastly, Supervisor support is highlighted as a moderator. Thus, the hypothesis for this study is as follows:

H1: WFH is positively associated with job stress among female workers, such that the more WFH is, greater is the job stress.

H2: WFH is negatively associated with productivity among female workers, such that the more WFH is, lesser is the productivity.

H3: WFH is negatively associated with work life balance among female workers, such that the more WFH is, lesser is the work life balance.

H4(a): Supervisor Support positively moderates the relationship between WFH and Job Stress.

H4(b): Supervisor Support positively moderates the relationship between WFH and employee productivity.

H4(c): Supervisor Support positively moderates the relationship between WFH and WLB.

2.7 Conclusion

A thorough and logical investigation of the concepts of work from home, job stress, employee productivity, work-life balance, and the potential moderating effects of supervisor support were the goals of the literature review chapter. The chapter began with a thorough analysis of the Work from Home (WFH) idea. It outlined what working from home included and how it was described using a variety of terms, including remote work and telecommuting in several published research. Second, the chapter presented a summary of the concept of job stress and explained it's relation in the context of work from home and the challenges. Third, the chapter explored the relationship between work from home and employee productivity by highlighting the challenges faced by working women in the organizational context. Fourth, the chapter explored how working from home has an effect on the work life balance of employees. Fifth, the chapter looked at how supervisor support can help to lessen the impact of the dependent variables on the work-from-home independent variable. The chapter's conclusion covered how earlier research has connected various hypotheses to these variables.

Chapter 3: Research Methodology

3.1 Research Design

Research Design refers to the strategy that we adopt in order to collect and analyze different components and variables of the study. This study is quantitative and cross-sectional in nature. The hypothesis has been tested by using a deductive approach in this study. A descriptive approach has also been used in the study.

3.2 Population

Population is defined as an entire pool of people from which a statistical sample is drawn. In this study, our population is the low to high-level female managers based in the headquarters of the major mobile and broadband service telecommunication organizations in Islamabad and Rawalpindi. The total number of major mobile and broadband service organizations is 7 in the twin cities of Pakistan. Two of these companies are semi-private, while the rest are private. This study considered four headquarters of major telecommunication companies in Islamabad/Rawalpindi: Jazz, PTCL group, Nayatel and Telenor. The author of this study had an inside source in each of these companies in order to determine an estimate of the number of employees who are women. Hence, the population size is calculated to be 1000.

3.3 Sampling

Sample is a group of individuals that are taken from a larger population for measurement. The sample size is calculated using an online calculator where in the confidence level is considered as 95%, the margin of error is taken as 5%, and the population proportion has been adjusted to be 50%. After these calculations were computed, the sample size of this study was 278.

3.4 Sampling Technique

The data collected in this study by the author used a simple random sampling technique. In this technique, a selection of participants from a population are chosen at random by the researcher using simple random sampling, a sort of probability sampling. Every person in the population has the same chance of being chosen. Then, data is gathered from as much of this randomly selected subgroup as possible.

3.5 Time Horizon

Time horizon, according to Melnikovas (2018), is a layer that establishes the moment frame for the research. It might be cross-sectional or short term, requiring data collection at a certain time, or longitudinal, requiring data collection over a prolonged period of time in order to compare data.

This study is cross sectional in nature because it is based on filling in the surveys which is a one-time activity. The data was only gathered once.

3.6 Unit of Analysis

The unit of analysis, according to Neuman (2006), is a type of unit used by researchers to choose the variables for their studies. As per Kervin (1992), there is no hard and fast rule on how many analytical units should be employed in a study; a researcher can utilize one or even more units. The characteristics of the research problem, the structure of the variables, and the extent to which data is to be collected for analysis determine the number and kind of unit of analysis to be used in the study at hand (Sekaran, 2003). Furthermore, the unit of analysis is crucially determined by the research's goals and questions. (Cavana et al., 2001).

Individuals (human beings) are the primary unit under investigation in the current study. They will provide the data, which will then be gathered and examined from their point of view. Individuals are therefore the unit of analysis for the current study.

3.7 Measures

Questionnaires adopted from the scales of different authors are used.

The independent variable ‘Work From Home’ is measured using the scale adopted by (Bhattacharya, 2021). The goal of adopting this scale is to find out the degree and frequency to which female employees work from home. For example, “I enjoy working from home.” Or “I work from home a lot.” Work from Home is measured using a four-item scale. These items were measured on a 5-point Likert scale, where 5 = strongly agree and 1 = strongly disagree.

Job Stress experienced during Work From Home is measured using the scales adopted by (Kowalski et al., 2022) and (Soman & Mohanan, 2022), aimed to measure workers’ perception of exhaustion and fatigue due to Work from Home. e.g., “I feel exhausted from working from home.” or “I feel many things are beyond my control and ability while working from home.” Job Stress is measured using a five-item scale. These items were measured on a 5-point Likert scale, where 5 = strongly agree and 1 = strongly disagree.

Perceived Work From Home productivity measure is adopted from (Toscano & Zappalà, 2020), (Kowalski et al., 2022), and (Mirela., 2020). e.g., “When I work remotely, I am more productive” or “The quality of my work is better when I work from home.” Employee Productivity is measured via a six-item scale. These items were measured on a 5-point Likert scale, where 5 = strongly agree and 1 = strongly disagree.

Work Life Balance concerning Work From Home is adapted from (Kapasi & Galloway, 2015; Putri & Amran, 2021). E.g., “Working time does not take up my time in carrying out my personal or family life.” Or “I have adequate time to take care of my family and household while working from home.” Work Life Balance is measured using a five-item scale. These items were measured on a 5-point Likert scale, where 5 = strongly agree and 1 = strongly disagree.

Supervisory support during Work From Home is adapted from the scales introduced by (Campo et al., 2021) and (Zhou et al., 2022). For example, “Your supervisor demonstrates effective behavior in how to juggle work and non-work issues” or “Your supervisor ensures you have the adequate resources and information you need to do your job at home.” Supervisor support is measured via a four-item scale. The items were measured on a 5-point Likert scale, where 5 = strongly agree and 1 = strongly disagree.

The following table 1 provides a summary of all the instruments considered for this study.

Table 1

Summary of the Instrument

Variable	Items	Original Author
WFH	4	Bhattacharya, T.
WFH and Job Stress	5	Kowalski et al.
WFH and Employee Productivity	6	Kowalski et al.
WFH and Work Life Balance	5	Putri & Aman
Supervisor Support during WFH	4	Zhou et al.

3.8 Data Collection

The author of this study collected the data through a series of a questionnaire that was submitted to the female workers employed at the headquarters of the three major telecommunication companies in the twin cities of Pakistan.

3.9 Data Analysis

Statistical Package for Social Sciences (SPSS) 25 has been used to conduct the data analysis. Results have been evaluated with the use of SPSS by tabulating the data and performing correlation and regression analysis, descriptive statistics via frequency analysis, and Cronbach's alpha for the reliability analysis.

Chapter 4: Results and Analysis

4.1 Descriptive Statistics of the Participant's Background Information

The participants of this study were categorized on the basis of their age, education, and career level. Due to the fact that this study only includes the female employees of the telecommunication companies in Islamabad and Rawalpindi, gender was not used as a demographic indicator. The demographic analysis's purpose was to discover more about the respondents' backgrounds.

4.1.1 Age of Respondents

The classification of participants according to their age is presented in the table 2. The findings illustrate that out of the total sample size of 279 respondents (N= 279), 222 (79.6%) respondents were about less than 35 years old, 46 (16.5%) were from the age bracket of 36 to 55 years old and 10 (3.6%) were over 55 years old. There are no missing values because all 279 questionnaires were returned and filled by the respondents. The analysis's findings show that more than 75% of respondents were under 35 years old. This pattern suggests that telecom corporations purposefully seek out young talent in an effort to nurture their innovation and creativity as well as a positive work environment.

Table 2

Age of the Respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		1	.4	.4	.4
	<35	222	79.6	79.6	79.9
	36-55	46	16.5	16.5	96.4
	Over 55	10	3.6	3.6	100.0
	Total	279	100.0	100.0	

4.1.2 Education Level of Respondents

A characterization of the participants by educational level is shown in table 3. The table showcases that out of the total sample size of 279 respondents (N= 279), those 154 (55.2%) respondents held a Postgraduate degree which can be broken down into MSc, MBA, MPhil, PhD and Post doc degrees. 120 (43%) respondents had an Undergraduate degree which can be classified as a bachelor's degree. Lastly 4 (1.4%) respondents held a secondary degree which can be categorized as matriculation or intermediate level degree. There are no missing values because all 279 questionnaires were returned and filled by the respondents. Thus, the findings demonstrate that a high level of education is necessary to find employment in the telecommunications industry.

Table 3

Education Level of Respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		1	.4	.4	.4
	Postgraduate	154	55.2	55.2	55.6
	Secondary	4	1.4	1.4	57.0
	Undergraduate	120	43.0	43.0	100.0
	Total	279	100.0	100.0	

4.1.3 Career Level of Respondents

The career level-wise categorization of the participants is discussed in the table 4. The outcomes exhibit that out of the 279 participants in the telecom organizations that were surveyed, 65 (23.3%) respondents were at the entry-level positions of their careers, 151 (54.1%) respondents were at the intermediate level of their jobs, 45 (16.1%) respondents were at the mid-level position of their careers, and 17 (6.1%) respondents were at the Senior or Executive career level. There are no missing values because all 279 questionnaires were returned and filled by the respondents.

Table 4

Career Level of Respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		1	.4	.4	.4
	Entry Level	65	23.3	23.3	23.7
	Intermediate	151	54.1	54.1	77.8
	Mid-Level	45	16.1	16.1	93.9
	Senior or Executive Level	17	6.1	6.1	100.0
	Total	279	100.0	100.0	

4.2 Scale Reliability Analysis

The degree to which an instrument may be used with the accuracy of a specific measurement and will consistently generate identical results on similar subjects under similar circumstances is referred to as its reliability. It doesn't imply that the outcome is valid or even true. When a measurement device actually measures what it is intended to measure, it is considered legitimate (Peter, 1981; McGarland and Kimberly, 2005). According to Mohajan (2017), the level to which any measuring tool compensates for random error is known as reliability, and it refers to the level of confidence that may be placed in the data gained via the use of an instrument. In

particular, multivariate analysis suffers from inflated standard errors and/or skewed estimates due to the low reliability of scale score measures. (Biemer et al., 2009).

In order to determine the reliability of the scales used in the present study, Cronbach's alpha coefficient is used. A popular reliability measure is Cronbach's alpha. Gidron (2020) described internal reliability, which is a measure of a measure's repeatability (measured by Cronbach's alpha). The value of the alpha coefficient will be high if the scale's items have a strong correlation with one another (DeVellis, 2003).

Gidron (2020) states that a questionnaire with, for instance, 10 items is considered reliable in psychometrics if its internal reliability coefficient is at least 0.70. This represents a roughly average correlation between each item's score and the sum of all other item scores across all items. As a general rule, reliability values above 0.8 are regarded as high (Downing, 2004). Additionally, the prevailing opinion is that values of coefficient alpha above 0.70 are deemed to represent acceptable reliability, those above 0.80 to represent good reliability, and those above 0.90 to represent excellent reliability (Hair et al., 2006).

The alpha coefficients of the scales used in the study are summarized in the table 5 below. Work from Home is an independent variable with a Cronbach's alpha score of 0.721; meanwhile, the dependent variables, Job Stress, Employee Productivity, and Work Life Balance, have alpha coefficients of 0.818, 0.857, and 0.894, respectively. Finally, the supervisor support moderating variable has a Cronbach's alpha score of 0.892. Hence, all the scales used in the questionnaire of this study are highly reliable as their Cronbach's alpha scores were equal to or higher than 0.7.

Table 5

Scale Reliability Analysis

Variables	Cronbach's Alpha	Number of Items
Work From Home	0.721	4
Job Stress	0.818	5
Employee Productivity	0.857	6
Work Life Balance	0.894	5
Supervisor Support	0.892	4

4.3 Correlation Analysis

The main goal of the current study is to examine the effects of working from home on job stress, employee productivity, and work-life balance for female employees in Pakistani telecommunications firms, with supervisor support serving as a moderator. It is first required to look at the relationships between the dimensions of Work from Home, Job Stress, Employee Productivity, Work Life Balance, and Supervisor Support in order to determine this relation with each other. Therefore, in the current study, Pearson's product moment correlation coefficient is used to attain this goal. Hussey and Hussey (1997) state that the analysis of correlation looks at the relationships between a study's variables or sets of variables. The results of a correlation study provide the direction, intensity, and level of significance of the correlation in addition to whether or not the variables are connected.

When assessing a relationship based on the correlation coefficient, Bartz (1999) suggested five general guidelines that should be followed. According to him, a correlation coefficient of 0 to.20 denotes a very low correlation, .20 to .40 denotes a low correlation,.40 to .60 denotes a moderate correlation, .60 to .80 denotes a strong connection, and .80 to 1.00 denotes a high correlation.

The following table 6 presents the correlations coefficients between the variables of the present study.

Table 6

Correlation Analysis

	WFH	JS	EP	WLB	SS
WFH	1				
JS	.518**	1			
EP	-.522**	-.981**	1		
WLB	-.524**	-.986**	.993**	1	
SS	.009	-.023	.017	.017	1

**. Correlation is significant at the 0.01 level (2-tailed). *Note.* WFH: Work from Home, JS: Job Stress, EP: Employee Productivity, WLB: Work Life Balance, SS: Supervisor Support.

4.3.1 Results of the Correlation Analysis of Hypothesis 1

The first hypothesis stated:

H1: WFH is positively associated with job stress among female workers, such that the more WFH is, greater is the job stress.

The Pearson product correlation of Work from Home and Job Stress was found to be statistically significant and moderately positive ($r = .518$, $p < .001$). Hence, H1 is supported. This shows that an increase in WFH would lead to higher Job stress in the female workers.

4.3.2 Results of the Correlation Analysis of Hypothesis 2

The second hypothesis reads as follows:

H2: WFH is negatively associated with productivity among female workers, such that the more WFH is, lesser is the productivity.

According to the value of Pearson correlation coefficient, Work from Home and Employee Productivity was found to be statistically significant and moderately negative ($r = -.522$, $p < .001$). Hence, H2 is supported. This shows that an increase in WFH would lead to lower productivity among the female workers.

4.3.3 Results of the Correlation Analysis of Hypothesis 3

The third hypothesis claimed:

H3: WFH is negatively associated with work life balance among female workers, such that the more WFH is, lesser is the work life balance.

Based on the value of Pearson product correlation, Work from Home and Work Life Balance was found to be statistically significant and moderately negative ($r = -.524$, $p < .001$). Hence, H3 is accepted. This shows that an increase in WFH would lead to lesser Work Life Balance among the female workers.

4.3.4 Results of the Correlation Analysis of Hypothesis 4

The fourth hypothesis is categorized as follows:

H4(a): Supervisor Support positively moderates the relationship between WFH and Job Stress.

The Pearson product correlation of Supervisor Support between the relation of Work from Home and Job Stress was found to be statistically insignificant and negatively correlated ($r = -.023$, $p > .001$). Hence, H4(a) is not supported. This shows that Supervisor support has low significance in the relationship between WFH and Job Stress and doesn't moderate the relationship between those two variables.

H4(b): Supervisor Support positively moderates the relationship between WFH and Employee Productivity.

According to the value of Pearson product correlation, Supervisor Support between the relation of Work from Home and Employee Productivity was found to be statistically insignificant and negligibly positive ($r = .017$, $p > .001$). Hence, H4(b) is not supported. This shows that Supervisor support is not significant in the relationship between WFH and Employee Productivity and thus, doesn't moderate the association between them.

H4(c): Supervisor support positively moderates the relationship between WFH and WLB.

Based on the value of Pearson product correlation, Supervisor Support between the relation of Work from Home and Work Life Balance was found to be statistically insignificant and very lowly positive ($r = .017$, $p > .001$). Hence, H4(c) is not supported. This shows that Supervisor Support has no significance in the relationship between WFH and Employee Productivity and, thus, accordingly, doesn't act as a moderator between them.

4.4 Regression Analysis

Regression analysis comes next after correlation analysis to help the study reach its original goal. If the independent variable (Work from Home) included in the model is actually a predictor of the dependent variables (Job Stress, Employee Productivity, Work Life Balance), it is determined using regression analysis. Additionally, it shows the extent to which the moderator (Supervisor Support) included in the framework may account for the change in the independent and dependent variables.

Regression analysis is a statistical method for determining the relationship between variables that have a reason and result link, as per Uyank (2013). Simple regression regression's primary aim is

to examine the association between a dependent variable and a single independent variable and to create a linear relationship equation between the two.

R-square, F value, and non-standardized beta coefficient values are used to understand the findings of the analysis of regression. The beta coefficients, according to Ali and Younas (2021), are not constant in terms of their means and standard deviations. They demonstrate how much variation in the dependent variable may be anticipated with one unit change in a given predictor or independent variable when other predictors and independent variables are maintained constant. The degree of variance in the dependent variable that can be assigned to each independent variable in the model is shown by the R-square value. The total significance of the model is expressed by the F value. It suggests that the model's independent variables are the actual predictors of the dependent variables.

4.4.1 Regression Analysis of Work from Home and Job Stress

H1: WFH is positively associated with job stress among female workers, such that the more WFH is, greater is the job stress.

A standard linear regression was performed to assess the effect of Work from Home on Job Stress. The dependent variable Job Stress was regressed on predicting variable Work from Home to test the hypothesis H1. The results outline that Work from Home significantly predicted Job Stress $F(1, 276) = 101.4$, $p < 0.001$, which indicates that the independent variable Work from Home can play a significant role in shaping Job Stress ($b = .518$, $p < 0.001$). These results clearly guide the positive effect of Work from Home on Job Stress. Furthermore, the $R^2 = .269$ illustrates that a 26.9% change in Job Stress can be accounted by Work From Home. Table 7 contains the findings of the current study's regression analysis:

Table 7

Regression Analysis

Hypothesis	Regression Weights	Beta Coefficient	R	R Square	F	P value	Hypotheses Supported
H1	WFH → JS	.518	.518	.269	101.4	.000	Yes

*Note** $p < 0.05$. WFH: Work from Home, JS: Job Stress.

4.4.2 Regression Analysis of Work from Home and Employee Productivity

H2: WFH is negatively associated with productivity among female workers, such that the more WFH is, lesser is the productivity.

A standard linear regression was performed to assess the effect of Work from Home on Employee Productivity. To test the null hypothesis, the dependent variable Employee Productivity was regressed on the predictor variable Work from Home. According to the findings, Work from Home strongly predicted Employee Productivity $F (1, 276) = 103.465$, $p < .001$, indicating that the independent variable Work from Home can have a considerable impact on how Employee Productivity is shaped ($b = -.522$, $p < .001$). These findings demonstrate the negative impacts of remote work on employee productivity. Moreover, the $R^2 = .273$ shows that Work From Home can account for a shift of 27.3% in Employee Productivity. The results of the regression analysis used in this research are shown in Table 8:

Table 8

Regression Analysis

Hypothesis	Regression Weights	Beta Coefficient	R	R Square	F	P value	Hypotheses Supported
H2	WFH →EP	-.522	.522	.273	103.465	.000	Yes

*Note** $p < 0.05$. WFH: Work from Home, EP: Employee Productivity.

4.4.3 Regression Analysis of Work from Home and Work Life Balance

H3: WFH is negatively associated with work life balance among female workers, such that the more WFH is, lesser is the work life balance.

In order to evaluate the effect of work from home on employee productivity, a conventional linear regression was used. The third hypothesis was tested by regressing the dependent variable Work Life Balance on the predictor variable Work from Home. Work from Home can have a significant impact on how Work Life Balance is shaped, as shown by the findings, which demonstrate that Work from Home significantly predicted Employee Productivity $F (1, 276) =$

104.676, p < .001. These findings suggest how remote Work from Home negatively affects Work-Life Balance. Additionally, the R2 =.275 indicates that Work From Home can account for a shift in Work Life Balance of 27.5%. Table 9 displays the findings of the regression analysis conducted in this study.

Table 9

Regression Analysis

Hypothesis	Regression Weights	Beta Coefficient	R	R Square	F	P value	Hypotheses Supported
H3	WFH→WLB	-.524	.524	.275	104.676	.000	Yes

*Note** p < 0.05. WFH: Work from Home, WLB: Work Life Balance.

4.4.4 Moderation Analysis between Work from Home and Job Stress using Regression

H4(a): Supervisor Support positively moderates the relationship between WFH and Job Stress.

A standard linear regression was performed to evaluate the moderating effect of Supervisor Support between the independent variable Work from Home on the dependent variable Job Stress. The dependent variable Job Stress was regressed on predicting variable Work from Home with Supervisor Support as the moderator to test the hypothesis H4(a). The results outline that Supervisor Support significantly moderated and predicted the impact of Work from Home on Job Stress F (1, 276) = 33.668, p < 0.001, which indicates that supervisor support can play a significant role in shaping the relationship between Work from Home and Job Stress (b = .330, p < 0.001). These results clearly guide the positive effect of Work from Home on Job Stress with Supervisor Support as a moderator. Besides, the R^2 = .109 showcases that a 10.9% change in Job

Stress can be accounted by the moderating role of Supervisor Support on Work From Home. The regression analysis for the current study's results is listed in Table 10:

Table 10

Regression Analysis

Hypothesis	Regression Weights	Beta Coefficient	R	R Square	F	P value	Hypotheses Supported
H4 (a)	WFHxSS→ JS	.330	.330	.109	33.66	.000	Yes

*Note** p < 0.05. WFH: Work from Home, JS: Job Stress, SS: Supervisor Support

4.4.5 Moderation analysis between Work from Home and Employee Productivity using Regression

H4(b): Supervisor support positively moderates the relationship between WFH and Employee Productivity.

To assess the moderating impact of Supervisor Support on the relationship between the independent variable Work from Home and the dependent variable Employee Productivity, a standard linear regression analysis was conducted. To test the null hypothesis H4(b), the dependent variable Employee Productivity was regressed on the variable Work from Home with Supervisor Support acting as the moderator. The results suggest that Supervisor Support significantly influenced Work from Home on Employee Productivity $F(1, 276) = 35.123$, $p < 0.001$, which implies that supervisor support can play a significant role in influencing the relationship between Work from Home and Employee Productivity ($b = .336$, $p < 0.001$). These findings unequivocally show that working from home has a negative effect on employee productivity, particularly when the supervisor acts as a moderator. Additionally, the $R^2 = .113$ shows that the moderating effect of supervisor support for work from home can be attributed to an increase of 11.3% in employee productivity. The findings of the current study's regression analysis are shown in Table 11:

Table 11

Regression Analysis

Hypothesis	Regression Weights	Beta Coefficient	R	R Square	F	P value	Hypotheses Supported
H4 (b)	WFHxSS→ EP	.336	.336	.113	35.12	.000	Yes

*Note** p < 0.05. WFH: Work from Home, EP: Employee Productivity, SS: Supervisor Support

4.4.6 Moderation analysis between Work from Home and Work Life Balance using Regression

H4(c): Supervisor Support positively moderates the relationship between WFH and WLB.

A basic linear regression analysis was carried out to determine the moderating effect of Supervis or Support on the association between the independent variable Work from Home and the depen dent variable Work Life Balance. The dependent variable Work Life Balance was regressed on Work from Home with Supervisor Support serving as the moderator in order to test the null hypo thesis H4(c). The findings imply that supervisor support can play a major role in determining the association between work from home home and work life balance ($b = .337$, $p < 0.001$) and that work from home had a significant impact on WLB $F (1, 276) = 35.321$, $p < 0.001$.

These data categorically demonstrate that working from home has a negative impact on work-life balance, especially when the supervisor support acts as a moderator. Furthermore, the $R^2 = .113$ shows that the moderating effect of supervisor support for work from home can be attributed to an increase of 11.3% in Work Life Balance of the female workers employed in the telecom sector of Pakistan. Table 12 displays the outcome of the regression analysis used in this study.

Table 12

Regression Analysis

Hypothesis	Regression Weights	Beta Coefficient	R	R Square	F	P value	Hypotheses Supported
H4 (c)	WFHxSS→WLB	.337	.337	.113	35.32	.000	Yes

*Note** p < 0.05. WFH: Work from Home, WLB: Work Life Balance, SS: Supervisor Support

4.5 Conclusion

A number of techniques to analyze the data were performed in this study. The results of the Reliability Analysis, Descriptive Statistics, Correlation and Regression Analysis were outlined and examined in this chapter. The hypotheses of this study were tested using the above-mentioned methods and their outcomes have been thoroughly interpreted in this chapter. The following table 13 provides a summary of the overall results of the hypotheses.

Table 13

Summary of the Results

Hypothesis	Result
H1: WFH is positively associated with job stress among female workers, such that the more WFH is, greater is the job stress.	Accepted
H2: WFH is negatively associated with productivity among female workers, such that the more WFH is, lesser is the productivity.	Accepted
H3: WFH is negatively associated with work life balance among female workers, such that the more WFH is, lesser is the work life balance.	Accepted
H4(a): Supervisor Support positively moderates the	Accepted

relationship between WFH and Job Stress.	
H4(b): Supervisor Support positively moderates the relationship between WFH and employee productivity.	Accepted
H4(c): Supervisor Support positively moderates the relationship between WFH and WLB.	Accepted

Chapter 5: Discussion, Limitations and Conclusion

This chapter discusses the findings from the previous chapter, enumerates the current study's limitations, and explores the implications for future research. Finally, the chapter ends with some final thoughts on the research.

5.1 Discussion

The goal of this study, as stated in the first chapter, is to investigate the effects of working from home on job stress, employee productivity, and work-life balance, with supervisor support serving as the moderator. The purpose of this study is to investigate how these variables affect female workers in Pakistan's telecommunications industry. The research model in Chapter 2 was backed by a thorough evaluation of the literature. In Chapter 3, the research methods used were presented along with the formalization of the research constructs. Chapter 4 offers a descriptive analysis of the hypothesis's findings. The findings of this study help to broaden the analysis of the link between stress and remote work by taking into account factors like work-life balance, worker productivity, and supervisor support.

The following is a detailed discussion of the hypothesis:

5.1.1 Relationship between Work from Home and Job Stress

According to the current study's findings, the notion of working from home has a significant impact on job stress. The findings of this study are consistent with those of other studies who found that working from home significantly affects the job stress of female employees. The previous researchers linked the elevated stress level to working from home and consequently spending much of one's time on the phone, online, or in meetings or training sessions. Prior study explicitly states that working from home has put more stress on working women, especially those who have children in school, working spouses, and elderly parents who need to be cared for. (Sandoval-Reyes, 2021; Jaiswal, 2020; Soman and Mohanan, 2022).

Additionally, previous studies have shown that there is a large gender gap between men and women who work remotely, with perceived stress having a more pronounced negative impact on women's productivity than on men. Given the aforementioned, it is clear that working from home significantly contributes to the greater stress levels among female employees. Thereby, supporting the validity of our hypothesis.

5.1.2 Relationship between Work from Home and Employee Productivity

The findings of this study show that working from home has a considerable, detrimental effect on female workers' productivity. These outcomes are consistent with the findings of the study by Mirela (2020). Other researchers have drawn the same conclusion that working from home has a detrimental impact on women's productivity at work. Despite putting in more hours than usual, they claimed that low levels of productivity were caused by a variety of factors, including poor network connectivity, inadequate ergonomics, a lack of family support, greater pressure at work and at home, uncertainty about the consequences of their work, a dearth of a schedule, and a loss of motivation.

This implies that workers who work from home are finding it difficult to adjust to their new working environment and are more likely to complain about poor communication, which could lower employee productivity. (Agache et al., 2021; Farooq, & Sultana, 2021; Jaiswal, 2020; Patanjali, 2022; Wolor et al., 2021; Van der Lippe and Lippényi, 2019) Our results are consistent with the previous research, which indicates that working from home has a negative impact on female employees' productivity. Therefore, our hypothesis is confirmed.

5.1.3 Relationship between Work from Home and Work Life Balance

According to the findings of the current study, work-life balance and remote work are significantly and adversely correlated with one another, meaning that the more remote work there is, the less time there is for work-life balance. This association is particularly pronounced among female workers. The research by Uddin (2021) also showed a direct correlation between work from home and a poorer work-life balance for female employees. Other earlier research that was based on empirical data found that working women who work from home suffer a number of difficulties, including a lack of time, sociocultural and family standards, and gender stereotypes. (Sheikh et al., 2018; Arwin et al., 2021; Biju et al., 2022; Agache et al., 2021).

These findings are in line with other research, which shows that working from home has a negative effect on female employees' work-life balance. Our hypothesis is therefore supported.

5.1.4 Moderating Role of Supervisor Support in the Relationship Between Work From Home and Job Stress, Employee Productivity, and Work Life Balance

The present study's findings indicate that the relationship between work from home and job stress, employee productivity, and work-life balance for working women is significantly moderated by supervisor support. These results are consistent with prior research that supports the notion that perceived supervisor support can help to moderate the impact of working from home on a female employee's job stress, productivity, and work-life balance (Berstein et al., 2020; Alon et al., 2020). This reveals that the study's assumption both supervisor assistance may be crucial in assisting workers to accomplish their job goals successfully and efficiently without jeopardizing their ability to maintain a healthy work-life balance—is true (Kumar et al., 2020).

Recent studies have also shown that individuals who work for supervisors who support families report to them with high levels of harmony because they encounter little work-family conflict. According to Achour et al. (2017), women who had positive relationships with their superiors also experienced less conflict at work and were content with their careers. These results support the study's hypothesis because they are consistent with other studies in the field.

5.2 Limitations of the Study

There are certain limits to the current study, despite its attempts to remove significant errors. First of all, there were time limitations on this investigation. Due to the fact that the MBA students were enrolled in a semester-based programme, there was little time available to perform a full and extensive research.

Second, due to time and financial restrictions, the current study is cross-sectional in style because the data was gathered at a given time. It's likely that surveys are sent out and completed during a difficult, hectic, or overwhelming time of the year.

The inability to collect data from a bigger sample due to time and financial restrictions is the third limitation. Only female employees of Pakistani telecom companies are included in the study's population, and the sample is confined to 279 people who work at these businesses' headquarters in Islamabad and Rawalpindi. As a result, the conclusions of this study have limited generalizability, meaning that they might not apply to businesses in other industries or Pakistani cities. Furthermore, as the sample is restricted to Pakistan alone, it is impossible to compare results among various nations.

Fourthly, as this study relies on questionnaires to gather data, it has the potential to introduce response bias, which could make it more difficult to come up with accurate responses to the questions.

The final limitation relates to the respondents' sociodemographic qualities. The sociodemographic traits of the participants in the study, such as their marital status and length of employment, which may have a significant impact on the link between the variables, are not taken into account.

5.3 Implications for Future Research

The above-discussed study's limitations offer a variety of possibilities that can direct scholars undertaking future research on work from home and its impact on job stress, worker productivity, and work-life balance.

To start, the current study solely employs a scientific, cross-sectional methodology to identify the associations that are hypothesized to arise. Additional studies may adopt a qualitative

viewpoint or may integrate both quantitative and qualitative research methods. In addition, future research can potentially use a longitudinal design to figure out how the factors examined in this study are related to one another.

Second, the current study's sample size is also restricted to a single area of Pakistan's economy, making it a rather small sample size. Future research can collect data from a vast variety of participants who hail from different nation regions. This can make it simpler to apply the study's outcomes to the overall population of the nation.

Third, the backdrop of Pakistani telecommunication firms served as the foundation for this study's theoretical model and findings. Future researchers will be able to replicate the theory and findings in comparable or dissimilar situations, such as in other sectors of Pakistan or in other developing or developed nations. Additionally, those aspects of remote work and the other variables that are not covered by the proposed framework of the present research can be included in subsequent studies. This might facilitate the development of distinctive connections and outcomes.

The study's final focus is on the effects of working from home on employee productivity, job stress, and work-life balance, with the position of supervisor support among female employees acting as a moderator. Future research may consider additional factors like job satisfaction and performance. As a mediator or moderator, they can also use family-friendly support activities.

5.4 Conclusion

This research's aim was to examine how working from home affected female workers in Pakistan's telecom industry in terms of productivity, job stress, and work-life balance. In order to assess and moderate the association between Work from Home and Job Stress, Employee Productivity, and Work Life Balance, Supervisor Support was also taken into consideration as a moderator in this study.

The research's outcomes demonstrated a positive and significant relationship between working from home and workplace stress, indicating that female employees felt more job-related stress when working from home. It also came to the conclusion that there is a considerable, yet unfavorable association between employee productivity and work from home. This suggests that women's production levels decreased when they worked from home. The findings also suggest a

strong but negative relationship between work-from-home and work-life balance. This suggests that because of the conventional gendered roles that women play in society, working from home causes disruptions to their personal and professional lives.

Additionally, the findings demonstrate that the connection between working from home and job stress, employee productivity, and work-life balance is positively and significantly moderated by supervisor support. This suggests that when female employees receive physical and emotional support and advice from their managers to help them meet their family and work duties, they are more likely to display higher productivity, fewer levels of stress, and a balanced work and home life (Achour et al., 2017).

Therefore, In order to overcome the difficulties working women encounter on a daily basis when they work from home, organizations must work harder to offer additional positive assistance.

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Appendix

QUESTIONNAIRE

Part 1

Please answer the following questions by tick marking the appropriate option

Age	<35 years	36 – 55 years	Over 55 years	
Education	Primary	Secondary	Undergraduate	Postgraduate
Career Level	Entry Level	Intermediate	Mid-Level	Senior or Executive Level

Part 2

Please indicate by tick marking the box the extent to which you agree or disagree with each of the statements with respect to your organization. The following scale is applied for all statements:

Strongly Disagree = 1	Disagree = 2	Neutral = 3	Agree = 4	Strongly Agree = 5

1: WFH						
		1	2	3	4	5
1	I work from home a lot.					
2	If I could, I would like to discontinue work from home.					
3	I enjoy working from home.					
4	I take regular breaks when I work from home.					
2: WFH and Employee Productivity						
		1	2	3	4	5
1	I feel more productive when I work from home.					
2	The quality of my work is better when I work from home.					
3	I have more distractions during work when I work from home.					
4	I am satisfied with my current work from home arrangement and schedule.					
5	My supervisor is concerned about my wellbeing during work from home.					
6	I can easily get work done from home even when I face distractions from family members.					
3: WFH and Job Stress						
1	I am discouraged about my work.					

2	I feel many things are beyond my control and ability while working from home.					
3	I feel overwhelmed by completing work when I work from home.					
4	I feel like giving up on my work during work from home.					
5	I have a higher workload during work from home than at office.					
4: WFH and Work Life Balance						
1	Working time doesn't take up my time in carrying out my personal or family life.					
2	I have adequate time to take care of my family and household while working from home.					
3	My involvement in family activities and work activities is done in a balanced way.					
4	I get more support from my family members when I work from home.					
5	I feel happy and satisfied with my work and family life.					
5: Supervisor Support during WFH						
1	Your supervisor makes you feel comfortable when talking about the conflict between your work and family during work from home.					
2	Your supervisor works efficiently with employees to creative solve the conflict between work and family during work from home.					
3	Your supervisor is very creative in reassigning work tasks and can help your department become a better work team.					
4	Your supervisor ensures you have the adequate resources and information you need to do your job at home.					