

**Research Article****Remote Work and Job Satisfaction: A Case Study of IT Professionals***¹Usama Saleem | ²Nouman Aamir Khan

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ABSTRACT

This study aims to assess the impact of remote work on employee performance, focusing on various parameters such as company-provided autonomy, supportive organizational culture for working from home, communication, and self-discipline. Rapid technological changes necessitate that organizations foster a culture promoting new sustainable development strategies amid global competition. The primary purpose of this study is to examine the role of remote work in the job performance of employees in the IT industry. To achieve this, a quantitative study was conducted using a systematic questionnaire distributed to employees working in the IT industry in Pakistan via a web-based data collection system using Google Forms. A sample of 238 respondents was collected and used for data analysis from employees working in IT organizations in major cities of Pakistan. The acquired data was used to perform descriptive and statistical analysis in SPSS software. The results revealed that remote work positively influences job performance. The study also discusses theoretical and practical implications and future recommendations in the context of Pakistan.

KEYWORDS

Remote Work, Telecommuting, Job Performance, Virtual Work, organizational factors, Self-Discipline, Communication, Working environment and workload

1 | INTRODUCTION

Remote work has become more relevant in recent years, where companies allow employees the flexibility to work from home or any other location they prefer. Gartner defines remote work, also known as work from home (WFH) or telecommuting, as a type of flexible work arrangement where employees can work from home or any remote location outside of designated corporate offices. Remote work has been a part of the IT industry in one form or another for more than a couple of decades. It was first proposed by Nilles (1976) a US scientist, in his book *The Telecommunications-Transportation Tradeoff* in 1976, where he mentioned the use of telephone lines and computers to move some work out of traditional offices. Research by Angelici and Profeta (2020) has shown that adopting “smart-working,” a technique where employees work one day from home, increased the productivity and well-being of workers in a traditional Italian company of blue and white-collar employees. A study by Elshaiekh, Hassan, and Abdallah (2018) concluded that remote workers were happier and felt more valued at work compared to their counterparts, although they felt their relationship with their co-workers wasn’t as strong. They also concluded that remote work positively affects workers’ performance. In the decades after it was proposed, remote work steadily became popular, but it still comprised a relatively modest market share before COVID-19. When COVID-19 started to spread and the World Health Organization (WHO) declared it a pandemic, countries began to declare travel bans and imposed lockdowns in one form or another. Soon after, a third of the world was under some kind of lockdown imposed by their governments (Koh, 2020). Remote work saw a significant rise, and according to Brynjolfsson et al.

(2020), the number of Americans who worked from home went from 5% pre-COVID to 37% in April 2020. Ozimek (2020a) reports an increase in the share of remote workers in teams from 13.2% pre-COVID to 56% to 74% post-COVID. With remote work on the rise and no signs of declining anytime soon, the current study will help organizations find the relationship between remote work and job performance. It will answer questions like whether organizational culture, autonomy, self-discipline, and effective communication impact job performance.

2 | LITERATURE REVIEW

This chapter starts with the theoretical orientation of the topic under study. It also contains the literature review related to all the variables of this study. The theoretical and research framework are also discussed in this chapter along with the proposed hypotheses.

2.1 | Theoretical Orientation for The Study

According to the literature, several theories provide the theoretical base for this study, such as social exchange theory, which explains the cost-benefit relationship between people, and self-determination theory, which elaborates on the types of motivation upon which employees perform their work. These theories are discussed in detail below.

2.2 | Social Exchange Theory

A theory that examines the social behavioral aspect of people is known as the social exchange theory. It states that people uphold relationships as long as they feel rewards are greater than costs (net profit) and will abandon relationships as soon as they sense costs are greater than profit (net loss). Cropanzano and Mitchell (2005) specify that people will apply economic principles when examining relationships. Rotter (1972) states individuals anticipate thoughts of behaving either negatively or positively against the environment and then respond the same towards the environment. Kim and Glomb (2014) suggest that these behaviors are named reciprocity according to social exchange theory. Bakker, Demerouti, and Verbeke (2007) found that when higher management requires positive behavior from subordinates, they provide incentives to them. Therefore, a notion of “exchange” is initiated between individuals. Gong, Lee, and Jolly (2021) used social exchange theory in their respective studies, which focused on inclusive leaders, employee motivation, and performance. In line with this theory, it’s concluded that inclusive leadership (IL) is a positive side of leadership that can positively influence a project. This theory demonstrates that IL allows employees to work in a collaborative environment, seeks their opinion, and in return, employees exchange their knowledge and skills as a reciprocation process.

Remote work became a necessity after the 2019 pandemic. However, it has clear benefits such as providing flexibility and autonomy to employees and increasing comfort by allowing them to work at home without the stress or anxiety of meeting new people or rushing through traffic to reach offices on time. On the other hand, remote work also affects employee work satisfaction as some people live in joint families and have to work in the nuisance of their home environments. Additionally, it made some companies expect their employees to be available for work 24/7. Theoretically, in our context, both Organization Adaptation and Social Exchange theories apply. Razmerita, Peroznejad, Panteli, and Kärreman (2021) found in their research that there was a lack of preparation from organizations and individuals to move to remote work, and both parties had to adapt their practices. Kelliher and Anderson (2009) found that remote workers saved time on commuting and instead of spending that time on non-work activities, they spent that time working.

Patanjali and Bhatta (2022) reviewed the literature on the work productivity of organizations depending on work from home from the lens of history and the current pandemic situation. This study worked with a sample of 526 experts from the IT area working worldwide. The analysis showed that around 66% of IT workers revealed increased efficiency while working from home, taking advantage of the time saved from travelling for work, as well as meeting increased expectations. The research analyzed the effect of WFH during the lockdown on the efficiency of IT workers, with specific reference to organizational elements. The examination utilized quantitative analysis as well as subjective responses from respondents to the survey to finalize the results Sandoval-Reyes, Idrovo-Carlier, & Duque-Oliva, (2021) focused on remote work, work stress, and work-life balance during the pandemic. They found that working from home (WFH) increases employee productivity but also has some downsides. Prolonged remote work leads to stress for employees with more responsibilities and those who need to be more readily available. This

stress decreases the positive effect of WFH on productivity and negatively affects job satisfaction and work-life balance. Organizations were not prepared for the rapid implementation of WFH and struggled to enhance their remote team management expertise. To mitigate the negative effects of long-term remote work on mental health, organizations and governments should develop plans to support employees and provide benefits that cover mental health.

Martin, Hauret, & Fuhrer, (2022) studied the effects of digitally transformed home offices on employee job satisfaction. They examined how the use of cooperative and correspondence computerized tools (groupware, workflow, instant messaging, and web conferencing) is related to the well-being (job satisfaction, work stress) and productivity of telecommuters during and before the first Covid-19 lockdown. They collected data from 438 employees working in various organizations in Luxembourg. This study highlighted different profiles of telecommuters based on the development and frequency of use of these tools during the lockdown compared to before. The study also showed that these profiles were linked to changes in job satisfaction, work stress, and productivity. Alexander, De Smet, Langstaff, & Ravid. (2021) stated that many organizations are planning a hybrid model for post-Covid work arrangements due to improved productivity during the pandemic. Despite increased productivity, employees have more work and less physical activity, leading to burnout. Increased anxiety has also reduced job satisfaction. Employees are looking forward to post-pandemic work arrangements as it is becoming difficult for them to continue their current work patterns. Frequent communication with colleagues is necessary. Organizations that have created specific policies for future workplaces have seen an increase in employee well-being and productivity.

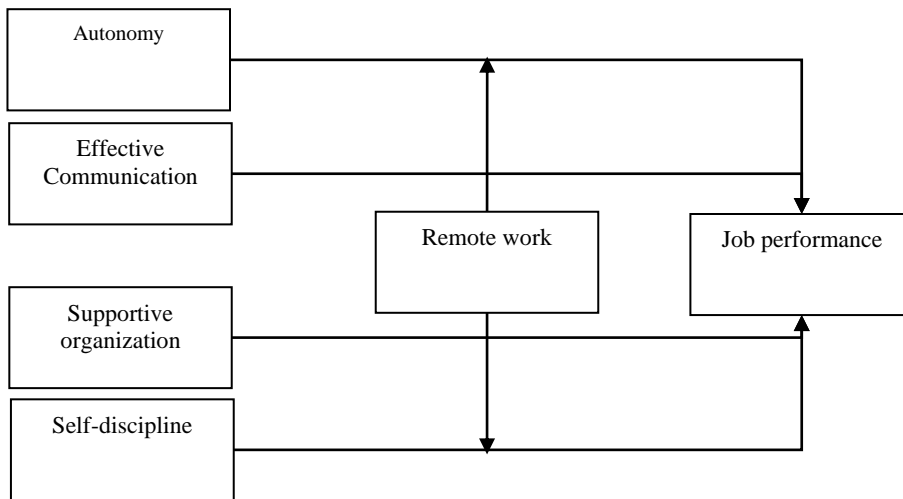


Figure 1: Theoretical Framework

In this model, Autonomy (AT), WFH Supportive Organization Culture (SOC), Effective Communication (EC), and Self Discipline (SD) are independent variables which are linked to Job Performance (JP) which is an independent variable. Remote Work (RW) is the moderator, and we would like to explore how these independent variables affect the dependent variable considering the impact of Remote Work as a moderator.

3 | RESEARCH MODEL

$$JP = \beta_0 + \beta_1(RW) + \epsilon \quad (1)$$

Our first hypothesis is explained using Equation 1 where JP represents Job Performance, RW represents Remote Work and ϵ is the error term. Whereas β_0 is the intercept coefficient, β_1 is the coefficient of the variable.

$$JP = \beta_0 + \beta_1(AT) + \beta_2(RW) + \beta_3(AT * RW) + \epsilon \quad (2)$$

Our second hypothesis is explained using Equation 2 where JP represents Job Performance, AT represents autonomy, RW represents Remote Work, $AT * RW$ is the interaction term and \mathcal{E} is the error term. Whereas β_0 is the intercept coefficient and β_1, β_2 and β_3 are the coefficients of variables.

$$JP = \beta_0 + \beta_1(AT) + \beta_2(RW) + \beta_3(AT * RW) + \mathcal{E} \quad (3)$$

Our third hypothesis is explained using Equation 3 where JP represents Job Performance, EC represents Effective Communication, RW represents Remote Work, $EC * RW$ is the interaction term and \mathcal{E} is the error term. Whereas β_0 is the intercept coefficient and β_1, β_2 and β_3 are the coefficients of variables.

$$JP = \beta_0 + \beta_1(EC) + \beta_2(RW) + \beta_3(EC * RW) + \mathcal{E} \quad (4)$$

Our fourth hypothesis is explained using Equation 4 where JP represents Job Performance, SD represents Self Discipline, RW represents Remote Work, $SD * RW$ is the interaction term and \mathcal{E} is the error term. Whereas β_0 is the intercept coefficient and β_1, β_2 and β_3 are the coefficient of variables.

$$JP = \beta_0 + \beta_1(SD) + \beta_2(RW) + \beta_3(SD * RW) + \mathcal{E} \quad (5)$$

Our fifth hypothesis is explained using Equation 5 where JP represents Job Performance, SOC represents WFH's Supportive Organization Culture, RW represents Remote Work, $SOC * RW$ is the interaction term and \mathcal{E} is the error term. Whereas β_0 is the intercept coefficient and β_1, β_2 and β_3 are the coefficients of variables.

3.1 | Hypothesis Development

Considering the available literature, the following hypotheses are proposed for the current study:

Hypothesis 1: Remote Work is positively related to the Job performance.

Hypothesis 2: Having Autonomy in day-to-day operations does affect the employee performance working remotely.

Hypothesis 3: Effective communication has a positive role in Job Performance.

Hypothesis 4: There exists a significant relationship between Self Discipline & Job Performance working remotely.

Hypothesis 5: WFH Supportive Organization Culture has an impact on the Job Performance

4 | METHODOLOGY

The present research intends to study remote work and job satisfaction among employees working in IT companies in Pakistan. This research will be based on a quantitative methodology for data collection and analysis. To obtain the data, a questionnaire is designed. The questionnaire is based on a 5-point Likert scale where 1 represents Strongly Agree and 5 represents Strongly Disagree. This questionnaire will help us collect the data and perform detailed analysis. Afterward, we will be able to identify common positive and negative effects associated with remote work and our variables.

4.1 | Data Collection and Data Analysis

Data is collected from employees working in IT companies in Pakistan. Questionnaires based on a 5-point Likert scale are created on Google Forms and shared via LinkedIn. LinkedIn is the world's largest professional network where we can find IT professionals working remotely for IT organizations across the globe. The questionnaire consists of multiple questions related to the positive and negative effects experienced by employees while working remotely on their job satisfaction and performance, considering Autonomy, Communication, organizational support for WFH, and self-discipline. Data analysis begins after the data is collected via questionnaires. It includes descriptive, inferential, and mediation analysis to obtain more detailed information.

4.2 | Dependent Variable 1 Job Performance

Motowidlo, Borman, W. & Schmit. (1997) define Job Performance as an aggregated value to the organization of the discrete behavioral episodes that an individual performs over a standard interval of time. We would like to explore whether working remotely has an impact on Job Performance and whether that impact is positive or negative.

4.3 | Independent Variable 1 Autonomy

Knowledge workers who are working from home need Autonomy to perform their job properly. They want the freedom to work in a way that suits them, and previous research has shown.

4.4 | Independent Variable 2 WFH Supportive Organization Culture

The massive and rapid shift to Work from Home is challenging in itself, and employees need reassurance and support from their companies that they are being supported while working from home. For those individuals who were working from home prior to COVID-19, reassurance that the company wholeheartedly believes that WFH or remote work is the future is necessary. We would like to explore the impact of supportive WFH organizational culture on job performance

4.5 | Independent Variable 3 Communication

Communication is an essential part of the job, and without proper communication, we cannot expect ideal Job Performance. With the recent shift to Remote Work due to COVID-19, our communication patterns have changed. Yang, Holtz, Jaffe, Suri, Sinha, Weston, Joyce, Shah, Sherman, Hecht, & Teevan. (2022) compared the data from before and after the firm-wide shift to remote work and found that there was a decrease in synchronous communication after the shift and an increase in asynchronous communication. This was across different communication methods, including audio/video calls, emails, and instant messages. We would like to explore how communication impacts remote workers and whether there is any significant effect on their job performance and satisfaction.

4.6 | Independent Variable 4 Self-Discipline

While working remotely, employees aren't monitored as closely as they are when working onsite. This leads to employees taking the initiative and seeking guidance preemptively. These characteristics require self-discipline to master, and we would like to explore whether self-discipline impacts job performance.

5 | RESULT OF THE STUDY AND INTERPRETATION

Table 1

Descriptive Statistics of Variables

	N	Range	Minimum	Maximum	Mean	SD	Variance	Skewness	Kurtosis		
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	SE	Statistic	SE
JP	238	3.8	1	4.8	2.3933	1.0522	1.107	0.798	0.158	-0.888	0.314
RW	238	3.75	1	4.75	2.4559	1.18342	1.4	0.736	0.158	-0.826	0.314
AT	238	3.71	1.14	4.86	3.2125	1.25241	1.569	-0.163	0.158	-1.523	0.314
EC	238	3.6	1.2	4.8	2.7403	1.156	1.336	0.333	0.158	-1.563	0.314
SD	238	3.5	1.25	4.75	2.4002	1.01285	1.026	0.662	0.158	-0.944	0.314
SOC	238	3.78	1.11	4.89	2.9514	1.38647	1.922	0.168	0.158	-1.748	0.314

Note: JP= Job Performance, RW=Remote Work, AT=Autonomy, EC=Effective Communication, SD=Self Discipline, SOC=WFH Supportive Organization Culture

In the table above, along with other information, the mean of the given variables is mentioned. The mean of the given sample is also known as the average of the given data. It indicates the central tendency of the data. If the answers lean a lot towards "Strongly Agree," then the mean will be near 1. If the answers lean towards "Strongly Disagree," then the mean will be near 5. The mean value of job performance is 2.393, which means most of the respondents have given answers between neutral, agree, and strongly agree. The mean value of autonomy is 3.21, which means the data is leaning more towards neutral, disagree, and strongly disagree. The mean values for remote work, effective communication, self-discipline, and supportive organizational culture are 2.45, 2.74, 2.40, and 2.95, respectively, which implies that respondents are leaning towards agree and neutral. Looking at the table, we can see that kurtosis values for all variables lie between -2 and 2; therefore, we can say all variables are normally distributed. A skewness value that lies between -1 and 1 is acceptable and considered normal (Bulmer, 1979).

Looking at the table again, we can see that all skewness statistics lie between -1 and 1, so the data for all the variables is normally distributed. Autonomy is negatively skewed, while all the other variables are positively skewed.

5.1 | Correlation

In the table below, the correlation between autonomy and job performance is ($r = 0.296$, $p < 0.001$), which shows that the relationship between the independent variable autonomy and the dependent variable job performance is positively correlated. This implies that an increase in autonomy will increase the job performance of employees. The correlation between effective communication and job performance is ($r = 0.817$, $p < 0.001$), which shows that the relationship between the independent variable effective communication and the dependent variable job performance is significant and positively correlated. If one variable's value increases, then the other variable's value will also increase. Similarly, the relationship between the independent variable self-discipline and job performance is strongly positively correlated, meaning an increase in one variable will increase the other. The correlation between the moderator remote work and the dependent variable job performance is ($r = 0.798$, $p < 0.001$), which means the two variables are positively correlated. This indicates that if remote work increases, then job performance will increase by the factor of ($r = 0.798$)

Table 2
Pearson Correlation Analysis

		JP	RW	AT	EC	SD	SOC
JP	Pearson Correlation	1	.798**	.296**	.817**	.806**	.629**
	Sig. (2-tailed)		<.001	<.001	<.001	<.001	<.001
RW	N	238	238	238	238	238	238
	Pearson Correlation	.798**	1	.197**	.708**	.711**	.497**
	Sig. (2-tailed)	<.001		.002	<.001	<.001	<.001
AT	N	238	238	238	238	238	238
	Pearson Correlation	.296**	.197**	1	.235**	.205**	.185**
	Sig. (2-tailed)	<.001	.002		<.001	.001	.004
EC	N	238	238	238	238	238	238
	Pearson Correlation	.817**	.708**	.235**	1	.697**	.603**
	Sig. (2-tailed)	<.001	<.001	<.001		<.001	<.001
SD	N	238	238	238	238	238	238
	Pearson Correlation	.806**	.711**	.205**	.697**	1	.513**
	Sig. (2-tailed)	<.001	<.001	.001	<.001		<.001
SOC	N	238	238	238	238	238	238
	Pearson Correlation	.629**	.497**	.185**	.603**	.513**	1
	Sig. (2-tailed)	<.001	<.001	.004	<.001	<.001	
	N	238	238	238	238	238	238

** . Correlation is significant at the 0.01 level (2-tailed).

Note: JP= Job Performance, RW=Remote Work, AT=Autonomy, EC=Effective Communication, SD=Self Discipline, SOC=WFH Supportive Organization Culture

5.2 | Common Method Bias in Pls (Collinearity and Vif)

Normally, a VIF greater than 3.3 is considered a case of collinearity, suggesting that the model has a common method bias. According to one research, a VIF threshold greater than 10 presents issues with collinearity, and values should be within the range of <10 (Vittinghoff et al., 2011). O'Brien (2007) and Chatterjee & Simonoff (2013) have suggested a rule of thumb for VIF and tolerance values of less than 5 and greater than 0.2, respectively. VIF and tolerance within this range can support that there is no issue of multicollinearity, and values are considered acceptable. Considering the most conservative numbers of $VIF < 3.3$ and $tolerance > 0.2$, and looking at the table

below, we can see that values of all variables are less than 3.3 and tolerance is greater than 0.2, which indicates there is no issue of multicollinearity and the model is not tainted by common method bias.

Table 3
Collinearity and VIF

Model	Variables	Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	RW	0.405	2.47
	AT	0.939	1.065
	EC	0.37	2.705
	SD	0.413	2.421
	SOC	0.616	1.624

Note: JP= Job Performance, RW=Remote Work, AT=Autonomy, EC=Effective Communication, SD=Self Discipline, SOC=WFH Supportive Organization Culture

5.3 | Construct Reliability and Validity Analysis

To evaluate our model and confirm the construct reliability and validity, we perform Confirmatory Factor Analysis (CFA), which includes Cronbach's alpha value, rho-A, Composite Reliability, and average variance extracted (AVE). Cronbach's alpha was developed to measure the internal consistency of a test or scale, which means how consistent your set of items are across the variable. According to Zalma et al. (2015), the value of Cronbach's alpha ranges between 0 to 1, and the cut-off value of Cronbach's alpha is 0.7. It is considered good if it is more than 0.7. Fornell and Larcker (1981) suggest that the value of AVE should be above 0.5 and the value of composite reliability is considered acceptable within the range of 0.6 or above. In the table below, the values of Cronbach's alpha, Composite Reliability (rho_a), Composite Reliability (rho_c), and average variance extracted (AVE) are higher than the thresholds mentioned in the research, which indicates that the data is reliable.

Table 4
Construct Reliability and Validity

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
AT	0.953	0.977	0.961	0.78
EC	0.936	0.939	0.951	0.795
JP	0.9	0.917	0.927	0.718
RW	0.927	0.948	0.948	0.82
SD	0.933	0.942	0.945	0.684
SOC	0.974	0.975	0.977	0.826

Note: JP= Job Performance, RW=Remote Work, AT=Autonomy, EC=Effective Communication, SD=Self Discipline, SOC=WFH Supportive Organization Culture

5.4 | Discriminant Validity (Fornell-Larcker Criterion)

Discriminant validity assessment is an important part of any research as it helps prevent multicollinearity issues. Ab Hamid, M. R., Sami, W., & Mohamad Sidek, M. H. (2017) find the extent to which one construct differs from another construct. To evaluate discriminant validity, one of the well-known and widely used methods is the Fornell-Larcker criterion. We use the extracted average variance for this purpose, and the average variance extracted from any one construct should be higher than the highest squared correlation with any other construct.

Fornell and Larcker (1981) state that discriminant validity is measured by comparing the AVE of each construct diagonally with the correlation of each construct. Looking at the table below, we analyzed that the discriminant validity of this research model can be accepted.

Table 5
Discriminant Validity by Fornell-Larcker

	AT	EC	JP	RW	SD	SOC
AT	0.883					
EC	0.249	0.892				
JP	0.32	0.829	0.847			
RW	0.217	0.716	0.818	0.906		
SD	0.223	0.7	0.817	0.719	0.827	
SOC	0.201	0.604	0.638	0.508	0.516	0.909

Note: JP= Job Performance, RW=Remote Work, AT=Autonomy, EC=Effective Communication, SD=Self Discipline, SOC=WFH Supportive Organization Culture

5.5 | HTMT Ratio

The Fornell-Larcker criterion is still a widely used and effective method to establish discriminant validity, but it comes with its drawbacks. Rönkkö and Evermann (2013) explored these drawbacks in their research. Later on, Henseler, Ringle, and Sarstedt (2015) introduced a new approach to evaluating discriminant validity called the heterotrait-monotrait ratio (HTMT). This method avoids the drawbacks of the aforementioned process, and the accepted threshold for HTMT is below 0.9. Looking at the table below, all of the values are within the threshold of 0.9, which confirms that the discriminant validity of this research model can be accepted

5.6 | Structural Model

The structural model displays the relationship between variables along with path coefficients (beta values), p-values, t-values, and R-squared values. It shows the direction of the relationship and whether they are positive or negative. It also indicates whether a relationship is significant or insignificant with the help of p-values and t-values.

Table 6
HTMT Ratio

	AT	EC	JP	RW	SD	SOC	RW x SD	RW x AT	RW x SOC
AT									
EC	0.247								
JP	0.321	0.887							
RW	0.209	0.755	0.872						
SD	0.214	0.744	0.88	0.76					
SOC	0.191	0.63	0.672	0.52	0.534				
RW x SD	0.227	0.431	0.624	0.499	0.494	0.36			
RW x AT	0.383	0.198	0.243	0.042	0.263	0.169	0.228		
RW x SOC	0.164	0.385	0.491	0.226	0.417	0.046	0.478	0.278	

Note: JP= Job Performance, RW=Remote Work, AT=Autonomy, EC=Effective Communication, SD=Self Discipline, SOC=WFH Supportive Organization Culture

5.7 | Beta Value

Beta values of all constructs are shown in the Smart PLS graphical output below. We can see that the beta value between Effective Communication (EC) and Job Performance (JP) is 0.133, which means that they are positively correlated. If we increase effective communication, then the job performance of the employee will increase as well.

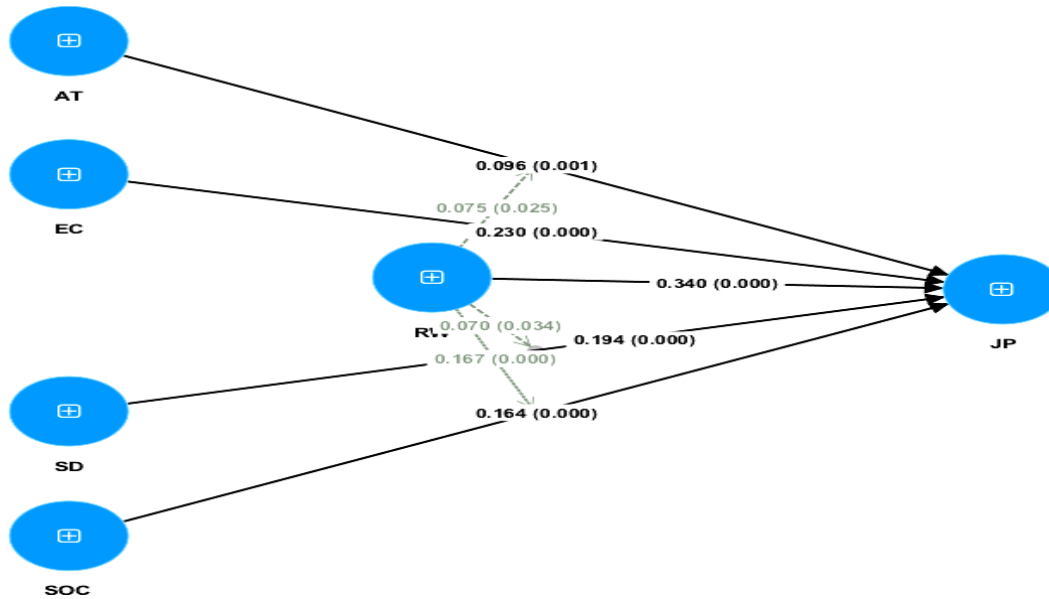


Figure 1: Graphical Structural Model

Table 7
 Hypothesis Summary

Hypothesis	Description	Remarks
1	Remote Work is positively related to the Job performance	Accepted
2	Having Autonomy in day-to-day operations does affect the employee performance working remotely	Accepted
3	Effective communication has a positive role in Job Performance	Accepted
4	There exists a significant relationship between Self Discipline and Job Performance working remotely	Accepted
5	WFH Supportive Organization Culture has an impact on the Job Performance	Accepted

6 | RESULT AND DISCUSSION

As mentioned before, five hypotheses were developed based on theoretical background and the review of literature. The findings for each hypothesis are discussed below: Our first hypothesis proposes that remote work has a positive impact on job performance. Looking at the analysis we have performed and the results we have gathered, we can see that remote work and job performance have a positive relationship with a beta coefficient value of 0.340. This means that if we increase remote work by 1%, there will be a 34% increase in job performance. The p-value and T-statistics indicate that the relationship is significant. Our second hypothesis postulates that autonomy in day-to-day jobs has a positive impact on job performance for employees working remotely. According to the analysis and results, we saw that remote work positively moderates the relationship between autonomy and job performance. A beta coefficient value of 0.075 suggests that increasing remote work by 1% will strengthen the relationship between autonomy and job performance by 7.5%. This means that remote workers need autonomy in their jobs to be more productive. Our third hypothesis proposes that effective communication has a positive impact on job performance. Looking at the analysis we have performed and the results we have gathered, we can see that effective communication and job performance have a positive relationship with a beta coefficient value of 0.230. This means that if we increase effective communication by 1%, there will be a 23% increase in job performance. The p-value and T-statistics indicate that the relationship is significant.

Our fourth hypothesis postulates that self-discipline plays an impactful role in how productive a remote worker is. We explored the moderating role of remote work on the relationship between self-discipline and job performance.

According to the analysis and results, we saw that remote work positively moderates the relationship between self-discipline and job performance. A beta coefficient value of 0.070 suggests that increasing remote work by 1% will strengthen the relationship between self-discipline and job performance by 7.0%. This means that self-discipline has an even greater impact on job performance for a remote employee compared to an office worker. Remote workers need to be more self-disciplined to be more productive. Our fifth hypothesis postulates that how productive a remote worker is also depends on how much support they get from their organization and the culture of the organization regarding remote work. We explored the moderating role of remote work between supportive organizational culture and job performance. According to the analysis and results, we saw that remote work positively moderates the relationship between supportive organizational culture and job performance. A beta coefficient value of 0.167 suggests that increasing remote work by 1% will strengthen the relationship between supportive organizational culture and job performance by 16.7%.

7 | CONCLUSION

The current study has practical implications and recommendations that can be easily implemented in the IT sector of Pakistan to improve the effectiveness of remote workers and remote teams. These findings have numerous benefits for practitioners regarding practical problems. The results of this study will also help the IT sector develop better and improved policies to enhance productivity. This research will help the IT sector think outside the box to gain a competitive advantage. The findings of this study show that remote workers should be allowed more autonomy to be their most productive. Organizations can spend time and resources to implement policies that are favorable towards remote workers, such as making it easier for employees to take care of their mental and physical health by subsidizing access to healthcare platforms. Organizations can adopt tools and technologies that allow them to have more effective communication with their remote employees. This can involve taking a consensus from employees on which tool they prefer to communicate and adopting that. Furthermore, this study will also help the IT sector increase the effectiveness of remote teams by implementing favorable organizational policies and spending resources to improve self-discipline in struggling employees and allowing them more autonomy in their day-to-day operations. Lastly, the findings of this research may support practitioners and academics in finding the best practices that can influence virtual team effectiveness.

8 | FUTURE DIRECTION

Every research has certain limitations, inadequacies, or restrictions, and this research is no different. Future studies may expand the model and examine additional variables that impact remote work and job satisfaction. Furthermore, because we only chose a sample from Pakistan for this study, the results have a limited capacity for external validity. Thus, if researchers can replicate this study in a variety of cultures or contexts, the generalizability of the findings can be increased. The sample size collected was 238 using Google Forms; to acquire a better image of the study in the future, a different sampling technique and a larger number of respondents can be used.

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