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Hybrid Work and Employee Productivity in Pakistan's Mobile Network Operators: The Mediating Role of Work-Life Balance and the Moderating Role of Perceived Organizational Support

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	Abstract
Shahid Khan PhD Scholar Department of Management Sciences Hazara University Mansehra. Email : shahidkhan@hu.edu.pk Dr.Muhammad Yasir Chairman Department of Management Sciences Hazara University Mansehra. Email : muhammadyasir@hu.edu.pk Hafeezullah PhD Scholar Department of Management Sciences Hazara University Mansehra. Email : hafeez301@gmail.com Amin ur Rehman MS Scholar Department of Management Sciences Hazara University Mansehra. Email : aminurehman879@gmail.com	Purpose The paper investigates the relationship between hybrid work and employee productivity within the telecom companies in Pakistan. Specifically, it analyzes the mediating effect of work-life balance and the moderating effect of perceived organizational support (POS). Design/methodology/approach the study adopted a quantitative cross-sectional design. Data was gathered from 200 employees from mobile cellular companies like Jazz, Zong, Telenor, Ufone and SCO through the help of a structured questionnaire. The data was analyzed using correlation, regression, mediation (PROCESS Model 4) and moderation using SPSS. Findings The results indicate that hybrid work is having a significant positive impact on employee productivity (= 0.44, p < 0.001). The study also suggests that work-life balance is partially mediating the effect of hybrid work on employee productivity (indirect effect = 0.24). Furthermore, it is observed that the positive impact of hybrid work on employee productivity is being moderated by POS (= 0.16, p < 0.001). The impact of hybrid work is the strongest when POS is high. Practical implications Besides implementing hybrid policies, organizations should support their employees by providing them with necessary resources, training and encouragement so they perform their job efficiently. Originality/value This study is among the first to empirically test the moderated-mediation model in the context of Pakistan's telecom sector while considering the mediating role of work-life balance and moderating role of POS in conjunction with hybrid work and exploring its impact on employee productivity, drawing upon social exchange and job demands-resources theories.
Keywords:	Hybrid Work, Employee Productivity, Work-Life Balance, Perceived Organizational Support, Telecom Sector, Pakistan

Introduction

Today work has significantly changed. With better technologies, enhanced connectivity via the internet and changed employee demands many organizations are embracing flexible work arrangements. One such arrangement that is gaining more and more popularity is the Hybrid work model. This type of work arrangement involves the split work between home and office while using digital technology for connecting with each other (Allen, Golden & Shockley, 2015). Following the Covid 19 pandemic, hybrid work arrangement grew prevalent and many organizations realized that work does not always have to be conducted from the office. Hybrid work is becoming an arrangement that organizations use rather than a temporary measure for some jobs. Employees value the hybrid arrangement for reasons such as saving time/ money of commuting, reduce work-related stress and better balance between work and family. Organizations benefit by improved employee morale, decrease in overheads and better employee retention. (Bloom, Han and Liang, 2024). Hybrid work in Pakistan is becoming even more prevalent due to the growing prices of fuel and energy; the government is suggesting work-from-home policies in many sector in order to minimize the national expenditure on fuel. Mobile cellular companies in Pakistan, such as Jazz, Telenor, Ufone, Zong, and SCO, have been at the vanguard of adopt the hybrid work arrangement due to the inherent technological advancements and competitive nature of their industry.

1.2 Problem Statement

Although hybrid work is gaining its place in the various organizations, the effect of hybrid work on employee productivity in the context of Pakistan is still uncertain. There are some employees who are performing better in a flexible work environment while some are struggling with the work-life issues, communication breakdown, poor teamwork, lack of coordination and much more. On the other hand, no much research has been conducted about the moderating effects of work-life balance and perceived organizational support in the relation of employee productivity and hybrid work in Pakistan Telecom sector.

Thus, the current study will investigate the effect of hybrid work on employee productivity and moderating effects of work-life balance and perceived organizational support in the context of Pakistan Telecom sector.

1.3 Research Objectives

1. Investigate the effect of hybrid work on employee productivity.
2. Investigate the mediating effect of work-life balance.
3. Investigate the moderating effect of perceived organizational support.

1.4 Research Questions

1. How does hybrid work affect employee productivity?
2. Does work-life balance mediate the effect of hybrid work on employee productivity?
3. Does perceived organizational support moderate the effect of hybrid work on employee productivity?

1.5 Significance of the Study

This study extends the research literature on hybrid work to an under-researched context in Pakistan, a sector which is now evolving with hybrid work, and is one of the first empirically validated reports from such a sector, enabling managers to implement relevant hybrid work strategies that will boost the welfare of employees and enhance work performance.

1.6 Scope of the Study

This research paper is on employees working in Pakistani mobile cellular companies Jazz, Zong, Telenor, Ufone and SCO. It includes analysis of Hybrid work, Work-life balance, Perceived organizational support and employees' performance in quantitative manner.

2. LITERATURE REVIEW AND HYPOTHESES

2.1 Theoretical Framework

This study is grounded in two complementary theories.

Social Exchange Theory (SET) Introduced by Homans (1958) and later expanded on by Blau (1964) this theory assumes that relations are governed by a form of exchange: The positive relationship that results from an organization's employees 'caring' and 'acknowledgement' of their input leads employees to respond in a positive way through attitudes and behavior (i.e. Work productivity). Thus, this theory can be used to explain the moderating role of perceive organizational support.

Job Demands-Resources (JD-R) Theory Developed by Demerouti, Bakker, Nachreiner, and Schaufeli (2001) JD-R Theory states that the role of job resources is to "help employees cope with job demands and reach work objectives". Hybrid work is an excellent resource that may provide autonomy and control of the work and therefore improve work-life balance. In turn this improves work productivity and so can explain the mediating role of work-life balance.

2.2 Hybrid Work and Employee Productivity

Hybrid work is a flexible work arrangement in which employees divide their working time between the traditional office environment and remote locations, such as their homes, while using technology to remain connected with organizational activities (Allen, Golden, & Shockley, 2015; Bloom et al., 2024).

Hybrid work is a more flexible system than that of a fixed schedule where employees work part-time in the office and part-time remotely (Allen et al., 2015). There have been findings on positive effects on employee's performance due to flexible working arrangements. According to Gajendran & Harrison (2007), working from home positively impacts satisfaction with job and employee performance rating. In addition, bloom et al., (2024) identified a higher retention in hybrid working and that performance does not drop with these arrangements. Employee benefits on the switch to hybrid work include less commute time, quiet office surroundings and flexible scheduling control (Barrero, Bloom, & Davis, 2021).

Based on this, we propose:

H1. Hybrid work has a significant positive effect on employee productivity.

2.3 Hybrid Work and Work-Life Balance

Work-life balance is the degree to which individuals have successfully negotiated their work role and family role (Greenhaus, Collins, & Shaw, 2003). Flexible work schedules lead to positive changes in work-life balance. Work-family conflict is decreased by workplace flexibility (Allen, Johnson, Kiburz, & Shockley, 2013). Employees who used flexibility to help with family roles enjoyed the largest improvements to work-life balance (Shockley & Allen, 2012). Reduced commuting time reported by remote workers led to improved work-life balance (Ipsen, Kirchner, & Hansen, 2021).

Thus, we propose:

H2. Hybrid work has a significant positive effect on work-life balance.

2.4 Work-Life Balance and Employee Productivity

Work-life balance results in less stress and more focus in workers. The research by Haar, Russo, Sue, and Ollier-Malaterre (2014) revealed that work-life balance is positively related to job satisfaction and performance, in many countries. Johari, Tan, and Zulkarnain (2018) showed that work-life balance positively affects job performance, because it lowers the amount of stress and boost employee's motivation.

Therefore, we propose:

H3. Work-life balance is strongly positively related to employee performance.

2.5 The Mediating Role of Work-Life Balance

Work-life balance refers to the extent to which individuals are equally engaged and satisfied with both their work roles and personal life roles (Greenhaus, Collins, & Shaw, 2003).

According to the JD-R Theory, work-life integration facilitated by hybrid work is considered a job resource, which is found to be positively related with productivity. This indirect path has theoretical significance, as flexibility might affect productivity in part due to increased employees' well-being.

Thus, we propose:

H4. Work-life balance mediates between hybrid work and employee productivity.

2.6 Perceived Organizational Support and Employee Productivity

Perceived organizational support (POS) is defined as employees' belief that their organization values their contributions and is concerned about their welfare (Eisenberger et al., 1986). Under SET, employee returns this support in the form of greater effort and performance. In their study, Rhoades and Eisenberger (2002) discovered strong positive links between POS and job performance. More recently, Kurtessis et al. (2017) showed POS is still a reliable predictor of employee outcomes.

Thus, we hypothesize:

H5. Employee productivity is positively related to perceived organizational support.

2.7 The Moderating Role of Perceived Organizational Support

Perceived organizational support refers to employees' general belief that their organization values their contributions and cares about their well-being (Eisenberger, Huntington, Hutchison, & Sowa, 1986).

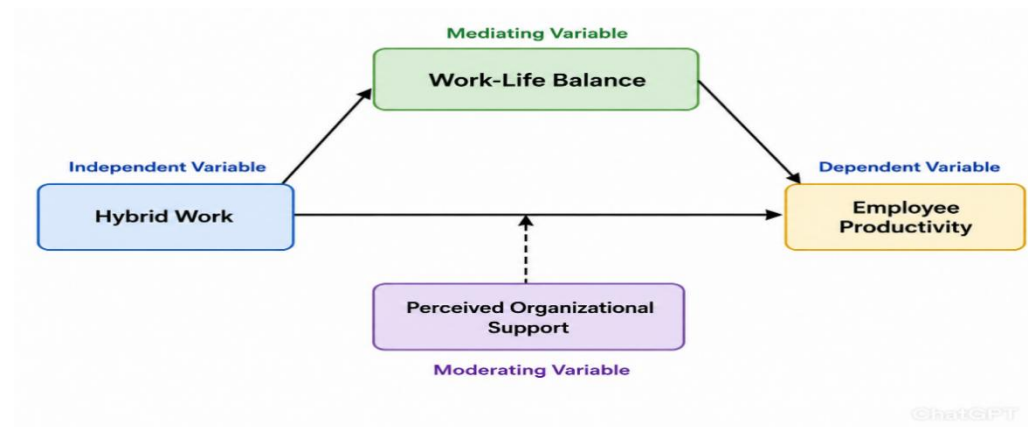
Based on SET, high POS would make employees feel greater indebtedness to reciprocate with more commitment toward the organization. The relationship between hybrid work and employee productivity would therefore be further strengthened by POS. Ferreira & Gomes (2023) demonstrated that POS moderated the relation between WFH experiences and their consequences.

Hence, we hypothesize:

H6. Employee productivity would be further enhanced under hybrid work when the employee holds high POS.

2.8 Conceptual Model

The conceptual model indicates that work-life balance acts as a mediator, in which hybrid work serves as the independent variable, employees' productivity serves as the dependent variable and perceived organizational support serves as the moderator.



3. METHODOLOGY

3.1 Research Design

The research design used in this study is quantitative, cross-sectional. The data has been gathered on single occasion from employees working in mobile cellular companies in Pakistan.

3.2 Population and Sample

The study's population consists of the employees of Jazz, Zong, Telenor, Ufone, and SCO. A sample size of 199 valid response has been obtained by the means of convenience sampling. Sample has 64% males and 36% females. A majority 43% are of age group 30-39 and 41% are of having 1-5 years of experience.

Participating Organizations

Participants The population from which this research participants were drawn comprised employees of leading Mobile Network Operators (MNOs) operating in Pakistan. These institutions may be generally well known through their respective brand names (Jazz, Ufone, Zong, and Telenor Pakistan), but they exist legally under different company registration names. In the subsequent text, we first referred to these companies with their registered names for consistency. We referred to the MNOs through their brand names in all subsequent mentions due to the better recognition by readers, employees, and industry professionals.

Brand Name	Legal Company Name
Jazz	Pakistan Mobile Communications Limited (PMCL)
Zong	China Mobile Pakistan (CMPak) Limited
Ufone	Pakistan Telecommunication Mobile Limited (PTML)
Telenor Pakistan	Telenor Pakistan (Private) Limited

It may be mentioned here that during the study Telenor Pakistan announced that they will merge their organization with Ufone. But at the time of data collection the merger process was under the process and the merger & integration have not been completed. Hence Telenor Pakistan & Ufone employees are taken as separate organizations.

3.3 Measures

The entire scales are measured with a 5-point Likert scale (1=Strongly Disagree to 5=Strongly Agree):

Hybrid Work (6 items, from Aprilina and Martdianty (2023))

Work-Life Balance (5 items, from Greenhaus et al. (2003))

Perceived organizational support (8 items, from Eisenberger et al. (1986))

Employee productivity (5 items, from Aprilina and Martdianty (2023)).

3.4 Data Analysis

The data was analyzed with SPSS. Cronbach's alpha was employed to check the reliability. Analysis consisted of correlations, regression, mediation (PROCESS Model 4), and moderation (interaction term).

3.5 Ethical Considerations

It was optional for people to take part. All information will be kept confidential. The data will be used for academic work only.



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4. RESULTS

4.1 Reliability Analysis

The results for Cronbach alpha were: (0.85), POS (0.89), employee above the minimum cut-off value of

4.2 Descriptive Statistics

Variable	Cronbach's Alpha	Items
Hybrid Work	0.87	6
Work-Life Balance	0.85	5
Perceived Organizational Support	0.89	8
Employee Productivity	0.86	6

Hybrid Work (0.87), Work-Life Balance productivity (0.86). These figures are all 0.70.

Variable	Mean	Std. Deviation
Hybrid Work	3.78	0.69
Work-Life Balance	3.71	0.66
POS	3.64	0.72
Employee Productivity	3.83	0.63

4.3 Correlation Analysis

Variable	1	2	3	4
1. Hybrid Work	1			
2. Work-Life Balance	0.64**	1		
3. POS	0.56**	0.59**	1	
4. Productivity	0.67**	0.61**	0.58**	1

**p < 0.01

The relationships between all pairs were positive and significant, offering initial support for hypotheses.

4.4 Testing of Direct Effects

Hypothesis	Path	Beta	t-value	p-value	Result
H1	HW → Productivity	0.44	7.95	< 0.001	Supported
H2	HW → Work-Life Balance	0.63	10.41	< 0.001	Supported
H3	WLB → Productivity	0.38	6.52	< 0.001	Supported
H5	POS → Productivity	0.31	5.96	< 0.001	Supported

4.5 Mediation Analysis (H4)

Using PROCESS Model 4 with 5,000 bootstrap samples:



Effect	Beta	95% CI	Result
Direct Effect	0.27	[0.15, 0.39]	Significant
Indirect Effect	0.24	[0.15, 0.34]	Significant
Total Effect	0.51	[0.41, 0.61]	Significant

The indirect path work-life balance was significant and the direct path was significant too thus partial mediation occurs. Therefore, H4 supported.

4.6 Moderation Analysis (H6)

The interaction term (Hybrid Work × POS) was significant:

Effect	Beta	t-value	p-value
HW × POS → Productivity	0.16	3.74	< 0.001

Simple slope analysis showed:

- When POS was high: effect of HW on productivity = 0.52 (p < 0.001)
- When POS was low: effect of HW on productivity = 0.28 (p < 0.01)

The relationship was stronger when organizational support was high. H6 was supported.

4.7 Summary of Hypotheses

Hypothesis	Result
H1: HW → Productivity	Supported
H2: HW → Work-Life Balance	Supported
H3: WLB → Productivity	Supported
H4: WLB mediates HW → Productivity	Supported (Partial)
H5: POS → Productivity	Supported
H6: POS moderates HW → Productivity	Supported

5. DISCUSSION AND CONCLUSION

5.1 Discussion of Findings

This research investigated the influence of hybrid working arrangements on employee productivity in mobile cellular organizations of Pakistan. All of the six hypotheses tested in the study were supported by the findings. Firstly, it was discovered that hybrid working directly increase employee productivity. These results are consistent with past literature on productivity and show that increased job flexibility and employee autonomy increased productivity (Bloom et al. 2024; Gajendran & Harrison, 2007). Commuting time and the employees' ability to control their own schedules were seen to be beneficial for productivity. Secondly, the findings of this study support the hypothesis that hybrid work has a positive impact on the employees' work life balance. The findings are consistent with the studies of Allen et al. (2013) and Shockley and Allen (2012), stating that working flexibility enables employees to balance job and family duties and is more vital in the Pakistan economy as people highly respect the family aspect. Thirdly, work life balance has a positive effect on employee productivity. Employees who are balanced are likely to suffer less from work-related stress and perform at a better level (Haar et al. 2014). Fourthly, work life balance partially mediates the positive relationship between hybrid work and employee productivity. This is evidenced in the current research where hybrid work not only leads to increase employee productivity but it is indirectly doing so through its effects on work life balance. Roughly 47 percent of the effect is indirect. Fifthly, perceived organizational support leads to increase employee productivity and is in line with much of the existing POS literature (Rhoades & Eisenberger, 2002). Lastly and importantly is found to moderate the hybrid work- productivity relation. The positive influence of hybrid working on productivity was strengthened significantly

by high levels of support from the organization, thus supporting Social Exchange Theory and showing that when people feel supported, they receive enhanced work performance through job flexibility.

5.2 Practical Implications

In light of these conclusions, some practical suggestions to managers of telecom companies in Pakistan:

1. Bolster hybrid work policies by putting supportive mechanisms in place. Management needs to communicate not just the policy but provide the necessary technical, informational and managerial support to employees for hybrid work to deliver to its full potential.
2. Champion work-life balance actively. Management needs to reinforce working hours and urge employees to distinguish between work-life domains. Clear expectations need to be laid down with respect to response times.
3. Increase POS. Recognition schemes, performance feedback, career development opportunities and concern for employee well-being collectively constitute POS which can influence the work of hybrid jobs.
4. Provide training to managers for hybrid management. This implies enabling supervisors to lead remote employees, provide remote support and maintain connections between disparate workers.

5.3 Limitations and Future Research

This study had limitations:

The cross-sectional design, did not permit us to make causal inferences.

Self-reports may have been biased.

The study was based on convenience sample hence, limiting its generalizability.

We only looked into the Telecom sector in Pakistan.

Future research could employ a longitudinal design and use actual objective work-based outcome measures, examine other sectors, or further study the potential Moderators like leadership style or organization culture.

5.4 Conclusion

This study concludes that hybrid work has a positive effect on the productivity of employees working for the mobile cellular companies in Pakistan. The impact of hybrid work on the productivity is partially mediated by work life balance, indicating that work life balance is one of the mechanisms explaining the relationship between hybrid work and employee productivity. This impact of work life balance is also positively moderated by organizational support: an employee feels supported, so hybrid work seems to be working better for such an employee. This implies that organizations moving toward future of work must know that hybrid work works, but it works better when organizations provide support for employees at work and care for employee's work life balance.

REFERENCES

- Allen, T. D., Golden, T. D., & Shockley, K. M. (2015). How effective is telecommuting? *Psychological Science in the Public Interest*, 16(2), 40-68.
- Allen, T. D., Johnson, R. C., Kiburz, K. M., & Shockley, K. M. (2013). Work–family conflict and flexible work arrangements. *Personnel Psychology*, 66(2), 345-376.
- Aprilina, R., & Martdianty, F. (2023). The role of hybrid-working in improving employees' satisfaction. *Journal of Theoretical and Applied Management*, 16(2).
- Barrero, J. M., Bloom, N., & Davis, S. J. (2021). Why working from home will stick. *NBER Working Paper No. 28731*.
- Blau, P. M. (1964). *Exchange and power in social life*. Wiley.
- Bloom, N., Han, R., & Liang, J. (2024). Hybrid working from home improves retention without damaging performance. *Nature*, 630(8018), 920-925.
- Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands–resources model of burnout. *Journal of Applied Psychology*, 86(3), 499-512.
- Eisenberger, R., Huntington, R., Hutchison, S., & Sowa, D. (1986). Perceived organizational support. *Journal of Applied Psychology*, 71(3), 500-507.
- Ferreira, P., & Gomes, S. (2023). Work–life balance and work from home experience. *Administrative Sciences*, 13(6), 153.
- Gajendran, R. S., & Harrison, D. A. (2007). The good, the bad, and the unknown about telecommuting. *Journal of Applied Psychology*, 92(6), 1524-1541.
- Greenhaus, J. H., Collins, K. M., & Shaw, J. D. (2003). The relation between work–family balance and quality of life. *Journal of Vocational Behavior*, 63(3), 510-531.
- Haar, J. M., Russo, M., Suñe, A., & Ollier-Malaterre, A. (2014). Outcomes of work–life balance on job satisfaction and performance. *International Journal of Human Resource Management*, 25(19), 2724-2744.
- Homans, G. C. (1958). Social behavior as exchange. *American Journal of Sociology*, 63(6), 597-606.
- Ipsen, C., Kirchner, K., & Hansen, J. P. (2021). Experiences of working from home during COVID-19. *International Journal of Environmental Research and Public Health*, 18(4), 1826.
- Johari, J., Tan, F. Y., & Zulkarnain, Z. I. T. (2018). Autonomy, workload, work–life balance and job performance. *International Journal of Educational Management*, 32(1), 107-120.



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- Kurtessis, J. N., Eisenberger, R., Ford, M. T., Buffardi, L. W., Stewart, K. A., & Adis, C. S. (2017). Perceived organizational support: A meta-analytic evaluation. *Journal of Management*, 43(6), 1854-1884.
- Rhoades, L., & Eisenberger, R. (2002). Perceived organizational support: A review of the literature. *Journal of Applied Psychology*, 87(4), 698-714.
- Shockley, K. M., & Allen, T. D. (2012). Motives for flexible work arrangement use. *Journal of Occupational and Organizational Psychology*, 85(1), 131-152.