

Impact of E-HRM and work from Home on Employee productivity during COVID-19: Evidence from Pharmaceutical companies

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Abstract

The key objectives of this study to examine the impact of e-HRM and work from home on employee productivity during COVID-19 among pharmaceutical companies of Sindh, Pakistan. It is difficult for employee to perform at same level due to lockdown and pandemic situation in country. Total 250 employees are considered as sample size. In the present study there are 3 variables and each variable was consisting of 5 items. Due, COVID-19 questionnaire generated via google form and it shared via official e-mail of HR department of respective companies in order to complete the questionnaire. The random sampling techniques applied for in order to chance equal opportunity to be part of this research study. In order to test the proposed hypothesis questionnaire was taken from previous studies. Results revealed that the there is a significant and positive impact of e-HRM and work from home on employee productivity during COVID-19 in Pharmaceutical companies of Sindh, Pakistan. New insights of this study are in past research scholar verified the e-HRM with respect to employee productivity without context of COVID-19 situation and e-HRM and work from home are studied together. The policy makers and top management of Pharmaceutical companies of Sindh, Pakistan should consider these variables for

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better employee productivity during COVID-19.

Keywords: E-HRM, Work from home, Employee productivity during COVID-19

1- Introduction

The employee productivity has significant impact on both financial and non-financial business performance during COVID-19 (Krekel et al., 2019). Role of human resource management cannot be ignored in terms of better productivity and employee satisfaction at great level (Gosnell et al., (2020). The E-HRM can be defined as the internet based technologies to perform HR related activities in order to have better control and coordination (Galanaki et al., 2019). E-HRM add the value to the organization and shift the traditional HRM that is labor-intensive in nature to efficient approach to HRM (Iqbal et al., 2019; Galanaki et al., 2019). However, the recent changes of COVID-19 dramatically affected entire global economic downturn (Al-Mansour & Al-Ajmi, 2020). It has impact on various industries including such as healthcare and education. Therefore, firms need to adopt a strategy in order to cope up this situation quickly for better employee productivity and firm's as well (Ahlstrom & Wang, 2020). In this regard, more firms have adopted the work from home practice and avoid spread of COVID-19 and flexible work practice for better employee productivity.

1.1 Research Gap

Aim of this study to examine the impact of E-HRM and work from home on employee productivity during COVID-19 in Pharmaceutical companies of Sindh, Pakistan. There are two main contributions of this study first, based on limited knowledge of author this would be first study conducted in developing country, Pakistan on E-HRM and work from home on employee productivity during COVID-19. Second, E-HRM and work from home are studied together during COVID-19.

1.2 Research Objectives

- To examine the impact of work from home on employee productivity in Pharmaceutical companies of Sindh, Pakistan.
- To identify the impact of E-HRM on employee productivity in Pharmaceutical companies of Sindh, Pakistan.

1.3 Research Questions

- What is impact of work from home on employee productivity in Pharmaceutical companies of Sindh, Pakistan.?
- What is impact of E-HRM on employee productivity in Pharmaceutical companies of Sindh, Pakistan?

1.4 Significance of Study

Present study will help to pharmaceutical top management to understand the factors including e-HRM and work from home in context of employee productivity during COVID-19 in Karachi, Pakistan. Employee also make best use of opportunity due to work from home

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through these research findings as evident. Lastly, the future researcher may confirm the behavior of these variables in their context for better employee productivity during COVID-19.

2. Literature Review

2.1 Work from home

Many studies have been showed role of work from home and its overall impact on employee productivity (Bick et al., 2020; Brynjolfsson et al., 2020; Von et al., 2020; Gottlieb et al., 2021 & Hensvik et al., 2020). Almost all positions and different in terms of education and income may have impact on work from home and might be applied by them. It has been suggested in study as well employee is also productive if they are working from home and completing their tasks on time (Etheridge et al., 2020). However, it is recommended by (Barrero et al., 2020), employee who are working from home might have effect on their work-life balance and might the job satisfaction. Lastly, study from china revealed that the workers' productivity might be decline if employee is biased than it has effect on other employee too.

Based on these mixed results following hypothesis is developed:

H1: *Work from home is related to employee productivity in Pharmaceutical companies of Sindh, Pakistan.*

2.2 E-HRM

The HR practices and polices impact on all level of employees' productivity (Pradhan et al., 2019). In past the HR used record the all data related to HR manually via file-based record-keeping and this practice lead to delay in service and inaccuracies (Ahmed & Ogalo, 2019). With passage of time the technologies have been evolved and firms shifted to e-HRM (Galanaki et al., 2019). As a result of this adaptation the employees' productivity enhanced (Iqbal et al., 2019). The employee looks for help from HR in terms of leave and compensation. Therefore, by using the latest technology the quality of services increased and it leads to impact on employee satisfaction and employees' productivity (Nurshabrina & Adrianti, 2020). Lastly, e-HRM would allow the employee to verify the available leaves and compensation if any and they would able to complete their task on time (Wege et al., 2019). Based on these mixed results following hypothesis is developed:

H2: *E-HRM is related to employee productivity in Pharmaceutical companies of Sindh, Pakistan*

2.3 Theoretical framework

In past various studies have been conducted on employee productivity and firm performance (Krekel et al., 2019; Mohamed et al., 2018 & Hanaysha & Majid, 2018). The employee productivity can be explained as the output of an employee (Ma & Ye, 2019). Human resource played an important role and it has significant impact on employee productivity as well (Wang et al., 2019). There are many motivational theories including Herzberg's Two Factor Theory 1965 and Maslow's Hierarchy of Needs 1954 helped to identify important related factors for motivation of employee for better performance such as workload, skill, competencies, compensation, growth opportunities and HR policies and practices employee productivity Gosnell et al., 2020; Ehsan & Ali, 2019; Shenoy & Uchil, 2018).

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3. MATERIALS AND METHODS

In this study quantitative research approach is adopted in order to test the proposed hypotheses. The impact of E-HRM and work from home on employee productivity empirical evidence from Pharmaceutical companies are studied. Total 250 employees are considered as sample size. Sample size is determined using thumb of rule item $\times 10$ (Roscoe, 1975). In the present study there are 3 variables and each variable was consisting of 5 items. In this regard $14 \times 10 = 140$ sample size is required in order to conclude the final findings of this study. However, for better reliable results the 250 employee are surveyed through adopted questionnaire from past studies. Due, COVID-19 questionnaire generated via google form and it shared via official e-mail of HR department of respective companies in order to complete the questionnaire. The random sampling techniques applied for in order to chance equal opportunity to be part of this research study. Questionnaire is adopted from past studies. Five likert scale is considered from strongly disagree 1 to strongly agree 5.

The factor e-HRM with 5 research items is adopted from the scale developed by Farhan et al., (2021). Five items are “We use e-HRM for formal grievances and complaints during COVID-19, e-HRM is used for performance appraisal in our Organization during COVID-19, Our Organization uses e-HRM for managing employee benefits during COVID-19, Our Organization uses e-HRM to receive formal information about a wide range of issues relevant to the branch and its operation during COVID-19 & We use e-HRM for online training and learning during COVID-19”.

The factor work from home with 5 research items is adopted from the scale developed by (Yu e & Wu, 2021). Five items are “I am not easy to get distracted working at home during COVID-19, My home workspace is suitable for my work during COVID-19, I have good conditions to work from home during COVID-19, I am allowed to choose the methods to use in carrying out my work during COVID-19, I have control over what I am supposed to accomplish during COVID-19”.

The factor employee productivity with 5 research items is adopted from the scale developed by (Njoku et al., 2019). Four items are “I always try to improve the quality of my work during COVID-19, I have really good skills for doing my tasks during COVID-19, I experience a decrease for my performance because of the current condition in the company during COVID-19, I feel that working at home is the factor that makes my work performance increase during COVID-19”.

4. Results and Discussion

4.1. Reliability Analysis

Table 1: Reliability Analysis

	Variables	Number of items	Cronbach's Alpha Value
1.	e-HRM	5	0.781

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2.	Work from Home	5	0.759
3.	Employee productivity	4	0.890

Source: Author's Estimations

It is highly recommended that the internal consistency to be checked for the gathered data before testing the proposed hypothesis by the authors. In this regard the reliability analysis applied and based the Cronbach's alpha values the variable's internal consistency confirmed. It can be noticed in Table 1, all variables found reliable due to equal or greater than 0.70 recommended value by (Hair et al., 2012). Highest value of employee productivity and lowest value of work from home can be seen in the Table 1.

4.2. Hypothesis Testing

Table 2: Hypothesis Testing

Model	Standardized Coefficients	Sig.
	Beta	
(Constant)		.451
e-HRM	0.56	.000
Work from Home	0.42	.000
R-Square= 0.242 Adjusted R square 0.231		

****Significance level at 0.05**

Source: Author's Estimations

The multiple regression analysis was performed in SPSS version 25. Furthermore, the two important value can be observed in Table 2 including beta value and p-value. The relationship between independent variables such as e-HRM and work from home on employee productivity can be determined through value of beta. Moreover, impact can be confirmed via sig-value (p-value) between independent variables such as e-HRM and work from home on employee productivity. Furthermore, the adjusted r-square explains the how much independent variables explain to dependent variable in terms of percentage. In this study independent variables explains to dependent variable 0.231 or 23.1%. It can be noticed in the Table 2 all proposed hypothesis H1 & H2 have been accepted and null hypothesis are rejected in context of Pharmaceutical companies of Sindh, Pakistan.

1. Discussion and concluding Remarks

Furthermore, the present study's results are alighted with such as (Nurshabrina & Adrianti, 2020; Galanaki et al., 2019; Iqbal et al., 2019). In these studies, it is enforced that e-HRM should be implemented in order to have better productivity of employees. In addition, they revealed that during last 2 years of pandemic COVID-19 there is change in employee

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productivity. The HRM process and better control and coordination can also be improved through e-HRM and as end results better employee productivity (Galanaki et al., 2019). Lastly the e-HRM and work from home has impact on the employee productivity in both short run as well long run in manufacturing sectors such as pharmaceutical companies (Yu & Wu, 2021; Njoku et al., 2019).

5.1 Theoretical contribution

Many motivational theories including Herzberg's Two Factor Theory 1965 and Maslow's Hierarchy of Needs 1954 helped to identify important related factors for motivation of employee for better performance such as work from home workload, skill, competencies, compensation, growth opportunities and HR policies and practices employee productivity have been checked in regard of pharmaceutical companies of Hyderabad, Pakistan. Best on knowledge of author this is first which applied these theories in order verify the behavior of studied variables including e-HRM and work from home on employee productivity during COVID-19.

5.2 Concluding Remarks

Aim of this study to examine the impact of e-HRM and work from home on the employee productivity of Pharmaceutical companies of Sindh, Pakistan. Both proposed hypothesis H1 & H2 have been accepted after applying the multiple regression analysis in SPSS version 25. However, the e-HRM found to have more significant impact on employee productivity during COVID-19 with beta value 0.56 as compare to work from home with beta value 0.42.

References

- Ahlstrom, D., & Wang, L. C. (2020). Temporal strategies and firms' speedy responses to COVID-19 [Editorial Material; Early Access]. *J. Manag. Stud.* 5, 592–596
- Ahmed, A., & Ogalo, H. S. (2019). From HRM to e-HRM: Contemporary developments from scholarly work. *Annals of Contemporary Developments in Management & HR (ACDMHR)*, Print ISSN, 2632-7686.
- Al-Mansour, J. F., & Al-Ajmi, S. A. (2020). Coronavirus 'COVID-19' – supply chain disruption and implications for strategy, economy, and management. *JAFEB.* 7, 659–672.
- Barrero, J. M., N. Bloom, & S. J. Davis (2020). "60 million fewer commuting hours per day: How Americans use time saved by working from home," University of Chicago, Becker Friedman Institute for Economics Working Paper.
- Bhatta, N. M. K., & Thite, M. (2018). Agile approach to e-HRM project management. In e-HRM (pp. 57-72). Routledge.
- Bick, A., A. Blandin, & K. Mertens (2020). "Work from home after the COVID-19 Outbreak," CEPR Discussion Paper No. DP15000.
- Brynjolfsson, E., J. J. Horton, A. Ozimek, D. Rock, G. Sharma, & H.-Y. Tu Ye (2020). "COVID-19 and remote work: An early look at US data," Tech. rep., National Bureau of Economic Research.
- Ehsan, M., & Ali, K. (2019). The impact of work stress on employee productivity: Based in the banking sector of Faisalabad, Pakistan. *International Journal of Innovation and Economic Development*, 4(6), 32-50.
- Etheridge, B., Y. Wang, & L. Tang (2020). "Worker Productivity during Lockdown and Working from Home: Evidence from Self-Reports," *Covid Economics*, 52, 118–151.
- Farhan, A. F., Salamzadeh, Y., & Richardson, C. (2021). The Impact of E-HRM On Employee Productivity-Mediating Role of Innovation. *Turkish Online Journal of Qualitative Inquiry*, 12(6),

Impact of E-HRM and work from Home on Employee productivity during ...

- 5033 -5050.
12. Galanaki, E., Lazazzara, A., & Parry, E. (2019). A cross-national analysis of e-HRM configurations: integrating the information technology and HRM perspectives. In *Organizing for digital innovation*, 261-276.
 13. Galanaki, E., Lazazzara, A., & Parry, E. (2019). A cross-national analysis of e-HRM configurations: integrating the information technology and HRM perspectives. In *Organizing for digital innovation*, 261-276.
 14. Gosnell, G. K., List, J. A., & Metcalfe, R. D. (2020). The impact of management practices on employee productivity: A field experiment with airline captains. *Journal of Political Economy*, 128(4), 1195-1233.
 15. Gottlieb, C., J. Grobovšek, M. Poschke, & F. Saltiel (2021). "Working from home in developing countries," *European Economic Review*, 103679.
 16. Hanaysha, J. R., & Majid, M. (2018). Employee motivation and its role in improving the productivity and organizational commitment at higher education institutions. *Journal of Entrepreneurship and Business*, 6(1), 17-28.
 17. Hensvik, L., T. Le Barbanchon, & R. Rathelot (2020). "Which jobs are done from home? Evidence from the American Time Use Survey," CEPR Discussion Paper No. DP14611
 18. Iqbal, N., Ahmad, M., & Allen, M. M. (2019a). Unveiling the relationship between e-HRM, impersonal trust and employee productivity. *Management Research Review*, 42(7), 879-899.
 19. Krekel, C., Ward, G., & De Neve, J. E. (2019). Employee wellbeing, productivity, and firm performance. *Saïd Business School WP*, 3-43.
 20. Ma, L., & Ye, R. (2019). Does daily commuting behavior matter to employee productivity? *Journal of Transport Geography*, 76, 130-141.
 21. Mohamed, M. S., Khalifa, G. S., Nusari, M., Ameen, A., Al-Shibami, A. H., & Abuelhassan, A. E. (2018). Effect of organizational excellence and employee performance on organizational productivity within healthcare sector in the UAE. *Journal of Engineering and Applied Sciences*, 13(15), 6199-6210.
 22. Njoku, E., Ruël, H., Rowlands, H., Evans, L., & Murdoch, M. (2019). An analysis of the contribution of e-HRM to sustaining business performance. Emerald Publishing Limited
 23. Nurshabrina, N., & Adrianti, R. (2020). The Effect of E-Human Resource Management (E-HRM) on Cost Efficiency and Productivity of Employees in the Company. *International Research Journal of Advanced Engineering and Science*, 5(1), 212-215.
 24. Roscoe, J. T. (1975). *Fundamental research statistics for the behavioral sciences* [by] John T. Roscoe.
 25. Shenoy, V., & Uchil, R. (2018). Influence of Cultural Environment Factors in Creating Employee Experience and Its Impact on Employee Engagement: An Employee Perspective. *International Journal of Business Insights & Transformation*, 11(2).
 26. Von Gaudecker, H.-M., R. Holler, L. Janys, B. Siflinger, & C. Zimpelmann (2020). "Labour supply in the early stages of the CoViD-19 Pandemic: Empirical Evidence on hours, home office, and expectations," IZA Discussion Paper
 27. Wang, P., Lu, Z., & Sun, J. (2018). Influential effects of intrinsic-extrinsic incentive factors on management performance in new energy enterprises. *International Journal of Environmental Research and Public Health*, 15(2), 292
 28. Wege, L. G., Ngige, C. D., & Dieli, O. J. (2019). Electronic Human Resource Management (E-HRM) and Organizational Performance in Nigeria. *International Journal of Management and Entrepreneurship*, 1(1), 53-69.
 29. Yu, J., & Wu, Y. (2021). The Impact of Enforced Working from Home on Employee Job Satisfaction during COVID-19: An Event System Perspective. *International Journal of Environmental Research and Public Health*, 18(24), 13207.