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Examining the Relationship between Relational e-HRM and Organizational Performance: A Study of the Banks of Lahore during the COVID-19 Pandemic

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Abstract

The current study empirically investigated the implementation of relational e-HRM practices in banks and examined their relationship with the overall organizational performance of the banks in Lahore during COVID-19 pandemic. It also highlighted the issues that managers face during the implementation of relational e-HRM practices. The mixed method approach was adopted to conduct this cross-sectional study. Commercial banks with their head offices in Lahore were chosen and 171 branches were selected randomly. The purposive sampling technique was used to collect qualitative data and semi-structured interviews of sixteen (16) branch managers were carried out online. Qualitative data was analyzed thematically while covariance-based structural equation modeling (CB-SEM) was used to understand the effect of e-HRM practices on organizational performance. Most of the banks were found to have implemented all the relational e-HRM practices except e-selection which was implemented only in two branches. Relational e-HRM practices showed a positive effect on the overall performance of banks during COVID-19 pandemic. Centralized decision-making, limited autonomy of bank branches, presence of senior, computer illiterate employees, and inadequate financial resources were found to obstruct the implementation of e-HRM practices. The current research added to the e-HRM literature and examined the association between relational e-HRM practices and overall organizational performance in the context of banks operating in Lahore which apparently was never done before. Only the top commercial banks operating in Lahore, one of the largest metropolitans in Pakistan, were included in this study. The generalizability of findings may be enhanced with further studies.

Keywords: COVID-19, e-HRM, e-selection, e-recruitment, e-performance appraisal, organizational performance, technology adoption

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Introduction

World Health Organization (WHO) declared Coronavirus a pandemic on March 11, 2020. The first case of COVID-19 in Pakistan, a country having an estimated population of 204.65 million, was detected on February 26, 2020 and since then the virus started spreading rapidly throughout Pakistan (Abid et al., [2020](#)). Pakistan, like the rest of the world, imposed a complete lockdown at the initial stages of the pandemic which disrupted the functioning of both small and large-scale businesses. The government, in order to ease the economic pressure mounting on businesses, then imposed the strategy of 'smart lockdown'. This smart lockdown was formed after consultations with molecular cell biologists, economists, scientists, and health system managers under which an intermittent lockdown for ten days was imposed followed by four days of work per fortnight in order to put a halt to the spread of pandemic (Haque & Nayab, [2020](#)). COVID-19 adversely affected all the sectors of the economy of Pakistan. Disruptions in supply chains, reduction in demand, and decrease in profits also brought the small and medium enterprises of Pakistan to the verge of complete collapse. The quality of education also deteriorated, and 'online education' brought major challenges, such as poor internet connections, low computer literacy rate, and high internet and computer prices for most students (Adnan & Anwar, [2020](#)). Medical students also suffered due to the delays in their examinations and results which negatively affected their confidence to become competent medical professionals. Moreover, community doctors and pharmacists were also unable to provide their services to the public amidst the pandemic due to the weak healthcare system. However, Pakistan still fared well in managing the COVID-19 pandemic as compared to many other developing states.

Like many other functions of organizations, Human Resource Management (HRM) is also profoundly affected by the extraordinary situation created by COVID-19. One of the major challenges imposed by the pandemic on businesses was the dismissal of employees. However, HRM undertook a leadership role and assisted the companies in the continuation of their operations by enabling people to manage their stress and work remotely. The HRM service quality improved due to the implementation of Electronic Human Resource Management (e-HRM). The trend of implementing e-HRM also witnessed a rise during COVID-19 due to the assistance it provided to the organizations. The extensive review of

the literature also highlighted that the service quality of HRM is significantly improved if e-HRM is implemented in the organizations. However, majority of the studies on e-HRM were carried out in states that are considered to be developed and industrialized while the studies carried out in relatively less developing states are exceedingly less in number. Moreover, majority of the previously conducted studies focused to find out how the e-HRM and the quality of HR services are interlinked (Strohmeier & Kabst, [2009](#); Wahyudi & Park, [2014](#)). Few studies investigated the impact of e-HRM in an organizational context including the study of its impact on overall organizational performance (Obeidat, [2016](#)), particularly in the context of least developed or developing states. The current study filled this gap by investigating if the banking sector of Pakistan adopted relational e-HRM practices during the pandemic while also examining how these practices impacted the overall organizational performance during COVID-19 pandemic. The study also explored numerous challenges during the implementation of relational e-HRM practices. Banks were chosen for this study since the financial institutes are strong contributors to the economy and the senior leadership of the banks in Pakistan is also interested to gain a competitive advantage by improving the quality of HR services.

Many scholars studied E-HRM. However, there exists no consensus on its definition and many scholars defined it differently. It is often considered as the integration of HRM and Information Technology (IT) or a conscious and direct implementation of HR strategies with complete or partial backing of internet-based technology. It has also been referred to as paperless or green HRM, web-based HRM, virtual HRM, and computer-based HRM that enables an organization to serve the social cause, achieve performance, enhance employee passion, and reduce the staff burden. E-HRM is further classified into three different types which include transformational e-HRM, relational e-HRM, and operational e-HRM. The focus of operational e-HRM is on the performance of administrative functions of HRM while, the transformational e-HRM is concerned with more complex functions of HR that are performed at a strategic level and contribute to the success of the entire organization. The focus of this study was, however, only on relational e-HRM practices which include intricate and useful business activities, such as recruitment and selection of new employees, training of existing employees, and the management of their performance. Relational e-HRM is also associated with increasing the channels of socialization,

communication, and networking among multiple stakeholders within and outside the organization.

The focus of multiple studies carried out on e-HRM was on different aspects of e-HRM and its adoption in organizations. In countries that are still developing, e-HRM is still in the stage of infancy as compared to the developed countries. Only a few large firms in Pakistan adopted e-HRM while, the majority of organizations, especially the public sector organizations, have not yet implemented it. Moreover, e-HRM also positively affected the organizational performance by making record-keeping easier, enhancing the smooth flow of information, and making strategy implementation more convenient (Nenwani & Raj, [2013](#)).

The study is divided into four sections. The first part comprises of literature review where the background of the study was provided along with the review of previously conducted studies on the variables which also led to the formulation of hypotheses. The second part comprises the methodology in which details regarding the procedure and sampling were provided along with measures adopted to carry out this study as well as details about common method bias. Data analysis was carried out in the next part. Both quantitative and qualitative analysis were carried out in this section of the study. Discussion and recommendations along with limitations and directions for future research studies were provided in the last section of the study.

Literature Review

Globalization in today's world has increased business competition, particularly in the areas of customer service, customer satisfaction, and cost reduction (Nivlouei, [2014](#)). This has compelled organizations to follow different strategies in order to achieve competitive advantage in highly competitive markets. HRM has also become a crucial factor for organizations in this regard. Human capital has become a key element to achieve a 'sustained competitive advantage' (SCA) as the output and effectiveness of the organization depends upon its utilization of human resources. Organizations have been increasingly investing in information and communication technology since the mid-1990s to improve their management practices and to create value. It also resulted in increased connectivity between people and organizations, thus increasing innovation and making work life easier (Hossain & Islam, [2015](#)). Record keeping and

management of the data in HRM departments also underwent transformation due to information technology. Decision-making has become easier and access to the voluminous data has become fast (Nenwani & Raj, [2013](#)) and most of the HRM functions have become web-enabled. This has also changed the role of HR departments and they are now involved in making strategic-level decisions and contributing to organizational success by playing a strategic role.

Moreover, information technology has also made HR jobs easier and cost-effective, and more organizations are now adopting electronic Human Resource Management (E-HRM) practices (Hosain, [2017](#)).

Literature review revealed that the adoption of relational e-HRM is helpful for organizations and it impacts their performance in a positive way. Organizations resort to different indicators to determine their performance. Some of the most used indicators to measure the performance of organizations include indicators, such as the overall quality of the product or service, the company's financial health, efficiency, and effectiveness of the processes used in the organization. However, the financial performance of the organization and the organization's overall effectiveness are still the most widely used indicators of the organization's performance. Financial performance indicates the reduction in costs and improvement of services due to efficient and effective managerial operations (Carton & Hofer, [2006](#)). As many as 82% of the 238 studies that were published in 'The Strategic Management Journal' from the year 1980 to the year 2004 used financial indicators to measure the organizational performance. In order to assess the financial performance of the organization, performance measures that are cost-based were considered to be the best indicators. However, solely relying on these indicators may lead to unintentionally disregarding the other different aspects of organizational performance that are non-financial in nature. The efficiency and effectiveness of the organization are also important determinants of overall organizational performance. The ability of an organization to achieve its goals and perform well while utilizing minimum energy, effort, time, and resources is usually referred to as organizational efficiency while, organizational effectiveness means is defined as the degree to which goals and objectives are achieved by the organization. As suggested by Luo et al. ([2012](#)), this study used operational and financial performance to measure organizational performance. Therefore, the concept of organizational performance is conceptualized as

a second-order variable that can be measured by its two first-order factors of operational and financial performance.

Impact of E-Recruitment and E-Selection on Organizational Performance

To carry out recruitment and selection electronically, organizations use internet and web portals to advertise jobs, gain the attention of potential candidates, and conduct electronic exams and interviews (Dhamija, [2012](#)). A large number of resumes are collected using e-recruitment which may assist in the rapid selection of competent candidates by quickly matching their qualifications, experience, and skills with job description. It also aids in wider access to the competitive pool of candidates which, in turn, assists to achieve competitive advantage and enhance organizational performance (Dhamija, [2012](#)). It also reduces organizational costs, makes processes more efficient, reduces advertisement costs, and improves organizational image (Ensher et al., [2002](#); Tong & Sivanand, [2005](#)). However, e-recruitment and e-selection were associated negatively with organizational performance in the service sector of Bangladesh (Hosain, [2017](#)). The presence of ability and resources is also indispensable to successfully implement and completely utilize e-recruitment. E-recruitment may also have some limitations if it is handled by junior and less experienced employees (Parry & Tyson, [2011](#)). From the above-reviewed literature, it is evident that most of the extant literature supports that there is a positive impact of recruitment and selection carried out electronically on the performance of the organization. The following hypotheses were developed on the basis of the above findings.

H1: There is a positive effect of electronic recruitment on organizational performance.

H2: There is a positive effect of the electronic selection procedure on organizational performance.

Impact of E-Training on Organizational Performance

One of the important components of organizational performance is e-training. It utilizes a diverse range of the latest technologies, such as internet and web-based applications, smart and virtual classrooms, videotapes, television, and satellite broadcast to provide learning opportunities to the employees and enhance their learning (Nenwani & Raj, [2013](#)). A significant amount of organizational cost is reduced by using e-training which received immense attention from practitioners and academics (Cornford & Pollock,

2003). It enables organizations to overcome geographical constraints, saves time, reduces information overload, improves employee tracking, and allows the organization to train a large number of employees (Evans & Haase, 2001; Welsh et al., 2003). Organizations worldwide are becoming more economically successful and European organizations are saving millions of dollars through the application of e-training (Evans & Haase, 2001). However, contrary to the above-mentioned findings, it was in the services sector of Bangladesh where a negative association was found between e-training and organizational performance (Hosain, 2017). Based upon the above-mentioned findings, it is evident that the majority of the studies determined a positive relationship between e-training and the performance of the organization. The following hypothesis is, thus formulated on the basis of the above-mentioned findings.

H3: There is a positive effect of electronic training on organizational performance.

The Impact of E-Performance Appraisal and Organizational Performance

Electronic performance appraisal or online performance appraisal is another important activity of relational e-HRM. In order to make the performance appraisal process more smooth, efficient and, reliable, it uses different internet-based tools and software. It reduces organizational costs and makes the HR processes more efficient.

It also helps managers in managing the performance of the employees and enables them to conveniently record, share, document, and compare the previous performances of employees. E-performance appraisal adds to the transparency, enables quick sharing of organizational goals with employees, and makes it easier to manage promotions and compensation plans that increase employee motivation (Kundu & Kadian, 2012). It also improves employees' perception regarding fairness in their organizations and assists them in quick decision-making. Its application promotes flexibility, innovation, and competitiveness (Odhiambo & Kamau, 2013). A positive impact of e-performance appraisal is very much evident from the above-reviewed literature based on which the fourth hypothesis is developed as follows:

H4: Electronic performance appraisal system has a positive impact on the performance of the organization

The current study takes cues from the Resource-Based View (RBV) theory which posits that a firm's resources, whether tangible or intangible, are crucial for attaining a sustained competitive advantage and superior organizational performance (Barney, [1991](#)). This perspective underscores the significance of resources that are valuable, rare, inimitable, and non-substitutable (VRIN) for organizational success.

Relational e-HRM involves the use of electronic communication and information technologies to manage relationships between employers and employees (Dery et al., [2019](#); Iqbal et al., [2019](#)). This approach concentrates on enhancing communication, collaboration, and knowledge sharing among employees which can lead to improved performance and productivity.

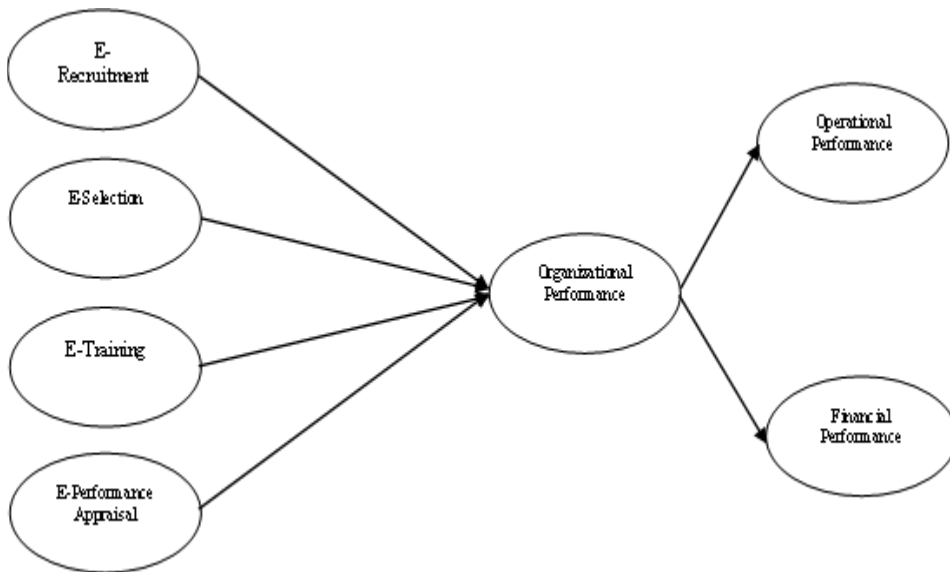
By applying the principles of the RBV theory to relational e-HRM, technology and human resources may be considered as valuable, rare, and inimitable resources for organizations. Effective implementation of relational e-HRM practices may help companies to build valuable relationships with employees, foster knowledge sharing, and increase their capacity to adapt to changing business environments. These resources may be difficult for competitors to imitate, providing a source of competitive advantage that can lead to improved organizational performance (Wiblen et al., [2017](#)).

For instance, a study conducted by Sujitparapitaya et al. ([2022](#)) found that relational e-HRM practices, such as virtual team-building and online training showed a positive impact on organizational performance. The authors concluded that relational e-HRM can serve as a valuable resource for firms, providing a competitive advantage that can lead to improved performance.

Thus, relational e-HRM can be viewed as a strategic approach for leveraging technology and human resources as assets for organizational performance in accordance with the principles of the RBV theory.

Figure 1 shows the conceptual framework of the study developed in light of the above-reviewed literature. Moreover, the underpinning theory of the resource-based view helped in the development of the proposed hypotheses.

Figure 1
Conceptual Model of the Study



Research Methodology

It was a cross-sectional study carried out using a mixed method approach. The adoption status of relational e-HRM practices in the banks, during COVID-19, was assessed in the quantitative part of the study. The relationship between e-HRM practices and organizational performance was also examined in this part of the study. The qualitative part identifies the hurdles faced by the banks during the implementation of e-HRM practices.

Procedure and Sample

There are 30 scheduled banks that are operating in Pakistan. Out of these 30, 6 have their head offices in the provincial capital of Punjab, that is, Lahore, while 20 banks have their head offices in Karachi, 3 in Islamabad, and 1 in Khyber Pakhtunkhwa. Only the commercial banks having their head offices in Lahore were included in this study. The six banks with their head offices within the city of Lahore included Finca Microfinance Bank Limited, MCB Bank Limited, MCB Islamic Bank Limited, Soneri Bank Limited, The Bank of Punjab, and The Punjab Provincial Cooperative Bank Limited. The Punjab Provincial Cooperative Bank Limited was not a part

of this study since it only provides services to the farmers for the development of the agriculture sector.

The study was carried out using both probability and non-probability sampling techniques. The five commercial banks were chosen based on convenience which is the type of non-probability sampling. There are three hundred branches of these banks that are operating in Lahore. A sample size of 171 was calculated using Slovin's formula. Simple random sampling, a type of probability sampling, was used to collect the quantitative data from these 171 branches. The sampling frame was obtained from the respective bank's HR departments. The purposive sampling technique, a type of non-probability sampling technique, was used for the collection of qualitative data. Semi-structured interviews of sixteen branch managers were carried out. The interviews were carried out online due to the pandemic. The collected data was then analyzed and major themes were identified. Branch managers of the banks, working at senior positions and having relevant experience and knowledge regarding the organizational performance, implementation of e-HRM practices, and the hurdles faced during the implementation of e-HRM practices before and during COVID-19 in their respective branches were approached for data collection. The following table 1 shows the demographic information of the participants of the study.

Table 1
Demographic Details of Respondents

Variable		Frequency	Percent%
Gender	Males	146	85.4
	Females	25	14.6
Age	20-30 years old	75	43.9
	31-40 years old	82	48.0
	Above 40 years	14	8.2
	Graduation	23	13.5
Qualification	Master's	107	62.6
	MPhil/PhD	41	24.0
	1-5 years	36	21.1
Work Experience	6-10 years	85	49.7
	11-15 years	34	19.9
	Above 15 years	16	9.4
Form of Ownership	Public	36	21.1
	Private	135	78.9

Data was collected from 171 branch managers of the banks. 85% of the branch managers were males. Most of the respondents were aged between 31 to 40 years and 62.6% of the respondents had a Master's degree. 36 of the branch managers had work experience of 1 to 5 years, 85 branch managers had the experience of 6 to 10 years and 34 branch managers had 11 to 15 years of work experience. 16 branch managers possessed a work experience of more than 15 years. Out of the five chosen banks, one was a public sector bank and the remaining belonged to the private sector. The bank in the public sector had 36 branches operating in Lahore.

Measures

The data was collected using the questionnaire adopted from another similar study conducted by Atallah (2016). The validity and reliability of all the scales was analyzed after adapting the questionnaire to suit the needs of the study. Five-point Likert scale that ranged from 1 = *strongly disagree* to 5 = *strongly agree* was used to measure all the items of the questionnaire. The questionnaire was divided into two portions.

The first portion of the questionnaire inquired about relational e-HRM practices and their adoption status. *E-recruitment* was measured using four items. Sample items in this scale included “in my bank, the announcement of jobs is done through the bank’s electronic job site” and “dates of examinations and interviews for screening process are announced through the bank’s website”.

E-selection was measured using three items. A sample item from the scale included “in this bank, we use clear and effective electronic methods to select candidates for various jobs”.

E-training was measured using four items. Sample items in this scale included “in our bank, training is provided to employees through internet/ videos or multimedia” and “in this bank, employees participate in different online courses”.

E-performance Appraisal was measured using five items. Two of these five items were “the process of E-performance appraisal is satisfactory to staff” and “in this bank, the process of performance appraisal is done electronically”.

The second part of the questionnaire was focused to measure the organizational performance. In this study, *organizational performance* was

measured using the two first-order factors of financial and operational performance. *Financial performance* was measured using four items. Sample items included “relational E-HRM practices help to reduce organizational costs” and “relational E-HRM practices have a positive effect on the financial performance of my bank”.

Operational performance was also measured using four items. The sample items included “these practices save time with fast and effective processes” and “the hiring of a talented workforce through electronic recruitment improves organizational performance”. All the scales adopted for the current study were found to be reliable and valid (Atallah, [2016](#)).

Google Forms was used to distribute the questionnaire. The printed questionnaires were also sent to the branch managers of the banks through the post. Statistical Package for Social Sciences (SPSS) version 24 was used for data analysis. To collect the qualitative data, an interview guide comprising twelve questions was developed and semi-structured interviews were carried out online. Interviews were carried out online due to the restrictions imposed during the COVID-19 period.

Common Method Bias

If the data is collected from a common source, there is a high possibility of having the issue of common method variance due to the high level of correlation within the variables and incorrect estimates of internal consistency (Chang et al., [2010](#)). For this study, data was collected from a single source. Therefore, it is important to ascertain common method variance before the hypotheses is tested. As suggested by Podsakoff and Organ ([1986](#)), Harman’s single-factor test was used to determine if most of the covariance between the opted measures was caused by the single variable or not. It was found that only 22.78 percent of the entire variance was caused by a single factor. This value was way less than the 50 percent threshold owing to which common method bias was not an issue in the current study.

Data Analysis

Adoption Status of Relational e-HRM

It was established that out of a total of 171 branches of different banks, the electronic recruitment system was completely adopted by 144 branches. Only a few aspects of electronic recruitment were adopted in 27 branches

of the bank. This showed that there existed a high adoption ratio of electronic recruitment in banks during COVID-19. Only 2 branches of different banks were found to have the following e-selection process during the pandemic. 9 branches were found to conduct their selection tests electronically, while selection interviews were carried out face to face. All the remaining branches were not relying on the e-selection process which showed that only a few branches adopted a complete e-selection system. It was found that 167 out of 171 branches relied on e-training during the pandemic, while only 4 branches did not adopt it. E-performance appraisal was also adopted by a large number of banks and out of 171 bank branches, 111 branches had completely implemented the e-appraisal system, while it was partially implemented in 60 branches.

Descriptive Statistics, Normality of Data, and Reliability Statistics

The mean and standard deviations of the constructs are given in the first two columns of the following table 2.

Table 2

Descriptive Statistics, Normality of Data, and Reliability Statistics

Constructs	<i>M</i>	<i>SD</i>	Skewness	Kurtosis	α
E-Recruitment	3.920	0.965	.029	.358	0.721
E-Selection	3.841	1.058	-.062	-.556	0.794
E-Training	3.792	1.120	.345	.489	0.903
E-Performance Appraisal	3.723	1.163	.376	.593	0.856
Operational Performance	3.141	1.127	.320	-.565	0.823
Financial Performance	3.452	1.321	.231	.404	0.844

Table shows that Cronbach alpha values range from 0.721 to 0.903, thus proving that the tool the current study adapted was reliable to measure specific constructs. To ascertain whether the data was normal, kurtosis and skewness were checked. All the values of skewness and kurtosis were between -1 to +1 which showed that the data was normally distributed as shown in Table 2. In order to check the multi-collinearity, the Variance Inflation Factor (VIF) was used. The values of VIF were found to be less

than 5 and the tolerance level values were greater than 0.2 which proved that the independent variables were having no multi-collinearity issues.

Measurement Model

Performing confirmatory factor analysis in structural equation modeling, that is, covariance-based (CB-SEM), is recommended. Thus, using the guidelines presented by Anderson and Gerbing (1988), confirmatory factor analysis was performed using AMOS version 25. Since all the scales were adopted from studies carried out previously, the maximum likelihood method was used. Li (2016) noted that when data is found to be normally distributed and multi-collinearity is of no concern, the maximum likelihood method generates far superior results.

By following the directions of Williams et al. (2009), the model fit values comprising the goodness of fit ($GFI \geq 0.90$), root mean residual ($RMR \leq 0.08$), root mean square error of approximation ($RMSEA \leq 0.08$), and comparative fit index ($CFI \geq 0.90$) were examined. The overall model was found to be fit. The values of the model fit were found to be in the range of where $\chi^2/df = 1.13$, $CFI = 0.97$, $GFI = 0.95$, $RMR = 0.021$, and $RMSEA = 0.017$. Construct reliability was measured through Cronbach Alpha values. The composite reliability showed a value that was greater than 0.7, thus proving the reliability of the constructs (Bagozzi et al., 1991). Similarly, the values of Cronbach Alpha fell between .621 and .903, proving the constructs' reliability.

The Average Variance Extracted (AVE) along with factor loadings were used to measure convergent. The constructs were found to have convergent validity as the values of factor loadings of each of the constructs were higher than 0.5 (Hulland, 1999). Similarly, the values of AVE were greater than 0.5 which proved the existence of convergent validity among the items of each construct (Henseler et al., 2009) as shown in Table 3 below.

Table 3
Convergent Validity

Constructs	Items	Loadings	CR	AVE
E-Recruitment	ER1	0.721	0.788	0.649
	ER2	0.777		
	ER3	0.820		
	ER4	0.701		
E-Selection	ES1	0.765	0.816	0.614

Constructs	Items	Loadings	CR	AVE
E-Training	ES2	0.744	0.924	0.568
	ES3	0.701		
	ET1	0.696		
	ET2	0.788		
	ET3	0.723		
E-Performance Appraisal	ET4	0.715	0.901	0.557
	EPA1	0.702		
	EPA2	0.687		
	EPA3	0.722		
	EPA4	0.764		
Operational Performance	EPA5	0.678	0.912	.603
	OP1	0.769		
	OP2	0.785		
	OP3	0.777		
Financial Performance	OP4	0.823	0.923	0.732
	FP1	0.814		
	FP2	0.788		
	FP3	0.709		
	EP4	0.763		

The discriminant validity of constructs was measured through the most used Fornell and Larcker (1981) method. The square root of AVE of each of the variables showed a value that was greater than the value of correlation that existed between variables, thus proving that discriminant validity existed amongst the latent constructs. This is shown in Table 4 below.

Table 4
Discriminant Validity

Constructs	ER	ES	ET	EPA	OP
ER	<i>0.703</i>				
ES	0.295	<i>0.765</i>			
ET	0.237	0.446	<i>0.754</i>		
EPA	0.525	0.215	0.374	<i>0.712</i>	
OP	0.168	0.068	0.224	.281	<i>0.801</i>

Note. Values of the square root of the AVE are mentioned on the diagonal (italicized) and the correlation coefficients among variables are mentioned in the other off-diagonal values.

In order to confirm the discriminant validity, cross-loadings of each construct were compared with the outer loadings of a construct. The presence of discriminant validity among latent constructs was confirmed after noticing that each item had an outer loading greater than the cross-loadings of other items.

Structural Model (Hypotheses Testing)

A structural model was drawn and run on AMOS version 25 to test the hypotheses. The direction of the relationship between the variables of the study and its strength was also measured through this structural model. The fitness of the model was analyzed by examining various indicators, such as GFI, CFI, TLI, RMSEA, χ^2/df , and AGFI. A normed Chi-square χ^2/df of 1.899 ($\chi^2 = 231.172$, $df=121$), GFI=0.891, AGFI=0.879, CFI=0.960, TLI=0.943, and RMSEA=0.062 were the results revealed by results of structural modeling. All these indices suggested that the model is an adequate fit. After the model fitness estimates, the results of the structural model analysis revealed that out of 4 paths, 3 were significant having p-values less than 0.05 (Table-5) with R^2 values ranging from 0.532 to 0.756 which shows that the variance explained by the model was between the range of 53.2 percent to 75.6 percent for organizational (financial and operational) performance. It is important to note here that organizational performance was conceptualized as a second-order construct here in this study which has 2 first-order factors of operational and financial performance. Only one of the relationships between e-Selection and organizational performance was found to be insignificant, that is, ES leading to OP ($b=0.067$, $p=0.413 > 0.05$), whereas other relationships are all positive and significant, ER leading to OP ($b=0.334$, $p < 0.05$), ET leading to OP ($b=0.222$, $p < 0.05$), and EPA leading to OP ($b=0.389$, $p=0.05$). Therefore, H1, H3, and H4 were supported and H2 was not supported in our study as shown in table 5 below.

Table 5
Hypotheses Testing

Hypotheses	Relationship	Unstd. Beta	Std. Beta	Std. Error	t-value	p-value
H1	ER→OP	.582	.401	.049	2.337	.000
H2	ES→OP	.177	.067	.216	0.810	.413
H3	ET→OP	.391	.222	.214	3.341	.006
H4	EPA→OP	.473	.389	.103	2.887	.000

Qualitative Analysis

Sixteen semi-structured interviews were carried out online and data was analyzed using thematic analysis. The questions explored the perceived linkage between relational E-HRM practices and organizational performance and also inquired about the hurdles in the implementation of relational E-HRM practices, especially during COVID-19. The following findings were drawn from the data collected through interviews.

Financial Advantage of Relational e-HRM during COVID-19

The interviewees agreed on the financial advantages of relational e-HRM practices and considered them as an important tool to reduce the costs that are incurred while performing HRM functions traditionally. Managers also reported that e-HRM practices significantly reduced the amount of time required to carry out the activities, such as CV collection, shortlisting of candidates, administration of selection tests, performance appraisals, and training programs. Participants also admitted that e-HRM resulted in the selection and retention of a competent workforce, reduced the risk factor associated with exposure to COVID-19, and made the workplace safer during the pandemic. E-training enabled the administration to carry out the training of employees, working in distant branches which not only reduced the cost, however, also increased the efficiency and enabled the banks to safely impart important skills during the pandemic.

Respondents were also of the view that the implementation of e-HRM made the HR departments leaner and reduced the workload on individual HR staff members. However, it was pointed out that having a dedicated information technology (IT) or technical department specialized in developing and implementing the in-house Human Resource Information System (HRIS) or assisted the HR officials in tackling the advanced level issues in the implemented HRIS, was indispensable for the effective implementation of e-HRM.

Increasing Trend of Online Training due to COVID-19 and State Bank Regulations

Managers reported that the banks were now increasingly relying on online training not only due to the restrictions imposed by COVID-19, however, also due to the regulations prescribed by the State Bank of Pakistan in the light of Financial Action Task Force (FATF)

recommendations which made it mandatory for all the banks to provide a specific set of training sessions to bank employees in order to curb money laundering and financial terrorism. The banks had to implement e-training programs as they enabled them to train a large number of employees with ease.

Preference to the Traditional Selection

Majority of the managers reported that they relied on traditional selection practices and preferred face-to-face selection interviews and exams before as well as during COVID-19 as it allowed them to effectively evaluate the applicants. E-interviews were carried out only in the case of hiring at senior positions, especially when the applicants were not from the same city or country.

However, e-recruitment processes comprising of online advertisement of vacancies, the online collection of CVs, and applications were implemented as it made the process of shortlisting and screening applicants less time-consuming.

Growing Effectiveness of e-appraisal

Bank managers reported that the adoption of the e-appraisal system was on rise as it was perceived to keep favoritism and biases in check. Moreover, it also complemented the FATF-related regulations by ensuring the presence and growth of competent employees who displayed integrity. All the interviewees also agreed that the e-performance appraisal system made the entire process of performance evaluation more fair, objective, and transparent.

Centralized Enterprise Resource Planning (ERP), Centralization in Decision-making, and Limited Autonomy

The participants pointed out that the presence of centralized Enterprise Resource Planning (ERP), excessive control exercised by the head offices, and limited autonomy of the bank branches was among the major hurdles in the path of complete implementation of all the relational e-HRM practices before and during COVID-19. The limited autonomy of the bank branches made it mandatory for them to seek approval from their head offices before implementing any change which significantly limited and slowed down their ability to implement relational e-HRM initiatives.

Presence of Senior, Computer Illiterate, and Non-serious Employees

The presence of older employees having less understanding of the technology posed another challenge to the implementation of relational e-HRM practices during COVID-19. Banks, however, were now offering early retirement and golden handshake programs to such employees. Similarly, non-seriousness exhibited by some employees during their e-training sessions and while using technological goods and software was identified as another reason behind the incomplete implementation of relational e-HRM practices amidst COVID-19.

Inadequate Financial Resources

The majority of the managers highlighted inadequate financial resources as another major factor that delayed or stopped the implementation of relational e-HRM practices. These financial challenges were aggravated further during the pandemic which made the adoption of relational e-HRM practices even more difficult.

Discussion and Recommendations

The current study explored the adoption status of relational e-HRM practices in banks and examined the impact of these practices on organizational performance during the COVID-19 pandemic. It was found that e-recruitment reduced organizational costs the most and showed the maximum positive effect on the organizational performance of the banks followed by e-performance appraisal. E-training showed the least positive impact on the organizational performance of banks, while e-selection was found to have no significant impact on organizational performance. The study also revealed that e-training in spite of having a less positive effect on organizational performance was implemented the most and was completely adopted by 167 branches and partially adopted in the remaining four branches. Whereas, e-recruitment was completely adopted in 144 branches. E-performance appraisal was found to be completely implemented in 111 branches and partially adopted in 67 branches. Whereas, e-selection was completely adopted in only two branches and nine branches implemented it partially.

The findings clarified the relationship between relational e-HRM practices and the organizational performance of the banks and also added to the existing e-HRM literature. The study was carried out in the context of a

state, such as Pakistan, which adds to its significance as well. Four hypotheses were tested in this study. The first hypothesis assumed a positive relationship between electronic recruitment and organizational performance during COVID-19 pandemic. This hypothesis was supported and electronic recruitment was found to have a maximum effect on organizational performance. This finding is consistent with the findings of Ensher et al. (2002), and Dhamija (2012) who indicated that electronic recruitment improves organizational performance through cost efficiency, improving the communication process and reducing recruitment time. Similarly, Henry and Temtime (2009) also found that the recruitment and selection process of an organization are important since the performance of an organization is dependent on the better-performing workforce. However, this finding is not consistent with the findings of Hosain (2017) who determined that e-recruitment showed no impact on the organizational performance in the service sector of Bangladesh.

The second hypothesis assumed that e-selection also positively affects organizational performance. However, the hypothesis was not supported and e-selection was found to have an insignificant relationship with organizational performance. This finding was supported by the findings of Parry and Tyson (2011) who explained that the initial selection process through electronic exams is generally handled by junior HR employees owing to which it may not be as cost-effective as it seems. It is also consistent with the findings of Hosain (2017) who found that e-selection did not improve the performance of the organizations operating in the service sector of Bangladesh. However, this finding is not consistent with the findings of Tong and Sivanand (2005) who found that electronic recruitment and selection procedure helps to reduce organizational cost and saves time by adding efficiency and effectiveness to the process.

The third hypothesis that assumed a positive effect of e-training on organizational performance was also supported. However, e-training was found to have less effect on organizational performance as compared to the effect of e-recruitment and e-performance appraisal. This finding is supported by the findings of Cornford and Pollock (2003) and Welsh et al. (2003) who found that e-training improves organizational financial performance by reducing the cost of trainers, traveling costs, and other expenses. Similarly, Evans and Haase (2001) also found that e-training helps the organizations in optimization of their resources and enables them

to train a large number of employees using less time and resources. Nenwani and Raj (2013) also found that e-training has a positive effect on organizational performance in the long run. However, this finding was inconsistent with the findings of Hosain (2017) who found that e-training had no impact on organizational performance in the service sector of Bangladesh.

In the fourth and last hypothesis, the e-performance appraisal was assumed to have a positive effect on organizational performance during COVID-19 pandemic. The hypothesis was supported and it was found that e-performance appraisal had a positive effect on organizational performance. This result is consistent with the previous findings of Odhiambo and Kamau (2013) who found that e-performance appraisal affects organizational performance positively as it adds to transparency, fairness, and objectivity. Similarly, Kundu and Kadian (2012) also found that effective e-performance appraisal improves the employees' performance which enhances the performance of the organization as well.

The analysis of the qualitative data revealed agreement among the respondents regarding the financial advantages of implementing relational e-HRM practices before and during COVID-19 pandemic. HR departments were found to get leaner and the workload on individual HR staff members was decreasing due to the increased implementation of relational e-HRM practices. The branch managers also reported that in addition to COVID-19 pandemic, it was also the State Bank of Pakistan that compelled the banks to provide important training to the staff members. This training was intended to implement the regulations developed in the light of FATF recommendations to fight money laundering and economic terrorism which made e-training an important training tool. It was also established that banks still prefer traditional selection methods to e-selection as it enable them to effectively evaluate the applicants and implementation of e- performance appraisal was on the rise. ERP, centralization in decision making, limited managerial autonomy of bank branches, presence of senior, computer illiterate, non-serious employees, and inadequate financial resources were identified as the major hurdles by the bank managers in the complete implementation of e-HRM practices during and before COVID-19 pandemic.

Theoretical Implications

The study on relational e-HRM and organizational performance carries important theoretical implications for HRM as well as for the RBV theory. The findings suggested that technology-enabled HR practices, specifically relational e-HRM practices have a positive impact on organizational performance by enhancing employee satisfaction which, in turn, leads to increased productivity and reduced turnover. This section would discuss the theoretical implications of the study with strong justifications for the link to the RBV theory and the overall field of HRM.

The RBV theory posits that firms can achieve a competitive advantage by developing and deploying unique, valuable, and rare resources (Barney, 1991). Human capital is one such resource and it can be a source of competitive advantage for firms that manage it effectively (Lepak & Snell, 1999). The use of relational e-HRM practices can be viewed as a source of valuable and rare resources that can enhance the strategic allocation and development of human capital, leading to improved organizational performance.

The findings are consistent with the RBV theory, as relational e-HRM practices were found to be positively related to enhanced organizational performance. The use of relational e-HRM practices can help firms to attract, develop, and retain high-performing employees by providing them with opportunities for learning and growth, job security, and a positive work environment. This, in turn, can lead to improved productivity, reduced turnover, and enhanced organizational performance (Liu et al., 2021).

The study also has implications for the broader field of HRM, particularly in the area of strategic HRM. Strategic HRM emphasizes the alignment of HRM practices with organizational goals and objectives to achieve a competitive advantage (Paauwe & Boon, 2018). The use of relational e-HRM practices can help firms to align their HRM practices with their strategic goals and objectives by providing employees with the resources and support they need to achieve these goals. This, in turn, can lead to improved organizational performance.

Furthermore, the study highlighted the importance of adopting a relational approach to HRM, which emphasizes the development of positive relationships between employees and their managers (Boselie et al., 2005). Relational e-HRM practices can facilitate the development of positive

relationships between employees and their managers by providing employees with greater access to their managers, enhancing communication, and improving the quality of feedback and support (Musa et al., [2019](#)).

Consequently, the current study on relational e-HRM and organizational performance has important theoretical implications for the field of HRM and the RBV theory. The findings of the study suggested that the use of technology-enabled HR practices, specifically relational e-HRM practices can enhance the strategic allocation and development of human capital, leading to improved organizational performance. The study also highlighted the importance of adopting a relational approach to HRM and aligning HRM practices with organizational strategy to achieve a competitive advantage.

Recommendations

The study recommends that the policymakers of the organizations, particularly the ones operating in the financial services sector, should understand the importance of relational e-HRM practices and adapt them to develop a competitive advantage, enhance organizational performance, and cope with the challenges imposed by the emergent threats, such as COVID-19. Organizations are also recommended to implement relational e-HRM practices to save their HRM-related costs, recruit competent candidates, improve the quality of their performance appraisal methods, and train a large number of employees with ease. To ensure the smooth implementation of relational e-HRM practices, the qualitative part of the study further recommends that banks and other such organizations should adopt a decentralized model of decision-making. Moreover, the organizations must provide managerial autonomy to the bank branches for quick decision-making regarding their workforce and ensure the availability of the adequate financial resources for effective implementation of relational e-HRM practices, particularly during the time of crisis, such as that of COVID-19 pandemic. The findings of the qualitative part of the study also suggest that implementation of relational e-HRM initiatives, such as e-training can help the banks train their employees to counter money laundering and economic terrorism and meet other regulatory requirements imposed by FATF.

Limitations and Directions for Future Research

Due to time and financial constraints, only the banks operating in Lahore were covered in this study which reduces its generalizability and constitutes one of its limitations. Moreover, it is a cross-sectional study which is another limitation of this research. For future research, it is suggested to replicate this study in other metropolitans of Pakistan, such as Karachi, Islamabad, and Faisalabad. Not just the branch managers but also the other employees of banks who are either directly affected by the relational e-HRM practices or implement these practices need to be interviewed in future studies to develop a more comprehensive understanding. Relationships between relational e-HRM practices and variables like organizational resilience, organizational justice perceptions, and employee performance also need to be investigated in future research endeavors. Lastly, a longitudinal study should be carried out in the future to develop a comprehensive understanding of the effects of relational e-HRM practices on organizations.

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