



**Arab American University  
Faculty of Graduate Studies**

**The Impact of E-HRM Practices on Employee Performance in  
Palestinian Higher Educational Institutions**

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**The thesis was submitted in partial fulfillment of the  
requirement for the Master's degree in Human Resource  
Management**

**June 2022**

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By:


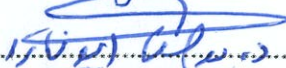

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### **Declaration**

I state that the effort of this study entitled “The impact of E-HRM practices on employee performance- In Palestinian Higher Educational institutions.” conducted by me under the supervision of Prof. Fathallah Ghanem, in the Department of Human Resource Management after the completion of the Master’s Degree requirements in HRM at the Arab American University - Graduate Studies - Ramallah Campus, Palestine, where the contributions of the participants involved in this study are expressed clearly and with the proper references to the literature. I declare that the information in this study is the result of my work. It has not been presented before in another degree, diploma or university. Thus, I introduce my complete acceptance to the determinations of conducting a thesis under the University's instructions, ethics and guidelines.

**Student's name**      **Sara Shaban**

**Signature**            **Sara Shaban**

**Date**                    **June. 6. 2022**

### **Dedication**

At the outset, I thank God Almighty for his kindness in helping me to work on this thesis in order to complete the requirements of the Master's degree in Human Resources Management. God Almighty is the source of my inspiration and encouragement in life's challenges during my Master's degree completion. I also dedicate this thesis work to my supportive and great family, who never stopped encouraging me throughout this critical stage in my life, and to my mother, who always stands with me and supports me in all ways toward success to pursue my dreams. To my father and my brothers, Saleem and Aisar, their keenness for my success and continuous pride in me has always motivated me to do my best. To my uncle's favourite wife-like my second mother, Um Samer, who supports, motivates and stands beside me in all stages of my life, specifically this pivotal stage for me. To the academic supervisor who guided, inspired and supported me during this process and kept me on track with the thesis. I also dedicate this thesis work to my best friend, Rula, who has supported me during this work, to my teachers and professors, who helped me and guided me to complete this study with solid knowledge and high confidence. To my colleagues and all influencers in my life who supported me and touched my passion for science, work, and success. All the people above have motivated me to move forward in achieving my goals.

## **Acknowledgement**

After thanking Allah, the Almighty, for all His gifts and blessings, especially for providing me with good health, knowledge, patience, strong will and opportunities to complete the thesis. I want to express gratitude to supervisor, Professor. Fathallah Ghanem, for his grace, continuous support and guidance. Prof. Fathallah Ghanem provided me with good research knowledge, helped me select the study topic, and devoted his time and effort to help me complete my thesis. Without his supervision and ongoing guidance, I would not have reached this stage. Ultimately, I would also like to thank and appreciate my family for supporting and encouraging me throughout my life and academic study.

## Abstract

This study aimed to investigate the impact of Electronic Human Resources Management (hereafter E-HRM) practices on employee performance in Palestinian Higher Educational institutions in the West Bank. The researcher uses a quantitative method to gather the data. The study population is represented by the total number of employees in Palestinian Higher Educational institutions (AAUP, Al-Quds Open University, An-Najah National University, and Palestine Technical University – Kadoorie) in Jenin, Nablus, and Tulkarm. For data collection, the researcher administered 300 questionnaires to employees in Palestinian Higher Educational institutions. Two hundred thirty-six questionnaires were collected, but 201 questionnaires met the criteria and used the Pearson Correlation Coefficient test: Statistical Package for Social Science (SPSS) to analyze the data. The researcher raised questions and formulated hypotheses to respond to them. The study revealed that there was a relationship between E-HRM practices and the performance of employees. It has also been found that employees agreed about the impact of knowledge and skills, positive workflow, and performing on time on employee performance.

On the other hand, E-HRM has displayed the importance of making a difference inside the Palestinian Higher Educational institutions. Findings showed that adopting E-HRM positively influences employee performance and the whole organizational performance. Human Resources Information Systems (HRIS) allow employees to perform HR-related activities more efficiently and comfortably; therefore, employees can concentrate on other essential tasks. In addition, the E-HRM system guarantees administration without errors by conducting tasks correctly and appropriately and completing the manager's task quickly, thus helping meet the organization's standardization.

**Keywords:** E-HRM, HRM, Employee performance, E-Recruitment and Selection, E-Compensation, E-Training, E-Evaluating, Palestinian Higher Educational institutions.

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## **Chapter 1: Introduction**

This research constitutes a relatively new area which has emerged from the HRM field. The researcher in the first chapter begins with the basic outline of the study. It introduces a general background for the study and understanding of HRM activities, E-HRM practices, and employee performance. Then, it moves to the research problem, its necessity, and its justification. In addition, the researcher specifies the research objectives, questions, hypotheses, limitations, and jargon. Finally, the chapter concludes with the scope of the study, delimitations, and the study's structure.

### **1.1 Background**

Research HRM has a long tradition. Several studies have been conducted on E-HRM, but some have concentrated on the type of applications that control the E-HRM (Heikkila, 2010, May). Other researchers have given their attention to the organizational adoption of E-HRM (Strohmeier & Kabst, 2009). Hence, these studies can differ in their classifications according to their regional and functional considerations. Concerning the functional basis, studies that identify the impact of general E-HRM (Lau & Hooper, 2008) should be differentiated from studies that clarify the adoption of specific functional sub-activities of E-HRM, such as E-Recruitment (Keim & Weitzel, 2008). Most studies of "E-HRM" adoption and use being exposed on use cases in Europe and the USA show some similarity.

On the other hand, few studies have been investigated outside the most developed countries, such as Palestine. These geographical places show different cultural investigations. The E-HRM in Palestine is in its early stages of adoption and use, resulting in changes occurring in the information technology areas (Dmour

&Shannak,R, 2012).Successful organizations must be compatible in winning their markets, employing and adapting to changing environments, and having a workforce who can be fully versed and competent to do their best (Adams, 2012). Therefore, due to the rapid technological development, organizations need HR professionals and electronic techniques to enhance employees' deal with, use, and adopt technology in their jobs (Al-Qudahet al., 2020).

The e-HRM technique provides a portal that lets managers, employees, and HR professionals watch, exploit, and constructor use the employment data necessary to administer the organization's Human Resources (hereafter HR). The E-HRM practices for this study include (E-Recruitment, E-Compensation, E-Training, and E-Evaluation).

The Palestinian Higher Educational institutions in West Bank were chosen for this study for many reasons. First, the results are submitted to the HRdepartment to obtain the benefit for their development. Second, the researcher studied at one of the study's sample universities and knew the issue related to the topic. Third, Higher Educationalinstitutions are significant in Palestine and have great importance.

Depending on a review of previous literature, this study has minimized the gap in the previous studies by identifying the E-HRM essential functions connected with the level of use of E-HRM and its impact on employee performance in Palestinian Higher Educational institutions, West Bank. Therefore, this study aims to examine the impact of E-HRM practices (E-Recruitment, E-Compensation, E-Training, and E-Evaluation) on employee performance in the Palestinian Higher Educational institutions in theWest Bank.

## **1.2 Research Problem**

The practice of management today, in light of the new challenges facing the business environment, has become not dependent on experience alone but is the result of the interaction between experience and technological informational knowledge.

The automation of HR to the administrative role is a crucial factor in the success or failure of the institution. The importance stems from the fact that the information is used to coordinate and support the administrative process. In addition, it is essential for making decisions and used as a communication tool within the institution and with the surrounding environment.

Previous studies have indicated that the use of modern technologies in business organizations is reflected in the productivity and trends of work. In this regard, universities are scientific research centers and models for educational organizations. The university professors and administrative workers represent their HR. Through them and their ways, the civilization project of the nation arises and crystallizes. Their core work is the advanced specialized knowledge that is the key to scientific and technical work in creating, managing, organizing and motivating what is new. Technology is used to administer HR and to achieve corporate goals. During the HR processes, such as recruitment, training, compensation, and so forth. The HR department can compile extensive data that allows them to study, analyze, assess and make decisions that will help the firm improve its performance faster (Jackson, 2010)

From this point of view, criteria for determining success in organizations depend on the level of performance concerning the organizational needs. Many studies have shown the positive effects of HRM on organizational performance (Lepak, 2002). Here comes the Human Resource Department's role in an organization that monitors employee

performance's effectiveness. Technological development often leads to plenty of surplus in the HR available to a company which puts senior departments and Human Resource Departments responsible for improving the company's workforce (Sierra-Cedar, 2019–2020). Planning, designing, and executing various innovative techniques to transfer institutions from the traditional way of performing to digitalizing the performance and keep pace with the new rapid technological developments have become the main concern for HRM professionals and the desired goal for different types of institutions (Rebolledo & Vega, 2021; Celaya 2015).

The most commonly used definition of E-HRM is elucidated by Strohmeier (2007), “employing of information technology and web-based mechanisms for both networking and supporting a group of individuals or collaborative users in their mutual performing HR practices.”

Based on the brief preview above, this study determines the distinct effect of E-HRM practices on the effectiveness of employee job performance and specifies the applicability of HRM practices for applying technological aspects.

The researcher interviewed the employees at Arab American University, Al-Quds Open University, An-Najah National University, and Palatine Technical University-Kadoorie. The researcher noticed that these universities are implementing technology in their operation with HR practices, but not to its complete automation. The technology and information department are not programming all the university operations. The reason behind this is the continuous increase in the number of processes that need to be digitalized with the lack of specialized working staff members in technology. The second reason is the development teams. Thirdly, the high cost of developing and supporting all HR practices and activities on an ongoing basis and the lack of interest in

establishing an integrating specialized department for the whole process. Therefore, this study aims to determine the impact of E-HRM practices on employee performance in the Palestinian Higher Educational institutions in the West Bank. To accomplish this, the researcher utilized both the questionnaire and interviews to obtain the necessary data from all universities located in three directorates: (Jenin, Nablus, and Tulkarm). The two data collection tools help the researcher demonstrate how digital usage alters Human Resources Management (hereafter HRM) from manual to automated processes and how this affects employees' job performance. There is a critical need for Palestinian higher educational institutions to use and benefit from technological mediums that improve HR processes and facilitate work resulting in a compelling performance.

### **1.3 Research Objectives**

**After defining the problem, the researcher explains the goals of the thesis.**

To examine the impact of E-HRM practices on employee performance in Palestinian Higher Educational institutions in the West Bank.

**Sub objectives:**

OR1: To study the impact of E-HRM practices (E-Recruitment and Selection) on employee performance in Palestinian Higher Educational institutions in the West Bank.

OR2: To study the impact of E-HRM practices (E-Compensation) on employee performance in Palestinian Higher Educational institutions in the West Bank.

OR3: To study the impact of E-HRM practices (E-Training) on employee performance in Palestinian Higher Educational institutions in the West Bank.

OR4: To study the impact of E-HRM practices (E-Evaluation) on employee performance in Palestinian Higher Educational institutions in the West Bank.

OR5: To develop findings, conclusions, and recommendations to enhance using E-HRM among employees in Palestinian Higher Educational institutions in the West Bank.

#### **1.4 Research Questions**

RQ1: What impact do E-HRM practices (E-Recruitment and Selection) have on employee performance in Palestinian Higher Educational institutions in the West Bank?

RQ2: What impact do E-HRM practices (E-Compensation) have on employee performance in Palestinian Higher Educational institutions in the West Bank?

RQ3: What impact do E-HRM practices (E-Training) have on employee performance in Palestinian Higher Educational institutions in the West Bank?

RQ4: What impact do E-HRM practices (E-Evaluation) have on employee performance in Palestinian Higher Educational institutions in the West Bank?

#### **1.5 Research Hypothesis**

H1: There is a significant relationship between E-HRM practices (E-Recruitment and Selection) and employees' performance.

H2: There is a significant relationship between E-HRM practices (E-Compensation) and employees' performance.

H3: There is a significant relationship between E-HRM practices (E-Training) and employees' performance.

H4: There is a significant relationship between E-HRM practices (E-Evaluation) and employees' performance.

H5: There are statistically significant differences at  $\alpha \leq 0.05$  in the responses of the research sample according to the demographic profile (Gender, Age, Educational attainment, Workplace, Experience, and Job title).

- H5.1: There are statistically significant differences at  $\alpha \leq 0.05$  in the responses of the research sample due to gender.
- H5.2: There are statistically significant differences at  $\alpha \leq 0.05$  in the responses of the research sample due to age.
- H5.3: There are statistically significant differences at  $\alpha \leq 0.05$  in the responses of the research sample due to educational attainment.
- H 5.4: There are statistically significant differences at  $\alpha \leq 0.05$  in the responses of the research sample due to experience.
- H 5.5: There are statistically significant differences at  $\alpha \leq 0.05$  in the responses of the research sample due to workplace.
- H 5.6: There are statistically significant differences at  $\alpha \leq 0.05$  in the responses of the research sample due to job title.

H6: E-HRM practices (E-Recruitment and Selection, E-Compensation, E-Training, and E-Evaluation) will positively explain employee performance variation.

### **1.6 Research Significance and Justification**

This study has made several significant contributions to the field of E-HRM. Using technology in recent years is one of the most critical developments that reflects the great necessity and the urgent need to inform, communicate, and coordinate work activities (Ledru et al., 2003). Different sectors, all professions, and all organizations are affected by this technology showing their interest in these technological channels. Therefore, all

functions of the organization, including HR as an important department, are considered the link among the various departments in the organization. HR are concerned with developing its performance, and these developments are represented by the concept of electronic HR, which has become an essential indigence in the HR departments in all sectors and has positively impacted employee performance (Laval, 2000). Several techniques are available to organizations to manage the primary responsibilities and HR duties at the administrative and supporting levels (including recruitment, selection, training, evaluation, performance, and compensation (Laval and Thierno Diallo, 2007). For these reasons, the E-HRM adds excellent value as it assimilates a solid restraint for the challenges of the twenty-first century in a world characterized by digital space, science, knowledge, and the internet revolution.

As a result of these profound changes and technological challenges, there is a need to cope with technology, especially among Higher institutions and what those institutions witnessed during the Corona pandemic, which establishes the need to use technology with all its capabilities.

### **The Study Findings are Highly Beneficial to the Following:**

#### **HR Practitioners**

HRM functions are to understand, maintain, develop, use, manage and connect individuals in the work environment. It is a specific management style responsible for managing specific resources (Human) and building strategies concerning its employees' recruitment, development, and management (Wall and Wood 2005). It is the set of various practices of building and improving the human ability to produce and develop themselves concerning continuous changes. The present study mainly aims at justifying

HRM practices in terms of technology to benefit HR practitioners and enhance their roles. Moreover, the study explains the positive influence that HR practices have on the performance of both employees and organizations. Equally important, this study encourages HR specialists to adapt technology in performing their duties to increase efforts, enhance performance, minimize cost and save time. Similarly, it facilitates self-service via the company through the growing use of modern technology and networks.

These days, HRM constitutes a new paradigm where HRM becomes more essential, cooperative, evaluative, and computerized. It is also evident that the world of technology creates a different desired concept of HRM as a strategic partner and performance booster.

**Organizations:** Achieving organizational objectives through enhancing performance is the primary concern for maintaining continuity. This technique can be considered valuable and easy to access when related to the primary duties of HR practices such as E-recruitment, E-selection, and E-training. These are usually considered applications of the HR operations toward achieving the organizational goals. The researcher believes that these kinds of studies are helpful to effectively manage employees within the company to serve the organization's economic situation and accomplish its social function of motivating and valuing its HR (Okoye & Ezejiolor, 2013).

### **Employees**

The digital world is changing how humans live, work, organize, and conduct business. E-HRM can help employees transfer to a digital mentality, a digital way of managing, organizing, and conducting tasks. By the same token, it changes the communication and interaction among employees in the work environment and what they estimate their employers and careers to introduce. This can be done through the innovative adaptation of

new knowledge and new ways of doing tasks Boundarouk and Ruël (2009). Kiesler et al. (1984) argued that technology mediates the link between employees, organizations, subordinates, and directors.

E-HRM is a technique that companies must adapt, especially in managing HR, to replace traditional HR practices such as recruitment and selection methods. However, technology helps create more efficient and effective recruiting, which is beneficial in the hiring process to distribute information and provide them with online training as new candidates. Nevertheless, employees need training and development; to help remote access information from different locations, attend virtual classroom training and evaluate progress through unique systems or portals. For example, the employer and the employee connect electronically. In addition, employee performance is also conducted a digital way manner.

Moreover, it enabled employees to use mobile apps to perform their work better. Employees would be more informed, aware, and engaged as they can do their tasks anywhere and anytime. E-HRM brings innovation, collaborations, and new strategies to the organization. The employees become international employees since they will share and introduce their knowledge and experience at a universal level (Saini, 2018).

According to the researcher's point of view, the chosen E-HRM practices are classified as the most important electronic HR practices and the widely used among researchers as concluded by the researcher.

### **Why Higher Educational Institutions (HEI)**

The contribution of higher institutions to regional development has recently gained great attention. These days, it is estimated that knowledge institutions provide education and research services and have a significant role in developing economic,

social, and cultural environments depending on several circumstances. Higher education, also called post-secondary or third-level, is an optional final stage of formal learning after completing secondary education. It consists of universities, specialized higher education schools, and independent colleges in various specializations.

The context of this study is higher education institutions. As stated elsewhere earlier, the researcher tried to investigate the impact of E-HRM practices on employees' performance in these institutions. As far as the researcher knows, there is a critical need for Palestinian higher educational institutions in the West Bank. The possible results are expected to be used and benefit from technological mediums to improve HR processes and performance. The Palestinian higher educational institutions were chosen for this study for many reasons. First, the results are submitted to the HR department to learn more about the E-HRM. Second, the researcher studied at one of the study's universities and knew the issue related to the topic. The researcher noticed that HR employees face challenges that prevent them from fast development. Third, higher education institutions are significant in Palestine's prosperity and development.

To the researcher's best knowledge, this study is one of the few studies investigating the impact of E-HRM practices on the performance of employees in Palestine. Having this in mind, the researcher believes that such a study introduces new knowledge about the great necessity of E-HRM practices during the rapid technological development worldwide. The researcher chose E-Recruitment and Selection, E-Evaluation, E-Training, and E-Compensation since these practices are the leading HR practices that concern both the organization and the employees. These are valuable for researchers and investigators to conduct research on E-HRM.

### **1.7 Limitations of the Study**

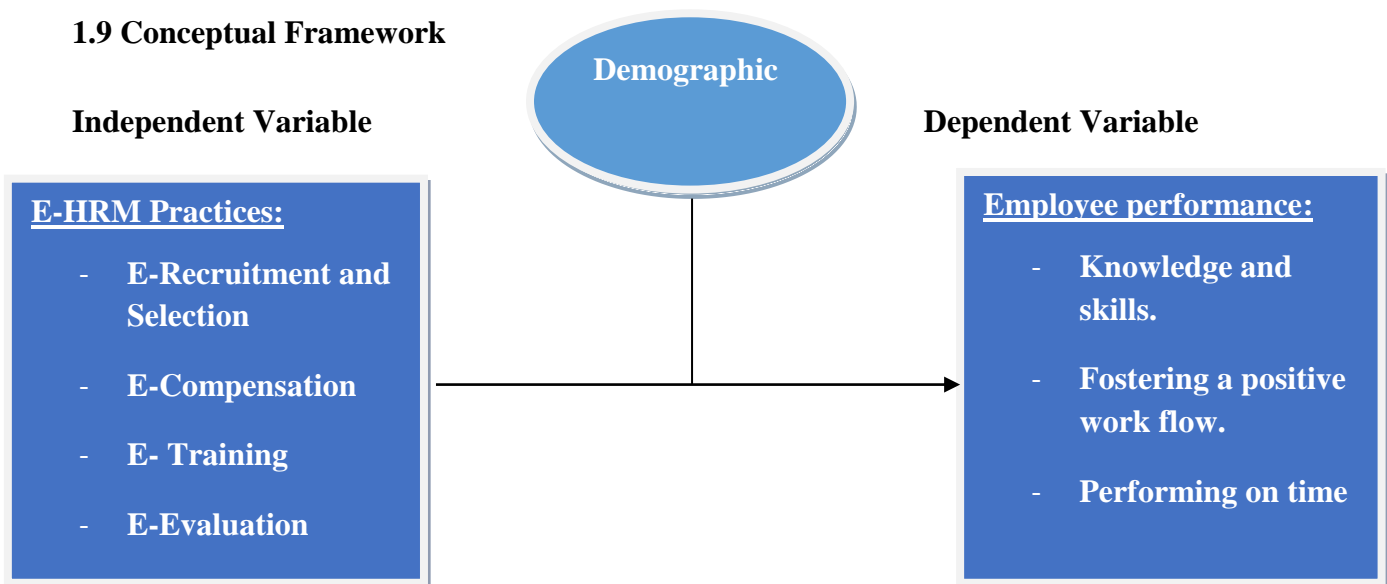
1. Employee awareness: employees are not thoroughly familiar with the terminology "Electronic Work".
2. Management awareness: management is not fully ready to integrate their employees with technology and the importance of its use in HR practices.
3. The obstacles of data collection itself.
4. There is an obstacle to communicating with the management of Palestinian higher educational institutions in the West Bank as they do not respond and collaborate with researchers immediately.
5. There is sometimes an obstacle in moving between the Palestinian cities to get the required study sample.
6. Insufficient time to balance between writing the thesis and work.
7. Lack of trust in scientific research by the employees.
8. Lack of studies related to the role of E-HRM practices in Palestine.
9. The inherent weaknesses of the instrumentation limit the study.
  - University administration consent is required.
  - Large Palestinian higher educational institutions accept only a small number of questionnaires for distribution.
  - The employee's participation is voluntary. Hence, response rates vary by year.

### **1.8 Scope of the Study**

The scope of the study mainly concentrated on the employees of the Palestinian higher educational institutions in the West Bank. e., (AAUP, Al-Quds Open University, An-Najah National University, and Palestine Technical University– Kadoorie) working in

the Northern West Bank region in order to achieve the study's objectives. Thus the study's data collection was restricted to them. The departments were chosen randomly. The researcher's selection of the employees who work in the northern West Bank region for data collection is based on the fact that the majority of them work in the same area under the same circumstances and to facilitate the process of collecting data from the universities located in the northern areas of the West Bank. Furthermore, The study's literature review focused on the impact of E-HRM practices on employee performance and the variables related to employee performance, such as knowledge and skills, positive workflow, and performing on time.

### 1.9 Conceptual Framework



**FIGURE 1. 1: E-HRM Practices and Employee Performance**

The conceptual framework in figure 1.1 above shows that (E-Recruitment, E-Compensation, E-Training, and E-Evaluation) strongly impact employee performance (dependent variable). Both independent (E-Recruitment, E-Compensation, E-Training, and E-Evaluation) and dependent variables (Employees' performance) are interdependent.

Furthermore, through the conceptual framework, the researcher illustrates that E-HRM practices (E-Recruitment and Selection, E-Compensation, E-Training, and E-Evaluation) positively impact employees' performance.

### 1.10 Delimitations of the Study

- **Geographical:** The study has covered employees in the Northern of the West Bank region (AAUP, Al-Quds Open University, An-Najah National University, and Palestine Technical University – Kadoorie).
- **Population and sample:** The study's population included the total number of employees in Palestinian Higher Educational institutions (AAUP, Al-Quds Open University, An-Najah National University, and Palestine Technical University – Kadoorie) in departments from the four institutions. The researcher administered the questionnaires to a total number of 300 in the Northern West Bank region. However, the researcher collected data from 236 participants. It is worth mentioning that the valid questionnaires were 201.
- **Knowledge:** The study focused on the impact of E-HRM practices (E-Recruitment and Selection, E-Compensation, E-Training, and E-Evaluation). Therefore, assisting Palestinian Higher Educational institutions to know and use E-HRM practices in their organizations.
- **Approach and Instrument:** The researcher used quantitative and qualitative methods to measure the desired objective to get the needed results. Questionnaires and interviews were used in this study. The primary goal of the questionnaire and interview is to achieve the research objectives, get an answer to the study questions and collect data for the findings, discussion, and recommendations.

- **Time:** The questionnaires were administrated to the employees on 25<sup>th</sup> April 2022 and gathered after five weeks.

### **1.11 Structure of the Study**

To present the information smoothly, this study has been divided into five chapters:

**Chapter 1: Introduction:** This chapter starts with a general background of the research to provide the reader with background about the research topic. It also covers the problem area of the study, significance and justifications, research objectives, questions, hypotheses, research limitations, the scope of the study, delimitations, and the study outline.

**Chapter 2: Literature Review:** This chapter is designed to present the previous studies related to the researcher's study. It provides knowledge about the study and identifies the consistencies of the theories related to the study and its problem.

This chapter begins with identifying HRM, E-HRM, employee performance, and HRM practices VS. E-HRM based on employee performance.

**Chapter 3: Methodology:** This chapter presents the study design along with the methods used. The chapter also explains the techniques used in the analysis and the issues related to the data collection procedures.

**Chapter 4: Data Analysis and Discussion:** This chapter (the findings) presents the study's data analysis and discussion.

**Chapter 5:** The last chapter covers the conclusions, recommendations, and references.

## **Chapter 2: Literature Review**

This chapter is devoted to previous studies related to the researcher's study. It reviews the literature and identifies the theories relevant to the study and its research problem. The first section is about HRM practices, the second section discusses the concept of E-HRM, paying attention to the targeted E-HRM practices for this study, and the third one handles employee performance and how it will be affected by E-HRM practices. The final section differentiates between HRM and E-HRM based on employee performance.

### **2.1 Electronic Human Resource Management (E-HRM)**

E-HRM is gaining more attention now (Cedar Crestone, 2005). The adoption of E-business techniques helps create great benefits by simplifying the efficient flow of information and effective resources within HRM (Ruel et al., 2004). At the same time, Wyatt (2001) emphasized that E-HRM is concerned with applying technology that gives managers and employees direct access to HR and other services for communication, performance, reports, team management, and training needs. E-HRM can be applied to workable HR through extranet and intranet applications, wireless communication, and HR mobile apps. As justified by (Zafar, 2010) in "Digitalization in the development of human resource management in the Republic of Belarus," a quarter of organizations realized that E-HRM is essential, while more than half think it has medium importance. Companies must pay more and more attention to E-HRM as an umbrella that casts a shadow over HR practices. Swaroop (2012) described E-HRM/Digital HRM as a method of performing HR methodologies, strategies, and activities through web-based and internet networks. Boundarouk and Ruël (2009) addressed that there is a great need to invent a concept that can connect HRM and IT while paying attention to the

importance of both employees and IT technicians. This means that the more corporations between HR and IT specialists, the more efficient their performance will be (CedarCrestone, 2009; Zarqan, and Sukarni (2017). Wright and Dyer (2000), in "E-HRM: Innovation or irritation," an explorative empirical study in five large companies on web-based HRM, introduced justification: E-business has imposed itself strongly, and therefore, HR professionals are dealing with the emerging challenge of performing in ways that are inconsistent with the new business. In their view, HR practices can become a great partner in driving success; however, HR must change its concentration, role, and delivery systems. According to them and in E-business, applying technology for HR is unavoidable. Technology is helping organizations focus on effectively performing the job with minimal time, cost, and effort and in high accuracy to minimize human errors.

E-HRM includes three pillars: operational, relational, and transformational (Wright & Dyer, 2000). Operational E-HRM is concerned with employees maintaining their personal data renewed through a website or HR system and increasing the value of that information for both the company and its employees. Relational E-HRM is related to staff through web-based tools and ongoing manual routine procedures such as recruitment and selection. Transformational E-HRM is a set of web-based integrated tools helping employees construct the organization's online strategic choices. Radwan (2002) specifies a set of necessary conditions to adopt E-HRM:

- Organizational commitment to improve and construct E-HRM projects.
- Strategic planning towards the transfer to the digital world.
- An inserted plan for effective communication among all parties, considering satisfying employees' needs and willingness.

- A focused study on procedures and performance concentrates on the interdependence of service systems and technical load.

Depending on knowledge and information, such requirements are necessary for any organization willing to transfer to E-HRM (Shi, 2002). The organization can ensure that its HRM practices help adopt some rules and procedures concerning its interests. The adoption of E-HRM brings many benefits to the organization, including minimizing costs, supporting HR duties and activities, and enhancing the company's strategy (Stanton & Coover, 2004, Voermans and Veldhoven, 2007) depicted E-HRM as the organized technical assistance that helps HR to work in organizations with relying on technology confirming the same point of views that Ruel (2004) also expressed in the article of "E-HRM: Innovation or irritation."

According to the researcher, E-HRM facilitates HR functions to create more dynamic and operational capabilities and effectively contribute to HRM effectiveness.

### **E-HRM as A concept**

A study completed by Al-Rawahneh (2013, as cited by Abufara and Ghannam, 2021) commented on the E-HRM as a concept. Al-Rawahneh believed that the E-HRM had proved itself as a practical application to help a particular organization build its strategies through HR practices. These practices focus on the best use of internal, external, and international information network channels. Based on the preceding, it can be seen as integration between E-HRM, technology, and its applications. Having this in mind, technology helps implement human resource management procedures and policies. The successful implementation leads to achieving substantial significant value for management and employees.

## **Advantages of E-HRM**

The literature review also shows that there are many advantages of E-HRM. The researcher has reviewed and presented them as follows.

The E-HRM helps avoid using a complex organizational structure that depends on many workers. The primary advantage is designing an electronic system that functions as effectively as humans. This successful implementation saves time and money and reduces the organization's costs because it does not require a specific location to work or occupying offices with many employees. Recent theoretical developments have revealed that the E-HRM simplifies the processes in particular organizations. These simple procedures help in creating a better quality of administrative work. Previous research completed by Miguel et al. (2007) demonstrated that using an electronic system for communicating is way better than paperwork because it makes transactions safer and protected in the database with limited access only to those authorized to log in and use the data. By the same token, using an electronic system is an environmental tool since it helps protect the environment by reducing using paper and trees for this purpose. Several studies suggest that the E-HRM helps managers to focus on other essential tasks, such as strategic aspects of the organization. Previous studies have also emphasized that the E-HRM works against bureaucracy and develops the control process level. Some authors have driven the further development of E-HRM. They believed that the E-HRM enhances organizations' flexibility, human efficiency, and performance. Electronic services improve the procedures and increase the effectiveness of interaction with employees (Al-Daini, 2010). As previously reported in the literature, the E-HRM brings data from its original sources in a unified manner, providing data and information to the beneficiaries immediately without delay.

A large number of existing studies in the broader literature have examined the E-HRM and found that it collects employees' data quickly, which can create effective communication channels with all relative parties (Musa and Qureshi, 2011; Wadi and Wadi, 2011).

### **HR as a Tool for Employment**

A more comprehensive description can be found in Hopkins and Makham's (2006) work. They believed that E-recruitment is effective electronic management of human resources. They claimed that it increases the efficiency of the recruitment process for organizations and job applicants, and it has become an essential part of the recruitment process in the contemporary business environment. For example, their research suggests that the Internet can be used to announce vacancies, attract qualified individuals, and provide data and information related to the job description. In light of the report, it is conceivable that the E-HRM reflects an authentic view of the organization, such as workstyle, and learns more about the expected tasks and responsibilities. In short, the literature pertaining to E-HRM strongly suggests that it can attract qualified candidates for the organization. These electronic tools may be internal tools within the same organization or external tools through electronic recruitment solutions provided by some specialized institutions (Al-Sayed, 2012).

### **E-training in the Context of E-HRM**

Continuous training within the framework of E-HRM is essential to keep pace with the changes in various aspects of life. This ongoing training is vital to accomplish the future vision by keeping up with global changes that its fundamental effects have appeared in most countries. It is by now generally accepted that a successful organization is developing its competitive capabilities through the e-training process in light of the

rapidly changing environment. In fact, e-training has become an essential tool that meets many of the immediate and strategic development needs to obtain highly qualified trained public resources (Al-Shalabi et al., 2017). These are very small and difficult to observe. Al-Harbi (2012) sheds light on the importance of e-training. Al-Harbi stated that e-training is a systematic process in a mobile interactive environment saturated with digital technology applications. It relies on using the Internet, computers, multimedia, and mobile devices to display software, bags, and electronic training courses. This is particularly important when investigating E-HRM. A study completed by Al-Zanbaqi (2011) found that the hosting organization designs a particular website for the required training programs. Therefore, the candidates can access the training material electronically while providing feedback. The authors agree that the e-training is the baseline for creating a mobile interactive environment to train employees. The internet facilitates the training process because it is not necessary for the trainees to be physically available at the organizations. This is an advantage of e-training because the internet succeeded in achieving the training program's potential goals.

### **Electronic Evaluation in the Context of E-HRM**

Studies of E-HRM are well documented, and it is also well acknowledged that information technology has contributed significantly to the electronic applications of the electronic evaluation and control process within the framework of the electronic management of HR. This process is vital in each stage of performance. Several authors have recognized its strengths and weaknesses. They found it accurate and high speed, contributing to the possibility of improving performance effectively. Interesting results were revealed by Al-Arishi (2015). Al-Arishi found that e-evaluation is an effective practice of the control process by using technical information and communication

technology tools. These tools collect information for decision-makers to make decisions, design strategies, and develop their organization, considering the standards that enhance the control aspect in all operating systems. A large number of existing studies in the broader literature have examined the effectiveness of e-training. The evaluation is programmed control built based on standards, rules, and procedures. This program ensures what must be appropriately applied to achieve the desired goals (Laudon & Laudon, 2010).

## **2.2 Employee Performance**

Performance is one of the techniques used to gauge the ability to work successfully and enhance the association's effectiveness. The need to set targets to make efficient performance and further develop the overall performance is defiantly the main objective for the association. Sarah and Tricia (2005) contended that performance is regularly used to gauge and measure the general situation of the association and its related policies. Tripathi and Singh (2017) strongly recommended that organizations that shift toward digitalizing HRM practices have become favorable these days. To this end, Fedorova (2019) displayed in their study "The Relationship Between Digital Human Resource Management and Organizational Performance" that digitization of HRM functions helps eliminate many routine tasks to minimize errors occurring by a human. Therefore, a previous study shows that adopting and implementing digital HRM is important for organizations to empower their performance and keep pace with the digital and electronic modes. Organizational performance can be estimated and measured from different sides, including financial and non-financial performance (Yang, 2009). From an HR perspective, six financial variables were found to be the

basics of assessing organizational performance – turnover growth rate, productivity, earnings per share, return on assets, average yearly profitability per employee, and attribution of company assets per employee. Other scholars (Iwu, 2016, Tripathi et al., 2019) assert that there is a strong relationship between E-HRM practices and performance consequences through a study "Effects of the use of electronic, human resource management (E-HRM) within human resource management (HRM) Advances in Economics, Business and Management Research at universities. Acta University Danubius" conducted in sub-Saharan African universities. The study revealed that a high percentage of employees accorded that E-HRM would increase and enhance their performance. It also examined the impact of digitization on the development of HR practices, talent management, and performance at work.

In the same direction, performance considers a multidimensional concept. For instance, the stakeholder's methodology indicates that some authors. Previous work completed by Truss (2001) introduced a different measure of performance to balance the process without any conflicts between internal and external actors of the organization. In this way, performance is considered a compound concept based on an economic basis, which reveals results such as labor productivity, innovation, quality, efficiency gains, and flexibility (Bosalie, 2003). On the other hand, another performance aspect is related to legitimacy and equity (Paauwe, 2004). This aspect can evaluate performance through specific measurements such as commitment, trust, job security, and perceived equity. According to this study, this aspect of performance handles the nature of the internal relations among employees, customers, and those other stakeholders. In the same view, they suggest four indicators.

- 1) HR consequences include absenteeism, turnover, job satisfaction and performance both individually and within a group.
- 2) Organizational consequences such as productivity and quality of products and services.
- 3) Monetary performance, such as return on assets and investment.
- 4) Market efficiency.

To survive in the current competitive and dynamic business environment worldwide, employees must have both soft and hard skills. Accordingly, most employers estimate workers to elucidate and transcend many “softer” skills, such as teamwork and group development (Rothwell et al., 2007). Employers are concerned with tapping into vital soft skills employees gain during their study and different work stages rather than just degree-specific knowledge (Raybould and Sheedy, 2005). Maniscalco (2010) referred to soft skills as “a series of qualities, habits, personality attributes, attitudes and social boons”, which everyone tends to gain in variations and are necessary for daily life as much as they are required for work. Similar to this point of view, Lorenz (2009) referred to soft skills as “a collection of personal qualities, habits, attributes and social boons that create employees who are good and convenient”. Gibbons and Lange (2000) maintained that the concept of “soft” skills is the exact meaning with substance skills, key competencies, and personal skills. Empirical studies have been executed in many places in Asia, specifically Malaysia. For instance, a study by Shariffah (2013) revealed that soft skills in Malaysian tertiary education constitute a significant concern in Malaysian higher learning schools.

Furthermore, Staffan’s (2010) study on improving individual employability found that hard formal and technical professional skills were considered to be of diminishing

importance. In general, these hard skills are considered less important in connection with individual employability and performance compared to different types of soft skills. This specifies a link between employees' soft skills and performance. A study on the importance of soft skills in the work environment revealed that the soft skills gap led to the high unemployment statistic for graduates (Seetha, 2014). Soft skills help deeply determine the success of a project or work performance needed for the organization's success. To achieve a high-performance culture, an organization must provide its employees with training and development programs designed to grow, build, and change their attitudes and behaviors towards several organizations' operations. Heathfield (2008) states that training is essential in creating a high work performance culture. Training is one solution that lets organizations achieve a high level of performance. For example, communication skills, listening, dealing, and managing people impact the relationship with people. Soft skills include broad competencies, self-awareness, attitude toward managing one's job, dealing with critics and not taking personally, taking risks, and getting along with people. (Alboher and Marci, 2008).

### **2.3 HRM Practices VS E-HRM Practices and the Impact on Employees'**

#### **Performance**

In their study, Hada and Gairola (2015) clearly stated that today's world is technology-based, and we can see its presence in each field of our lives. The concept of the internet has had a significant change in our lives and our work approach. Nowadays, the world has become a small village. A person can contact anyone in any part of the world. Oswal and Narayanappa (2014) showed that by online job openings, candidates

have a better opportunity to go through the company profile and understand the vision, mission, and organizational goals.

### **2.3.1 Online Recruitment and Selection**

This expands the field and area of talent study for the human resource department. Managers could review existing employee records for internal recruitment even with an organization's intranet. Also, employees can go to seek any job openings.

The HR processes within organizations have changed over time. These changes are due to internal or external reasons factors. First, external factors include technological developments and customer preferences changes. Mainly, HRM focuses on transactional and traditional activities such as daily routine, recruitment, selection, and training and performance assessment. However, the function of HRM has expanded to include more value-adding activities such as employee development and talent management. HRM has developed from caretaking and record maintenance in the 20th century to becoming a strategic business partner in employee development and talent recruitment in the 21st century (Thite & Kavanagh, 2012). Compared to traditional HRM, strategic HRM, according to Watson (2009), is essentially strategic as it has a long-term focus. In this sense, strategic HRM is responsible for organizational learning and developing the present and future competencies needed (Watson, 2009).

Moreover, the development of Information and communication technology has influenced the evolution of HRM (Thite & Kavanagh, 2012). This helps all the managers quickly access all the information regarding employee statistics, costs, and performances. Thus, HR practices these days are not only performed by traditional HR specialists, the technological development has affected the evolution of the HR

function. It affects HRM from a much broader perspective than electronic mediums (Hempel, 2004; Thite & Kavanagh, 2012). Because of the technological development, the HRM role is redefined by Thite and Kavanagh (2012), 'Evolution of human resource management and human resource information systems: the role of information technology' article to exhibit a demand for new HR competencies.

Sekhar et al. (2016) emphasized that a productive work environment affects an organization's performance. Recruitment and selection, training, and performance evaluation that emphasize the traditional administrative HR perspective have proven to be inadequate and insufficient due to a world characterized by technological changes. It is necessary to rethink HRM processes and practices for good corporate management. This, in turn, creates a necessity for organizations to be flexible, which involves the response to changing competitive environments, as (Attia et al., 2014) described, "considering skills Evolutions in Multiskilled Workforce Allocation with Flexible Working." In line with this, Sekhar (2016, p. 57) indicated in the study of "HR Flexibility and Firm Performance." the function of HR in an organization's flexibility. They pointed out that "HR flexibility as a form of strategic flexibility helps a firm to preserve and develop its competitive advantage." Hempel (2004) debated that technological changes prompt HRM to create people, processes, and techniques to support these changes.

Moreover, resilience in HR practices impacts employees' performance by enhancing participation and involvement and allowing them to improve their careers. Managing performance processes are a vital element in HR functions (Fisher & Sempik, 2009). Moreover, Cappelli and Tavis (2016) argued that many organizations work in highly competitive environments with rapid innovations, which result in future demands and

objectives that are continually changing. Therefore, classic systems prepared for assessment and accountability for past and current activities are no longer applicable.

In their study, Bengtsson and Bloom (2017) stated, "Human Resources Management in a digital era." They justify that adopting electronic mediums can change the culture of the organization's work environment. HR professionals must be aware of technological proficiency as part of their competencies in such areas. Another studies revealed that essential E-practices like E-communication, E-selection, E-compensation, E-training, and E-evaluation have a direct positive influence on HRM performances. From the managerial point of view, E-HRM helps managers to concentrate on the factors that affect employee performance. By considering these factors, HR managers can help organizations to achieve their objectives. Singh (2017) stated in "E-Recruitment: A New Dimension of Human Resource Management in India" that one of the critical tasks of today's organization is to hire and retain talented employees, and here is the function of E-recruitment. E-recruitment has made a considerable change in HR practices. It significantly decreased the human resource department's encumbrance to a great extent and introduced a much more reinforced and well-organized working approach. E-Recruitment is reduced time consumption, simpler, diaphanous, and easily accessible worldwide. Iwu (2016), in their study "Strategic human resource metrics: A perspective of the general systems theory," studied how the E-HRM system helps human resource practitioners carry on their duties and responsibilities effectively to achieve organizational goals. Human Resource Information System (HRIS) is one of the most important Management Information Systems which helps mainly in administering the organization's human resources activities. HRIS helps by providing information on how many people work with the organization, where, and how they can be managed. It has

become an essential tool by which information is gathered, managed, and reported in a way that is useful in making decisions. HRIS helps organizations organize most HR planning activities, such as recruiting employees. Recruitment and selection are considered the primary HR functions that need to be well planned and implemented efficiently and effectively in organizations to achieve success (Darrag, 2010). El-Kot and Leat (2008) provided several techniques of selection practices that can be used for recruitment, like application forms, psychometric testing, assessment centers, knowledge tests, and group-based activities.

Many researchers have conducted studies on recruitment methods. However, not enough research has addressed the new technologies, especially HRIS, that can play a significant part in the recruitment process. Kapse (2012), in their article, "E-Recruitment: A New Dimension of Human Resource Management in India," about E-recruitment, discussed that E-recruitment has many benefits to organizations like saving time and cost, easy access, better match, and with this, they have pointed out some of the disadvantages of online recruitment like scrutinizing applications, lack of awareness regarding internet in some places and they said that employers sometimes prefer face to face interaction with applicants.

HRIS can support and strengthen the recruitment process of an organization. It can be essential for organizations to provide a successful recruitment process.

The second process is selection, by which institutions use several methods to select adequate people to do specific duties after recruiting them (Cunha et al., 2010). An early study (Brannick and Levine, 2002) stated that the candidates' profiles are compared with the job requirements using function analysis to determine their content, and the suitable selection approaches towards the definition of the desired best performance

(Cunha et al., 2010; Rocha, 2010). The need for the selection procedures and techniques to be predictors of the performance and success of the candidate is even more remarkable because choosing people who are capable of changing will lead to improving their performance as human resources (HR) in the face of the demands resulting from the changes of the environment, the people themselves and the nature of work (Cunha et al., 2010). There is an excellent necessity for modern hiring approaches (Anderson et al., 2004) and other HRM practices that create selection methods and criteria with greater predictive power. Training means a set of systematically organized learning experiences by an organization for changing individuals' skills, knowledge, attitudes, and behaviors, redounding to their professional competence (Cabrera, 2006). New technologies and communication makes training more effective and allows participants to interact (Lee and Owens, 2000, as cited by Baird et al., 2003).

In HRM, performance assessment can be defined as the organized and systematic appraisal of the individual's attitude toward their work, depending on the goal analysis of human conduct at the job and communication to the individual of his evaluation outcome (Rocha, 2010). In order to get the actual performance appraisal, job analysis of the evaluated individuals must occur, specifying what is estimated from them as well as providing managers with a tool that permits the justification of their teamwork processes, the selection, training, performance appraisal, and compensation decision-making process, or the assigning of people to tasks (Morgenson et al., 2004). The importance of this analysis to the performance assessment results from the probability of clearly identifying duties and responsibilities of each function, supporting with the determination of performance exponents and determining activities to perform and in the awareness of the implementation (Lees and Cordery, 2000).

Electronic training has many benefits for both employees and organizations. These benefits are illustrated on several bases:

**Computer Self-Effectiveness and Motivation to Learn:** It is approved that those with an advanced level of computer self-effectiveness are more engaged in completing computer tasks regardless of any challenges (Johnson, 2001). In the same direction, Lim and Nam (2007) revealed that the higher the trainee's computer self-effectiveness related to electronic training, the higher their performance regarding learning. Those individuals are believed to feel higher levels of satisfaction. Moreover, it is confirmed that computer self-effectiveness is vital in E-training. However, employees lacking computer self-effectiveness are exposed to problems in dealing with the E-training system.

**Content Basis: Ease of use and Content of Training**

Roca and Gagné (2008) found that the concept of ease of use was an essential predictor of ongoing E-learning purposes. According to Lim and Nam. (2007), the main element affecting trainees' learning fulfillment depends on using and accessing a site. With guidance through the system, an apparent online assistance menu, and instruction assistance, employees can easily and quickly obtain the information they need easily and quickly. The ease of use in an E-training environment involves the contents of training which consider essential for the training program's success. Good content has to be up-to-date, relevant, and accurate. According to Negash et al. (2003), information quality is clarified as a turn of the value of the findings generated by a system as realized by the user. Measures linked to the quality of information combine the diversity of the content, complete, integrated, accurate, detailed, timely, and reliable information with a suitable design (Ahn et al., 2004).

### **Institution Basis: Management and Organization Support**

Management support is a significant basis in an organization's training atmosphere encompassing top management enhancements, resource allocation, and guidance improvement help. It is agreed that when managers show explicit confirmation of the necessity of ongoing learning and link specific rewards to the initiatives taken by their dynamic employees who engage in E-training, employees will feel satisfied, resulting in higher training effectiveness. Moreover, a previous study declared that the organizational atmosphere prepares employees for formal improvement practices and achieving desired learning goals (Tracey.Tannenbaum& Kavanagh., 2001). Lim and Nam (2007) deducted that E-training settings and consistency are not necessary to transfer performance but to learning performance.

#### **2.3.2 E-Training**

Armstrong (2011) defines training as the formal and systematic change of behavior through learning, which results from education, instructions, development, and planned experience. It is the process of providing employees with the knowledge, skills, and attitudes necessary to carry out the job responsibilities. Corporations are offering different training programs to meet their organizational needs. These include content on IT and systems, processes, procedures, and business practices, industry-specific training, managerial or supervisory training, interpersonal skills, compliance, sales, executive development, basic skills, new employee orientation, customer service, and quality. As Reynolds (2014) points out, training has an integral role in accelerating learning. Cole (2002) proposes a general view of knowledge and competencies acquisition training. He suggests that he cares more about employee potential than

instant skills and shows employees as adjustable resources aiming at personal growth and realization of the potential of an employee. Armstrong (2011) refers to individual development as improving individuals in their jobs with guidance, encouragement, and manager assistance. E-training introduces a complete, measurable, and open infrastructure that allows organizations to manage, transmit and track employee training participation in electronic channels or classroom-based environments (Fisher, 2002). Trainees interact with content and trainers at their own pace. Managers automatically specify the business flow from order processing to delivery and performance management to training findings. E-training systems prevail content to global learners; make use of mixed media and multiple separated locations on a single instance of the application, identify skills gained by trainees, update the trainees' competency profiles, and aim to ensure that HRM provides the appropriate resources, skilled and experienced trainers and integrate training initiatives on a scalable and cost-effective manner (Jaffee, 2001). Moreover, it aims to assess training effectiveness and provides learning opportunities for employees, customers, and other shareholders by providing one-stop administration and systemized data.

### **2.3.3 E-Compensation**

Employee self-service allows all organization members to electronically introduce their preferences in terms of specified interest and burden reduction on human resources management. Nevertheless, it is agreed that the Internet delivery of employee benefits, if executed correctly, demands significant savings for managing human resources. Moreover, the manager's self-service allows the manager to take action or confirm payroll, rewards, and stock management changes. Application stimulates managers to

offer bonuses or their subordinate's confirmation and request to entomb their decision (Townsend and Bennett, 2003).

E-compensation systems are used to build and perform pay systems, introduce benefits, and measure the efficacy of compensation systems (Dulebohn and Marler, 2005). This kind of system will benefit the organization's functions and objectives. The effectiveness of these systems appears when they enhance individuals with rewards and other incentives that motivate them to meet or transcend role expectations.

### **Building of Pay Systems**

Organizations usually build pay systems by:

1. Determining essential job features through job analysis.
2. Job evaluation identifies the related rewards or other motivational techniques and compensable factors linked with jobs.
3. Converting the scores gained by the evaluation into a pay framework by examining pay rates in associated labor markets.
4. Pertaining dollar values to jobs.

This process is efficiently conducted (Dulebohn & Marler, 2005). First, they allow HR D.L. Stone et al.(2006) managers to obtain data's job analysis through online questionnaires. The systems gather job analysis data from relevant subjects like supervisors and directors. Then, develop a summary of data, and create standard job descriptions. Moreover, they score the analyzed job data into job evaluation points. In addition, they connect the job evaluation scores with the electronic labor market data. Finally, they benefit from the data in formulating pay levels and creating pay standards in organizations.

### **Advantages of E-compensation Systems**

E-Compensation systems are used to utilize data and draw options for organizations to benefit their active employees; thereupon, choosing the incentive plans online (Gueutal and Falbe, 2005; Stone, Johnson et al., 2004; Stone, Lukaszewski et al., 2005). However, employees are not usually familiar with the benefits offered by organizations (Cascio, 2006). The justification is that benefit information is often hidden in employee handbooks or orientation packets. Electronic systems also simplify the criteria used for resilient benefits systems. They mostly use employee self-service systems (ESS) that assist employees in changing their benefits packages according to their situations (Gueutal & Falbe, 2005). As a result, these systems help employees to fulfill their requirements more effectively than classical benefits systems. The e-Compensation system also enables managers to create budgets, study the effect of incentive systems, and assert the justice of salary determination decisions (Dulebohn & Marler, 2005; Stone et al., 2004). Besides, these techniques can be connected to e-performance management systems by adopting pay raises based on employee performance. Furthermore, they can be employed to assure that compensation systems achieve internal and external fairness (Dulebohn & Marler, 2005).

### **E-Compensation Systems Leverage**

The efficiency of e-compensation systems is measured by the degree to which such systems help institutions to provide rewards that increase the employee's level of motivation. Despite the everyday use of such systems, little work has measured their effectiveness (Dulebohn et al., 2005; Gueutal & Falbe, 2005).

### **2.3.4 E- Evaluation**

E-performance management enables institutions accurately and adequately assess employee performance. E-performance management can be expressed as a web-based tool prepared to assess employee performance (Ravisha and Pakkeerappa, 2015). Based on E-performance management, employee appraisal can be executed. By using E-performance management systems, firms can observe the performance of employees, and when performance evaluation comes, the E-Evaluation system can be used to evaluate the employee's performance. This system is fair since the evaluation process is conducted without bias. An e-Evaluation system can be the reference to the overall performance at the end of the year.

When the performance of the employee and the teams are improved, the organization's overall performance will be improved by employing an adequate electronic evaluation system (Ravisha and Pakkeerappa, 2015). They also concluded that e-performance management is one of the main pillars of a competency-based reward system. The employee who possesses more skills and is considered competent in his/ her institution will be motivated by rewards more than the others, which will motivate employees to raise their efforts to improve their performance and gain rewards.

HR evaluation is granted for the whole evaluation performance that will take place through online techniques for the internal corporate network. This means supervisors can provide performance information directly to the human resources department via electronic channels.

### **Chapter 3: Research Methodology**

The researcher in this chapter presents the study design and the methods used, population, sample (size and procedures), study instruments (questionnaire design and content), and data collection methods and procedures.

#### **3.1 Design of the Study**

In this study, the researcher used a quantitative approach to help in gathering the necessary data through quantitative methods (questionnaire) to increase the understanding of the problem, answer the research questions and reflect the participant's point of view comprehensively. Using quantitative method research employs quantitative views along with the study techniques stage, quantitative data is assessed quantitatively. Additionally, using the quantitative technique enables the researcher to collect data from many people, helping generalize the findings to a broader population.

#### **3.2 Population, Sample, and Sample Procedures of the Study:**

The population and the sample are essential in scientific research since they help the researcher to collect valuable information required to deduce conclusions. The researcher applied the quantitative method to extract the sample from the population through a convenience sample, giving every population instance the same opportunity to be included in the sample without bias. The population of this study is represented by the total number of employees in Palestinian higher educational institutions in the West Bank (AAUP, Al-Quds Open University, An-Najah National University, and Palestine

Technical University – Kadoorie) in Jenin, Nablus, and Tulkarm, respectively. However, in order to obtain a desired and appropriate sample size with reliable results, the researcher distributed 236 questionnaires. Around 201 questionnaires met the criteria and were analyzed.

Herbert equation to compute the sample size :

$$n = P(1-P)/(E/Z)^2 + [P(1-P)/N]$$

n = required sample size.

Z = Confidence coefficient used to determine the precision interval represents the number of standard errors along the horizontal axis about the mean under the normal distribution (1.96)

N = the population size.

P = the population proportion (assumed to be .50 since this would provide the maximum sample size).

E = the degree of accuracy expressed as a proportion (.05).

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### **3.3. Instruments of the Study**

The study applied the questionnaire tool to the instrument as follows:

1. Quantitative method (Questionnaire).

#### **3.3.1. Questionnaire Design and Content**

The initial draft of the questionnaire was created and discussed with the study's supervisor to be checked, reviewed, and ensured that it was free of errors. After that, the questionnaire was judged by three experts in the field.

The questionnaire starts with a summary of the study's objective, including statements to assure the study's confidentiality to motivate respondents to participate with total confidence.

The questionnaire questions were designed to cover all the main topics of the study. It helped the researcher gather and analyze data and introduce results and recommendations.

The questionnaire was divided into four main sections: Demographics, sectors of the questionnaire, and open-ended questions.

##### **First Section: Demographic Data**

This section illustrated demographic characteristics. It was concerned with the basic information about the participants. It had six elements about the participants: Sex, age, educational attainment, workplace, experience, and job title.

##### **Second Section: Sectors of the Questionnaire**

This section contained four (4) sectors (E-Recruitment and Selection, E-Compensation, E-Training, and E-Evaluation). The researcher used Five-point Likert Scale to determine the degree of consistency among the questions.

- The first part of the sector consisted of five statements that measured E-HRM practices (E-Recruitment and Selection) on employee performance.
- The second sector consisted of five statements that measured E-HRM practices (E-Compensation) on employees' performance.
- The third sector consisted of five statements that measured E-HRM practices (E-Training) on employees performance.
- The fourth sector consisted of six statements that measured E-HRM practices (E-Evaluation) on employees' performance.

### **Third Section: The Employee Performance**

The first subsection consisted of four statements that measured the knowledge and skills of employees in the Palestinian Higher Educational institutions in the West Bank.

The second subsection consisted of four statements, which measured the positive workflow of employees in the Palestinian Higher Educational institutions in the West Bank.

The third subsection consisted of four statements, which measured performance on time for employees in the Palestinian Higher Educational institutions, West Bank.

### **Fourth Section: Open-ended Questions**

Open-ended questions allow participants to share their knowledge, thoughts, ideas, and understanding of the questions. In addition, open-ended questions assist the researcher in drawing conclusions and recommendations per the participants' views.

1. How do you rank Electronic Human Resource Management practices (E-HRM) in order of importance to you, as:

**1** = the least important

**5** = the most important

1	2	3	4	5

2. To what extent are you satisfied with your organization's electronic, human resource management practices?
3. What challenges do you face in dealing with the electronic systems used by the human resources department in your organization?
4. How do you think you can overcome the challenges you face in dealing with the electronic systems used by the human resources department in your organization?
5. To what extent do you think electronic human resources management practices increase your interaction with HR activities?
6. Do you believe using technology in human resource management motivates you to self-create and develop internal service standards in your organization?
7. Any points you would like to add, please write them here, and I'll be glad to see them:

### **3.4 Data Collection Methods and Procedures**

The researcher collected primary data using a questionnaire survey effort. Questionnaires were administered, distributed via e-mail to the respondents or given to them personally to measure the impact of E-HRM practices on employees' performance in Palestinian Higher Educational institutions (AAUP, Al-Quds Open University, An-Najah National University, and Palestine Technical University – Kadoorie). Thus, the

questionnaire was designed so that all necessary elements of E-HRM practices are considered to enhance employees' performance and encourage them to adopt E-HRM in performing their duties. The questionnaire was pre-tested on the employees of one of the universities mentioned above to check the content's validity, clarity, and reliability. A pilot study was conducted to examine the clarity and appropriateness of the questionnaire development.

## **Chapter 4: Data Analysis and Interpretation**

This chapter presents the data analysis strategies and techniques, starting with the pilot study, reliability, and validity. It also discusses the mixed method approach's results and the links between variables.

### **4.1 Pilot Study**

A pilot study is a small testing sample designed to gather information prior to a larger study and to test logistics to develop the latter's quality and efficiency (Altman et al., 2006; Woken, 2002).

Regarding the quantitative data, the purpose of conducting a pilot study is to ensure that the researcher's expectations regarding the information obtained from the questionnaire are met (Aaker & Day, 1995, as cited in Rusli & Hasbee, 2011, p.141). In addition, piloting the questionnaire will also assist the researcher in identifying the reliability of the measurement scale before the actual study is conducted. It aimed to measure the validity of the data or scores. According to Foster and Cone (2006), the validity of scores is the extent to which scores on a measure are related to scores on other measures.

This study conducted a pilot study after the supervisor and referees had approved the survey questionnaire. The questionnaire in this study was verified in terms of the language or statements used, their appropriateness, and suitability, which means that the statements should be formulated smoothly and efficiently (Ghauri et al., 2020). Moreover, the questionnaire was designed in two languages: Arabic and English. It is believed that translation helps discover and handle errors (Rusli & Hasbee, 2011, p.141).

In order to conduct the pilot study, the researcher administered the questionnaire to 30 participants. This means that 30 employees' have been involved in determining the reliability of the study questionnaire.

The reliability and validity of the questionnaire were analyzed using the Cronbach Alpha technique and Statistical Package for Social Science (SPSS) Version 21. According to Yu (1979) and Santos (1999), Cronbach Alpha measures the squared correlation between observed and accurate scores. Cronbach's Alpha is also a measure of internal consistency. It is well known that a reliability alpha coefficient of 0.70 or higher is considered acceptable in most social science research situations (Santos, 1999). The purpose was to ensure that the elements of the questionnaires were consistent and measured the study's variables (Sekaran, 2000).

Based on the Cronbach's Alpha values, as Table 4.1 below shows, it can be noted that all subsections in the questionnaire exceeded the value of 0.7. This indicates that these subsections had met the reliability standard, and all the statements constructed within these subsections were reliable.

Thereby, the researcher has proved that the questionnaire was reliable and valid for distribution to the population sample.

**Table 4.1: Cronbach's Alpha Value**

<b>Sections</b>	<b>Cronbach's Alpha Coefficient Values</b>
Electronic recruitment and selection	.816
Electronic compensation	.866
Electronic Training	.827
Electronic Evaluation	.920
Knowledge and Skill	.771
Fostering a positive workflow	.877
Performing on time	.840
Employee Performance	.913
All items	.929

## 4.2 Data Analysis Technique

In order to test the research hypotheses, the researcher used inferential statistics through using the Pearson Correlation test to find out whether there was a significant relationship between two variables (Coakes & Steed, 2007, p.58). The researcher conducted this test to determine whether the research hypotheses tested by using this technique were significant or not. The researcher was primarily concerned with the significance level represented in the “correlation” column output. If the significant “Sig.” value was equal to  $p = 0.00$  or less than  $0.05$  ( $p \leq 0.05$ ), then the researcher could conclude that the alternative research hypotheses were accepted or failed to be rejected. Therefore, to identify the strength of the relationship between the variables, the Pearson Correlation coefficient was used. When using Pearson Correlation in analyzing the data, the strength of the relationship was identified by looking at the value of “r” as shown in the Pearson Correlation table. Typically, the correlation coefficient sign indicates the relationship's strength or degree of association between two variables. However, the correlation coefficient will show zero value if there is no relationship.

**Table 3.2: Adapted from Muchinsky (1993), this Table Shows the Strength of the Relationship between the Independent and Dependent Variables.**

**Table 4.2: Pearson Correlation Value**

Value of “r”	Strength of relationship between variables
<b>0.00-0.20</b>	Very low or no relationship
<b>0.21-0.40</b>	Low relationship
<b>0.41-0.60</b>	Moderate relationship
<b>0.61-0.80</b>	High relationship
<b>0.81-1.00</b>	Very high relationship

(Source: Muchinsky, 1993)

#### 4.2.1 Demographic Characteristics of Participants

The questionnaire of the study was administered to 250 employees' working in Palestinian Higher Educational Institutions in West Bank. The researcher was able to collect 236 copies of questionnaire, 201 were fully completed,

Items	Valid	Missing
Gender	201	0
Age	201	0
Educational Attainment	201	0
Workplace	201	0
Experience	201	0
Job title	201	0

All the demographic variables were valid, with no missing values.

Table 4.2 shows the demographic characteristics of the participants.

Demographic Data	Frequency	Percent
<b>Gender</b>		
Male	135	67.2%
Female	66	32.8%
Total	201	100.0%
<b>Age</b>		
Less than 31yrs	42	20.9%
31yr – less than 50yrs	111	55.2%
More than 50yrs	48	23.9%
Total	201	100.0%
<b>Educational attainment</b>		
Bachelor degree	69	34.3%
Master's degree	70	34.8%
PHD	58	28.9%
Others	4	2.0%
Total	201	100.0%
<b>Workplace</b>		
Arab American University	85	42.3%
Al-Quds Open University	53	26.4%
Palestine Technical University – Kadoorie	30	14.9%
An-Najah National University	28	13.9%
Others	5	2.5%
Total	201	100.0%

<b>Experience</b>		
Less than 5 yrs	41	20.4%
5-15yrs	84	41.8%
More than 15yrs	76	37.8%
Total	201	100.0%
<b>Job title</b>		
Employee	74	36.8%
Faculty member	91	45.3%
Head of department	25	12.4%
Manager	11	5.5%
Total	201	100.0%

The diagram shows the demographic characteristics of the participants.

Table 4.2, or a diagram, presents a summary of the demographic characteristics of the participants. It contains six variables. In the gender variable, where male employees constitute 67.2% of the participants, 55% were between 31 to and 50 years old. This table also shows that 69% of the participants had Bachelor's and Master's degrees. Most participants (41.8%) had between 5 to 15 years of experience, while the Arab American University recorded the highest participation rate (42.3%). It was also perceived that (45.3%) of the participants were faculty members.

#### **4.2.2 Non-Parametric Test**

The non-parametric methods are commonly used for studying populations that take on a ranked order. The use of non-parametric methods may be essential when data is on the ordinal scale or ranked but without clear numeric clarification. Non-parametric methods make fewer assumptions. Their applicability is much broader than the corresponding parametric methods (Hoeffding, 1948). In particular, they may be practical in situations where little is known about the application. Also, due to the dependence on fewer assumptions, non-parametric methods are more successful. Another reason for the use of

non-parametric methods is simplicity. When the researcher analyzed the data, it was non-normally distributed. Therefore, the researcher used a non-parametric test in this study.

#### **4.2.3 Sign Test**

This test was adopted to determine if the mean of a statement was significantly different from a hypothesized value of 3 (Middle value of Likert scale). If the P-value (Sig.) was smaller than or equal to the level of significance,  $\alpha \leq 0.05$ , then the mean of the statement would be significantly different from a hypothesized value 3. The sign of the Test value indicates whether the mean is significantly greater or smaller than a hypothesized value 3. However, if the P-value (Sig.) was more significant than the significance level,  $\alpha \leq 0.05$ , then the mean of the statement would be insignificantly different from a hypothesized value 3. However, in this study, the significance level was less than 0.05, meaning that all statements differed significantly from a hypothesized value 3. (Dixon et al., 1946)

#### **4.2.4. Mann-Whitney Test**

This test was used to examine if there was a statistically significant difference between two means among the participants (Mann & Whitney, 1947; Wilcoxon, 1945) regarding the practices of Human electronic Recourses (E-Recruitment and Selection, E-Compensation, E-Training and the performance of employees who work in Palestinian Higher Educational institutions, in the West Bank, which could be attributed to gender variable.

#### 4.2.5. Kruskal-Wallis Test

According to (Kruskal & Wallis, 1952), this test was used to examine if there was a statistically significant difference between several means among the participants with respect to the E-HRM practices (E-Recruitment and Selection, E-Compensation, E-Training and the performance of employees in Higher Educational institutions in Palestine which is due to age, educational attainment, experience, Workplace and job title variables.

**Table 4.3: Electronic Recruitment and Selection according to Demographic Data:**

E-Recruitment and Selection	<i>M</i>	<i>S.D</i>
<b>Gender</b>		
Male	3.88	.68
Female	3.78	.65
<b>Age</b>		
Less than 31yrs	3.89	.69
31yr – less than 50yrs	3.80	.70
More than 50yrs	3.91	.60
<b>Educational attainment</b>		
Bachelor or less	3.80	.64
Master's degree	3.88	.74
PHD	3.84	.59
Others	3.90	.96
<b>Workplace</b>		
Arab American University	3.69	.68
Al-Quds Open University	4.11	.47
Palestine Technical University – Kadoorie	4.21	.51
An-Najah National University	3.63	.70
Others	2.76	.68
<b>Experience</b>		
Less than 5 yrs	3.76	.70
5-15yrs	3.82	.68
More than 15yrs	3.92	.65
<b>Job title</b>		
Employee	3.80	.73
Faculty member	3.83	.65
Head of department	4.00	.62
Manager	3.94	.56

Table 4.3 shows the degree of using E-HRM practices (E-Recruitment and Selection) based on gender, age, educational attainment, workplace, experience, and job title. The 'mean value' column was used to determine which category had a high level of implementing (E-Recruitment and Selection) HR practices.

The researcher observed that male employees in Higher Educational Institutions achieved a higher mean ( $M=3.88$ ), indicating that they realize that their institutions deal with (E-Recruitment and Selection) practices more than their female counterparts. However, we can notice that employees whose age is more than 50 years old believe that their institutions are already embracing the adoption of (E-Recruitment and Selection) practices. Regarding educational attainment, the researcher found that employees with Master's and Ph.D. degrees recognize that their institutions use the practices of (E-Recruitment and Selection) more than employees in other institutions. As for the experience, the researcher detected that employees who had years of experience between 5 to 15 see their institution achieved a high level of using (E-Recruitment and Selection) practices. However, employees working in Palestine Technical University – Kadoori and Al-Quds Open University institutions had the highest rate of using (E-Recruitment and Selection) practices than employees of other institutions. In terms of job title, managers and departments heads believe that their institutions have a high level of using (E-Recruitment and selection) practices.

The researcher concludes that males' ability, skill, and willingness to handle and use electronic channels is higher than the female category. Males are willing to use such mediums for business reasons, while females prefer to use those for personal issues.

**Table 4.4: Electronic Compensation According to Demographic Data:**

<b>Electronic Compensation</b>	<b><i>M</i></b>	<b><i>S.D</i></b>
<b>Gender</b>		
Male	3.79	.73
Female	3.87	.57
<b>Age</b>		
Less than 31yrs	3.81	.64
31yr – less than 50yrs	3.81	.70
More than 50yrs	3.85	.68
<b>Educational attainment</b>		
Bachelor or less	3.80	.71
Master’s degree	3.78	.72
PHD	3.88	.60
Others	3.65	.68
<b>Workplace</b>		
Arab American University	3.72	.73
Al-Quds Open University	3.88	.63
Palestine Technical University – Kadoorie	4.14	.51
An-Najah National University	3.79	.56
Others	2.96	.86
<b>Experience</b>		
Less than 5 yrs	3.71	.77
5-15yrs	3.79	.67
More than 15yrs	3.90	.63
<b>Job title</b>		
Employee	3.86	.74
Faculty member	3.83	.68
Head of department	3.76	.57
Manager	3.52	.41

Table 4.4 shows the degree of using E-HRM practices (Electronic compensation) based on gender, age, educational attainment, workplace, experience, and job title. The ‘mean value’ column was used to determine which category had a high usage rate (Electronic compensation) practices.

The researcher twigged that female employees in Higher Educational institutions had a high mean ( $M=3.87$ ) which indicates that their institutions deal with (Electronic compensation) practices in a higher percentage than their male counterparts. By

contrast, it can be noted that employees of age more than 50 years old conceived that their institutions had high usage of (Electronic compensation) practices. As for educational attainment, the researcher found that the employees with Ph.D. deemed that their institutions utilize (Electronic compensation) practices more than other employees. Concerning experience, the researcher pointed out that employees with an experience of more than 15 years supposed that their institutions had a high rate of use (Electronic compensation) practices. However, employees who work in Palestine Technical University – KADOORIE constructed that their institutions had a great deal with (Electronic compensation) practices more than other institutions. Related to job title, employees and Faculty members asserted that their institutions enjoy a high rate of use (Electronic compensation) practices.

The researcher concluded that (E-electronic compensation) practices are highly used by females who have gained more than 15 years of experience, perhaps due to the high rate of leaving their jobs when they reach the age of 50 years or more compared to males.

**Table 4.5: Electronic Training According to Demographic Data:**

<b>Electronic Training</b>	<b><i>M</i></b>	<b><i>S.D</i></b>
<b>Gender</b>		
Male	3.93	.68
Female	4.01	.46
<b>Age</b>		
Less than 31yrs	3.97	.55
31yr – less than 50yrs	3.94	.61
More than 50yrs	3.98	.67
<b>Educational attainment</b>		
Bachelor or less	4.00	.58
Master's degree	3.90	.71
PHD	3.97	.52
Others	4.05	.75
<b>Workplace</b>		
Arab American University	3.79	.68
Al-Quds Open University	4.07	.61

Palestine Technical University – Kadoorie	4.26	.38
An-Najah National University	3.97	.46
Others	3.84	.47
<b>Experience</b>		
Less than 5 yrs	3.96	.57
5-15yrs	3.91	.62
More than 15yrs	4.01	.63
<b>Job title</b>		
Employee	3.95	.64
Faculty member	3.96	.58
Head of department	3.99	.71
Manager	3.92	.56

Table 4.5 shows the degree of using the E-HRM practices (Electronic Training) based on gender, age, educational attainment, workplace, experience, and job title. The ‘mean value’ column was used to determine which category expressed a high rate of using the (Electronic Training) practices.

The researcher declared that female employees in Higher Educational institutions in the West Bank had a higher mean ( $M=4.01$ ), indicating that they see their institutions apply (Electronic Training) practices than their male counterparts. On the other side, it is noted that employees of age less than 31 years old think that their institutions employ (Electronic training) practices in a large proportion. In connection with educational attainment, the researcher located that employees with a Bachelor's degree behold their institutions deal with (Electronic Training) practices in a high manner more than other employees. Regarding experience, the researcher got that employees with experience of more than 15 yrs conceive that their institutions had a high ratio of employing (Electronic Training) practices. In contrast, employees who work in Palestine Technical University – KADOORIE and Al-Quds Open University reckon that their institutions had more usage of (Electronic Training) practices than other institutions. Regarding job title,

Heads of departments believe that their institutions have a high level of use (Electronic Training)practices.

The researcher deduced that female employees receive electronic training more than males. From the researcher's point of view, this is a logical perception due to the willingness and ability of female employees to do more than one task simultaneously. Females are considered as multitasks more than males. Female employees can also receive electronic training despite constraints of place and time. They prefer to work remotely and sequentially can carry out other responsibilities towards their families. As for the link of electronic training with age, it can be noted that employees under 31 years agreed on electronic training necessity. They also can deal with electronic systems more than the elder ones, who do not want to change the way they do their jobs and do not prefer to get electronic training since they cannot deal with electronic channels and systems. Regarding the results of Kadoorie and Al-Quds Open universities in obtaining the highest rates in adopting electronic training. The reason for this is the teaching manner at Al-Quds Open university is a self-paced system remotely as it has adopted E-Learning since 2007, while Kadoorie is a Palestinian Technical University that introduces several technical specializations which require the adoption of technologies and electronic systems in all its practices, including electronic training as one of the E-HRM practices.

**Table 4.6: Electronic Evaluation according to Demographic Data:**

<b>Electronic Evaluation</b>	<b><i>M</i></b>	<b><i>S.D</i></b>
<b>Gender</b>		
Male	3.76	.78
Female	3.86	.65
<b>Age</b>		
Less than 31yrs	3.77	.83
31yr – less than 50yrs	3.80	.75
More than 50yrs	3.81	.65

<b>Educational attainment</b>		
Bachelor or less	3.78	.77
Master's degree	3.80	.77
PHD	3.82	.64
Others	3.54	.96
<b>Workplace</b>		
Arab American University	3.54	.80
Al-Quds Open University	3.98	.56
Palestine Technical University – Kadoorie	4.23	.49
An-Najah National University	3.88	.663
Others	3.03	.96
<b>Experience</b>		
Less than 5yrs	3.72	.83
5-15yrs	3.76	.78
More than 15yrs	3.86	.63
<b>Job title</b>		
Employee	3.71	.87
Faculty member	3.78	.69
Head of department	4.08	.54
Manager	3.87	.36

Table 4.6 shows the degree of using E-HRM practices (Electronic Evaluation) based on gender, age, educational attainment, workplace, experience, and job title. The 'mean value' column was used to determine which category had high usage of (Electronic Evaluation) practices.

It could be illustrated that female employees in Higher Educational Institutions in the West Bank gained a high mean ( $M=3.86$ ), indicating that their institutions are interested in using a larger scale of (Electronic Evaluation) practices than their male counterparts. By contrast, it can be noticed that employees of age more than 31 years old counted their institutions had a high dealing of (Electronic Evaluation) practices. Considering educational attainment, the researcher indicated that employees with Ph.D. apply (Electronic evaluation) practices in their institutions at a higher rate than other employees. Considering experience, the researcher found that employees with 15 years of experience or more classify their institutions as using (Electronic evaluation) practices to

a large extent. However, employees working in Palestine Technical University – KADOORIE and Al-Quds Open University express that their institutions had a higher level of using (Electronic Evaluation) practices than other institutions. Depending on the Job title, heads of departments believe that their institutions are highly employing (Electronic evaluation) practices.

The researcher concludes that the reason that female employees use (Electronic evaluation) more than male ones is due to the increase in the percentage of the number of female employees in the HR department compared to the percentage of the number of male employees who were working in the same field, where (Electronic evaluation) is one of the essential practices of this department.

**Table 4.7: Knowledge and Skill According to Demographic Data:**

<b>Knowledge and Skill</b>	<i>M</i>	<i>S.D</i>
<b>Gender</b>		
Male	4.28	.51
Female	4.23	.51
<b>Age</b>		
Less than 31yrs	4.16	.47
31yr – less than 50yrs	4.30	.49
More than 50yrs	4.27	.57
<b>Educational attainment</b>		
Bachelor or less	4.26	.50
Master's degree	4.29	.54
PHD	4.21	.49
Others	4.56	.51
<b>Workplace</b>		
Arab American University	4.28	.51
Al-Quds Open University	4.19	.57
Palestine Technical University – Kadoorie	4.40	.39
An-Najah National University	4.18	.50
Others	4.40	.57
<b>Experience</b>		
Less than 5 yrs	4.15	.52
5-15yrs	4.30	.48
More than 15yrs	4.29	.54
<b>Job title</b>		
Employee	4.31	.51
Faculty member	4.25	.52
Head of department	4.30	.48

Manager	4.00	.47
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Table 4.7 shows the significance of knowledge and skills based on gender, age, educational attainment, workplace, experience, and job title. The 'mean value' column was used to determine which category had a high percentage of knowledge and skill in Palestinian Higher Educational Institutions to improve employee performance.

The researcher noticed that male employees in Palestinian Higher Educational Institutions had a high mean ( $M=4.28$ ) which indicates that male employees think that a high level of knowledge and skills would improve their performance in their institutions. However, the researcher noticed that employees over 31 years old ratify that enjoying an advanced level of knowledge and skills would improve their performance in their institutions. As for educational attainment, the researcher concluded that employees' with a Master's degree perceived that a high level of knowledge and skills would improve employees' performance in their institutions. The researcher also found that employees with experience between 5 years to 15 years inferred that having a high level of knowledge and skills among employees in their institutions would improve their performance.

In contrast, the researcher revealed that employees in Palestine Technical University – Kadoorie and Arab American University imagined that advanced knowledge and skills would enhance employees' performance in their institutions more than in other institutions. Based on the job title, heads of departments suppose that a high level of knowledge and skills would improve employees' performance in their institutions.

The researcher sealed that knowledge and skills are linked to years of experience which means that the higher the years of experience, the more excellent skills and knowledge for the employee. In the same direction, advancements in the educational level lead to

more excellent knowledge of employees and, accordingly, their performance would improve.

**Table 4.8: Fostering A positive Workflow Accordingto Demographic Data:**

<b>Fostering A positive Workflow</b>	<b><i>M</i></b>	<b><i>S.D</i></b>
<b>Gender</b>		
Male	4.22	.59
Female	4.31	.58
<b>Age</b>		
Less than 31yrs	4.16	.63
31yr – less than 50yrs	4.29	.56
More than 50yrs	4.24	.60
<b>Educational attainment</b>		
Bachelor or less	4.22	.60
Master’s degree	4.33	.57
PHD	4.15	.58
Others	4.81	.37
<b>Workplace</b>		
Arab American University	4.30	.57
Al-Quds Open University	4.13	.63
Palestine Technical University – Kadoorie	4.35	.42
An-Najah National University	4.18	.68
Others	4.50	.58
<b>Experience</b>		
Less than 5 yrs	4.15	.69
5-15yrs	4.24	.57
More than 15yrs	4.32	.54
<b>Job title</b>		
Employee	4.35	.61
Faculty member	4.18	.58
Head of department	4.31	.56
Manager	4.11	.47

Table 4.8 views the significance of fostering a positive workflow depending on gender, age, educational attainment, workplace, experience, and job title. The ‘mean value’ column was used to determine which category had a positive workflow in Palestinian Higher Educational Institutions to increase employees' performance.

The researcher found that female employees' in Palestinian Higher Education Institutions had a high mean ( $M=4.31$ ) which indicates that female employees think that positive workflow is significant to improving employees' performance.

The researcher informed that employees of age more than 31 years old agreed that positive workflow is important to improve employees' performance. Regarding educational attainment, the researcher pointed out that employees with a Master's degree considered positive workflow significant in enhancing employee performance. Nevertheless, the researcher revealed that employees with an experience of more than 15 yrs believe that positive workflow is vital to improving employees' performance.

The researcher notes that employees in Palestine Technical University – KADOORIE and Arab American University agreed that a positive workflow is more efficient in improving employees' performance. For the job title, employees located that positive workflow is essential to enhance employees' performance.

The researcher concluded that positive workflow is critical for improving employee performance based on educational degrees and years of experience. In other words, the higher years of experience and educational level, the smoother and more positive the workflows.

**Table 4.9: Performing on Time According to Demographic Data:**

<b>Performing on time</b>	<i>M</i>	<i>S.D</i>
<b>Gender</b>		
Male	4.24	.55
Female	4.26	.62
<b>Age</b>		
Less than 31yrs	4.17	.69
31yr – less than 50yrs	4.25	.51
More than 50yrs	4.31	.60
<b>Educational attainment</b>		
Bachelor or less	4.24	.64
Master's degree	4.27	.56

PHD	4.20	.53
Others	4.56	.31
<b>Workplace</b>		
Arab American University	4.23	.58
Al-Quds Open University	4.22	.61
Palestine Technical University – Kadoorie	4.38	.39
An-Najah National University	4.18	.64
Others	4.45	.67
<b>Experience</b>		
Less than 5 yrs	4.17	.73
5-15yrs	4.25	.55
More than 15yrs	4.28	.51
<b>Job title</b>		
Employee	4.30	.57
Faculty member	4.19	.57
Head of department	4.39	.66
Manager	4.04	.40

Table 4.9 displays the significance of performing on time based on gender, age, educational attainment, workplace, experience, and job title. The ‘mean value’ column was used to determine which category admitted that performing on time will improve employees' performance in Palestinian Higher Education Institutions.

The researcher specified that female employees' in Palestinian Higher Education Institutions, West Bank, had a high mean ( $M=4.26$ ) which denotes that female employees said that performing on time is significant to improving employees' performance.

The researcher also observed that employees of age more than 50 years old think that performing on time is better to improve employees performance. Looking at educational attainment, the researcher found that employees, regardless of their educational attainment, believe that performing on time is necessary to improve employees performance. The researcher found that employees who had experienced more than 15 years believed that performing on time is essential to improve employees performance.

By contrast, the researcher shows that employees in Palestine Technical University – Kadoorie and Arab American University conceive that performing on time is more efficient in enhancing employees' performance. With job titles, heads of departments comprehend that performing on time substantially improves employees' performance.

The researcher deduced that experienced employees with more than 15 years, specifically women who are sensitive and have more commitment to time regardless of educational attainment, all constitute a great necessity to increase employee performance.

**Table 4.10: Employees' Performance According to Demographic**

<b>Employees Performance</b>	<i>M</i>	<i>S.D</i>
<b>Gender</b>		
Male	4.25	.48
Female	4.27	.51
<b>Age</b>		
Less than 31yrs	4.16	.55
31yr – less than 50yrs	4.28	.44
More than 50yrs	4.27	.54
<b>Educational attainment</b>		
Bachelor or less	4.24	.51
Master's degree	4.30	.50
PHD	4.19	.46
Others	4.64	.33
<b>Workplace</b>		
Arab American University	4.27	.48
Al-Quds Open University	4.18	.54
Palestine Technical University – Kadoorie	4.37	.31
An-Najah National University	4.18	.55
Others	4.45	.59
<b>Experience</b>		
Less than 5 yrs	4.16	.59
5-15yrs	4.26	.45
More than 15yrs	4.30	.47
<b>Job title</b>		
Employee	4.32	.50
Faculty member	4.21	.49
Head of department	4.33	.49
Manager	4.05	.35

Table 4.10 presents employees' performance by applying (Knowledge and Skill, fostering a positive workflow, and Performing on time) based on gender, age, educational attainment, workplace, experience, and job title.

The researcher detected that the female employees supposed that the three factors (knowledge and skill, fostering a positive workflow, and performing on time) help to improve employees' performance.

Also, the researcher noticed that employees over 31 deem that (knowledge and skill, fostering a positive workflow, and performing on time) are significant factors that improve employees' performance. In the case of educational attainment, the researcher explored that the employees with a Master's degree in administration (knowledge and skill, fostering a positive workflow, and performing on time) are significant factors that help improve employees' performance. With this in mind, the researcher concluded that the employees with experience between 5 years to 15 years grasp that (knowledge and skill, fostering a positive workflow, and performing on time) are significant factors that help to enhance employees' performance. The researcher outlines that the employees who work in Palestine Technical University – Kadoorie acknowledge that (knowledge and skill, fostering a positive workflow, and performing on time) constitute significant factor that facilitates the performance improvement process. Depending on the job title, the head of departments agrees that the (knowledge and skill, fostering a positive workflow, and performing on time) comprise significant factors that improve the employees' performance.

The researcher concludes the importance and the significance of applying (knowledge and skills, fostering positive workflow, and performing on time) as the main anchors in

improving employee performance based on gender, age, educational attainment, workplace, experience, and job title, which are represented by Heads of departments.

### **4.3 Validity of the Study Questionnaire**

The statistical validity of the questionnaire indicates the degree to which an instrument measures what it is assumed to be measuring (Poilt, 1985). Validity has many different aspects, and assessment approaches.

Two statistical tests were applied to check the validity of the questionnaire. The first test was the Criterion-related Validity Test. This test measures the correlation coefficient between each statement in one field and the whole field. The researcher uses such type of validity for the need to measure the concrete outcome they are designed to measure. The second test was the Structure Validity Test (**pearson** test). This was used to test the validity of the questionnaire structure through testing the validity of each field and the validity of the whole questionnaire. It measures the correlation coefficient between one field and the whole fields of the questionnaire that had the same level (Obilor and Amadi, 2018).

#### **4.3.1 Criterion-Related Validity**

Internal consistency of the questionnaire was measured through a scouting sample, which consisted of 30 copies of the questionnaires. It measures the correlation coefficients between each statement in one domain and the whole domain. The tables in appendix A illustrate the correlation coefficient for each statement in each domain and the total domains. The p-values (Sig.) were found to be less than or equal to 0.05. Therefore, the correlation coefficients of this domain were significant at  $\alpha \leq 0.05$ .

Thereupon, the statement or item of each domain was consistent and valid to measure what it was set to do.

### 4.3.2 Structure Validity of the Study Questionnaire

Structure validity was the second statistical test used to test the validity of the questionnaire's structure by testing the validity of each domain, and the whole questionnaire was tested. It measures the correlation coefficient between a single domain and all the questionnaire domains with the same Likert scale level. Table (4.8) shows the correlation coefficient for each domain and the whole questionnaire. The p-values (Sig.) were observed to be less than or equal to 0.05. Therefore, the correlation coefficients of all the domains were significant at  $\alpha \leq 0.05$ . Accordingly, the domains were valid to measure what they were designed to measure.

**Table 4.11: Correlation coefficient of each domain and the whole questionnaire**

<b>Item</b>	<b>Correlation Coefficient(Pearson)</b>	<b>P-Value</b>
electronic recruitment and selection	0.699**	.000
Electronic compensation	0.731**	.000
Electronic Training	0.727**	.000
Electronic Evaluation	0.810**	.000
Knowledge and Skill	0.666**	.000
Fostering a positive workflow	0.641**	.000
Performing on time	0.684**	.000
Employees Performance	0.753**	.000

### 4.4. Reliability Analysis

Reliability aims to examine the quality of measurement. It is the "consistency" or "repeatability" of the analysis. The primary goal is the accuracy of the dependent variable measures. In a correlation study, both dependent and independent variables should be examined. Reducing sources of measurement error is the key to enhancing the data's reliability.

The reliability of an instrument is the degree of consistency that measures the attribute it was supposed to measure (Poilt, 1985). The less variation an instrument generates in repeated measurements of an attribute, the higher its reliability.

Reliability can be equated with a measuring tool's consistency, stability, or dependability. The test is administered twice to the same sample of people on two occasions. The scores are compared by computing a reliability coefficient (Poilt, 1985).

This method was used to measure the reliability of the questionnaire between each domain and the mean of the whole questionnaire domain. The usual range of Cronbach's coefficient alpha value is between 0.0 and + 1.0 (Fellows&Liu, 2021);thus, the higher values reflect a higher degree of internal consistency. The Cronbach's coefficient alpha was calculated for each domain of the questionnaire.

Table (4.9)presents the values of Cronbach's Alpha for each domain of the questionnaire and the entire questionnaire. For the domains, values of Cronbach's Alpha were in the range of 0.723 and 0.934. This range is considered high; the result ensured the reliability of each questionnaire domain. This indicates the excellent reliability of the questionnaire.

**Table 4.12:Cronbach's Alpha Value**

<b>Sections</b>	<b>Cronbach's Alpha Coefficient Values</b>
Electronic Recruitment and selection	0.834
Electronic Compensation	0.855
Electronic Training	0.813
Electronic Evaluation	0.911
Knowledge and Skill	0.723
Fostering a positive workflow	0.825
Performing on time	0.809
Employees Performance	0.900
Electronic HRM practices	0.934

#### 4.5 Analysis of the Research Questions:

Research questions have been formulated to study the relations between the variables of E-HRM practices in accordance with Employees Performance in Palestinian Higher Education Institutions in the West Bank.

The descriptive statistics, i.e., Means ( $M$ ), Standard Deviations ( $SD$ ), and Degree of Agreement ( $DOA$ ), was established and presented in research questions.

As the table below shows, the researcher has used the Likert scale range to describe the agreement for each item in the questionnaire.

**Table 4.13: Scoring Range of Likert Scale**

Range	Description of Range
1.00-1.80	Strongly Disagree
1.81-2.60	Disagree
2.61-3.40	Neither/Nor Agree
3.41-4.20	Agree
4.21-5.00	Strongly Agree

(Al-Khadash, Jireis & Embassy-Jordan, 2017)

#### **Q1: What Impact does (E-Recruitment and Selection) have on Employees Performance in Palestinian Higher Educational institutions in the West Bank?**

To answer this question, the researcher developed five statements to assess the impact of (E-Recruitment and Selection) practices on employees' performance. These statements were subjected to the views of the participants. The analysis results are shown in **Table 4.14**.

The researcher manifested that the overall mean of the impact of (E-Recruitment and Selection) practices on employees performance was ( $M=3.85$ ,  $S.D=0.86$ ). This means that employees correspond about the impact of (E-Recruitment and Selection) practices

on employees' performance. The researcher also revealed that most participants were consonant with all statements. This means that most of the employees agreed that (E-recruitment and Selection) facilitate selecting the best human competencies and give employees equal access to recruitment data. Electronic technologies help in raising the rates of Recruitment, increasing the level of transparency in the Recruitment and Selection process. E-recruitment also makes employees more interactive with technological development.

**Table 4.14: Descriptive Statistics of (E-Recruitment and Selection) Practices on Employees' Performance**

NO	Statement	M	SD	DOA
1	E-recruitment facilitates the process of selecting the best human competencies.	3.66	.96	Agree
2	Online recruitment gives me equal access to recruitment data.	3.88	.88	Agree
3	Electronic technologies help raise the rates of Recruitment and Selection.	3.95	.82	Agree
4	Electronic technologies help increase the level of transparency in the recruitment and selection process.	3.81	.82	Agree
5	E-Recruitment makes me more interactive with technological development.	3.95	.80	Agree
Overall Average		3.85	.86	Agree

**Q2: What Impact does (E-Compensation) have on Employees Performance in Palestinian Higher Educational Institutions, West Bank?**

To get the answer to this question, the researcher developed five statements to estimate the impact of (E-compensation) practices on employees' performance; these statements were exposed to the participant's views. The output of the analysis is shown in **Table 4.15**.

The researcher concludes that the overall mean of the impact of (E-Compensation) practices on employees' performance was ( $M=3.81$ ,  $S.D=0.85$ ). This

clarifies employees' correspondence about the impact of (E-Compensation) practices on employees' performance. The researcher figured out that most participants concurred with all statements. This indicates that most of the employees reconciled that (The Electronic Compensation) system accurately records employees' overtime, giving employees easy access to their compensation information and benefits. In addition, (Electronic Compensation) system keeps employees' financial data accurate.

**Table 4.15: Descriptive Statistics of (E-Compensation) Practices on Employees' Performance**

NO	Statement	M	SD	DOA
1	I feel reassured that the E-Compensation system in my organization is electronic.	3.75	.89	Agree
2	The E-Compensation system accurately records my overtime.	3.86	.86	Agree
3	The E-Compensation system makes it easier for me to access my compensation information and benefits.	3.81	.83	Agree
4	The E-Compensation system keeps my financial data accurate.	3.95	.76	Agree
5	The E-Compensation system helps in the integration of Human Resource processes such as linking performance to rewards.	3.70	.92	Agree
Overall Average		3.81	.85	Agree

### **Q3: What Impact does (E-training) have on Employees Performance in Palestinian Higher Educational institutions, West Bank?**

To answer this question, the researcher established five statements to evaluate the impact of (E-training) practices on employee performance; these statements reflected the participants' views. The results of the analysis are represented in **Table 4.16**.

The researcher registered that the overall mean of the impact of (E-training) practices on employees' performance was ( $M=3.96$ ,  $S.D=0.81$ ). This means that employees coincide about the impact of (E-training) practices on employees' performance. The

researcher spotted that most participants were throughwith all statements. This signifies that most of theemployeesacceptedthat (E-training) gives them the opportunity for self-learning without time and space restrictions. Employees can choose (Electronic training) program that matches their job needs. An electronic interactive training environment develops the skill of communicating with others. An e-training system allows employees to return to the training material anytime.

**Table 4.16: Descriptive Statistics of (E-training) Practices on the Employees' Performance**

NO	Statement	M	SD	DOA
1	E-Training gives me the opportunity for self-learning without time and space restrictions.	4.01	.81	Agree
2	I can choose the E-Training program that matches my job needs.	3.95	.80	Agree
3	The E-Training system enables me to control the content of the training material.	3.87	.84	Agree
4	The electronic interactive training environment develops the skill of communicating with others.	3.81	.88	Agree
5	The E-Training system gives me the ability to return to the training material at any time.	4.18	.70	Agree
Overall Average		3.96	.81	Agree

**Q4: What Impact does (E-Evaluation)have on Employees Performance in Palestinian Higher Educational Institutions, West Bank?**

The researcher createdsix statements to assess the impact of (E-Evaluation)practicesonemployee performance. These statements were plotted to the participants' views. The outcome of the analysis is shown in **Table 4.17**.

The researcher noted that the overall mean was ( $M=3.80$ ,  $S.D=0.89$ ),which explains the impact of (E-Evaluation) practiceson employees' performance. This intends that the employeesagreewith the impact of (E-Evaluation)practicesonemployees'performance. It was also found that most of the participants acceptedall the statements. This reveals that

most employees confessed that the electronic assessment system contributes to increasing the reliability of the assessment results and assists employees in referring to their assessment records for any modifications. Moreover, the electronic evaluation system provides continuous feedback on employee performance and makes employees feel fair and motivated.

**Table 4.17: Descriptive Statistics of (E-Evaluation) Practices on Employees Performance**

NO	Statement	M	SD	DOA
1	The E-Evaluation system contributes to increasing my reliability of assessment results.	3.85	.82	Agree
2	The E-Evaluation system makes it easy to refer to my assessment records for any modifications.	4.01	.80	Agree
3	The E-Evaluation system supports my right to receive promotions.	3.70	.92	Agree
4	The E-Evaluation system constantly motivates me to improve my job performance.	3.73	.91	Agree
5	I feel the fairness of the e-assessment system in my institution.	3.71	.91	Agree
6	The E-Evaluation system provides continuous feedback on my job performance.	3.79	.97	Agree
Overall Average		3.80	.89	Agree

#### 4.7 Testing of Research Hypotheses

Hypotheses have been formulated to study relationships between variables; five hypotheses have been tested using the Pearson correlation coefficient. Pearson's Correlation coefficient was used to measure the strength and direction of the relationship (linear correlation) between two quantitative variables, where the value ( $r=1$ ) indicates a perfect positive correlation and the value ( $r = -1$ ) means a perfect negative correlation. Each hypothesis was tested separately.

**H1: (E-Recruitment and Selection) Positively Impact Employee Performance.**

**Table 4.18: Relationship between (E-Recruitment and Selection) on Employees Performance.**

Variables	
E- recruitment	$r = .235^{**}$
Employees' performance	$p = .000$

The result of Pearson Correlation between (E-Recruitment and Selection) practices and employees performance showed that the test was **significant**, where the correlation value,  $r = 0.235$  significant value,  $p = 0.000$  or  $p \leq 0.05$ . Thus, the first hypothesis (Ha1) was accepted, assuming a significant relationship between (E-Recruitment and Selection) practices and employee performance.

The closer (r) is to +1, the stronger the positive correlation, while the closer (r) is to -1, the stronger the negative correlation. Based on that, the researcher found that the relationship between (E-Recruitment and Selection) practices and employees' performance was (low) positive because  $r = 0.235$ . This result shows that when one variable increases in value, the second variable also increases in value. In other words, good criteria at (E-recruitment and Selection) practices would improve employee performance.

Managers agree that applying advanced mechanisms and techniques for recruiting and selecting candidates is an essential element of Human resources Management practices. These days, organizations benefit from websites and job portals to announce an unoccupied job position or attract the right candidate. Other researchers (Suman Rajest, S., & Suresh, 2018) also revealed that (E-recruitment and Selection) assist HR managers in several ways, minimizing pressure and decreasing the time consumed for the recruiting process and the cost of the recruitment cycle. In addition, in their study,

Stone et al. (2005) found that the Professional Practice Series 22 deducted that many talented applicants are attracted through online recruitment. Therefore, and as a result of the researcher's justification agreement regarding (E-Recruitment and Selection) practice, The benefit of (E-Recruitment and Selection) concerns the institution as a whole which then reflects positively on the overall organizational performance, not on employee's performance. The researcher's point of view agrees with the logic behind the researcher's clarifications since such a practice is applied explicitly to job candidates or those recruited from other institutions before they are engaged to become actual employees in their institutions.

## **H2: (E-Compensation) has A positive Impact on Employees' Performance**

**Table 4.19: Relationship between (E-compensation) and Employees Performance**

Variables	
E-compensation	$r = .327^{**}$
Employees' performance	$p = .000$

The Pearson Correlation between (E-compensation) practices and employee performance showed that the test was significant, with the correlation value,  $r = 0.327$ , and significant value,  $p = 0.000$  or  $p \leq 0.05$ . Hence, the second hypothesis (Ha2) was accepted, assuming a significant relationship between (E-Compensation) practices and employee performance.

The closer (r) is to +1, the stronger the positive correlation, while the closer (r) is to -1, the stronger the negative correlation. Depending on that, the researcher detected that the relationship between (E-Compensation) practices and employees' performance was low and positive because  $r = 0.327$ . This result reveals that when one variable increases

in value, the second variable also increases in value. In other words, using (E-Compensation) practices as HRM practices would improve employee

E-HRM consists of the implementation of employee activities, including staff information, information on training & development, salary management, rewards-based performance and promotions, vacations and leave basis, and calculations which all affect the financial position of the organization and then the whole organizational performance as Bamel et al., (2014) explained in his study, Usage, benefits, and barriers of human resource information system in universities. In the same direction, personnel management was early to be employed for payroll systemization, benefits administration, and protection of employee records that constitute the basis for promoting, rewarding and compensating employees. As a result, it affects employee performance (Ball, 2001).

The researcher believes that applying (E-Compensation) is mainly used for administrative issues and employee interests. In other words, (E-Compensation) should be serviced and oriented towards management and employees whose performance is affected by this practice. Therefore, the researcher tends to conclude that (E-Compensation) affects both employee and organizational performance because this practice is linked to the institution's and employee's critical financial aspects.

### **H3: (E-training) has A positive Impact on Employees' Performance**

**Table 4.20: Relationship between (E-training) and Employees Performance**

Variables	
E-training	$r = .347^{**}$
Employees' performance	$p = .000$

The Pearson Correlation between (E-Training) practices and employee performance showed that the test was significant, where the correlation value,  $r = 0.347$ , and

significant value,  $p = 0.000$  or  $p \leq 0.05$ . Therefore, the third hypothesis (Ha3) was accepted, assuming a significant relationship between (E-Training) practices and employee performance.

The closer (r) is to +1, the stronger the positive correlation, while the closer (r) is to -1, the stronger the negative correlation. As a result, the researcher found that the relationship between (E-training) practices and employees' performance was low and positive because  $r = 0.347$ . This result indicates that when one variable increases in value, the second variable also increases in value. So, increasing the use of (E-Training) would lead to improving employees' performance.

The (E-training) is a dynamic input for the advancements of HR to improve the performance of the employees who can achieve the organizational objectives (Al-Hila et al., 2017). Other researchers like Amara and Atia (2016) **also** went beyond the view that training-based technologies give employees the required knowledge and skills covering different subjects related to their jobs. Thus, it can be said that (E-training) has a direct positive influence on employee performance. The output of this study enhances what was conducted by Kamal, where the main objective of (E-training) is to develop employee performance and establish a productive workforce (Kamal et al., 2016). The researcher, as a result, supports that (E-training) can be beneficial mainly for improving employee performance because employees can easily access different training activities or workshops through the internet worldwide. As a result, it affects the institution's performance as a whole.

**H4: (E-Evaluation) has A positive Impact on Employees' Performance.**

**Table 4.21: Relationship between (E-Evaluation) and Employee Performance.**

Variables	
E- evaluation	$r = .385^{**}$
Employees' performance	$p = .000$

The consequence of Pearson Correlation between (E-Evaluation) practices and employees performance showed that the test was significant, where the correlation value,  $r = 0.385$  and significant value,  $p = 0.000$  or  $p \leq 0.05$ . This means that the fourth hypothesis (Ha4) was accepted, assuming a significant relationship between (E-Evaluation) practices and employee performance.

The closer (r) is to +1, the stronger the positive correlation, while the closer (r) is to -1, the stronger the negative correlation. The researcher concluded that the relationship between (E-Evaluation) practices and employee performance was low because  $r = 0.385$ . This result means that when one variable increases in value, the second variable also increases in value. In different words, using (E-Evaluation) would lead to an increase in employees' performances.

The output of this study regarding (E-Evaluation) is consistent with what Al-Hmouze (2016) revealed by which (E-Evaluation) is a web-based technique that prepares to measure employee performance by assisting HR managers to administer performance appraisals of employees easily. By adopting that, organizations can observe employee performance. Employees will be interested in presenting a good level of performance based on such a fair mechanism without any preferences or bias. Moreover, studies proved that (E-Evaluation) system could be considered a competency-based reward system. Employees with more competencies will be motivated through attractive

rewards and promoted to improve their performance to get more rewards (Muda et al., 2014). The researcher agrees with the findings of the studies by which (The e-Evaluation system can create a kind of faith and confidence for employees toward the Evaluation) process. At the same time, this also lets HR managers capture employees' performance and encourage them to improve it.

### Summary of Hypotheses Testing

Research Hypothesis	Measures	Significance
1. E-Recruitment has a positive impact on employees performance	Pearson Correlation ( $r = 0.235$ )	$P \leq 0.05$ (Accepted, where $p = 0.000$ )
2. E-compensation has a positive impact on employees performance	Pearson Correlation ( $r = 0.327$ )	$p \leq 0.05$ (Accepted, where $p = 0.000$ )
3. E-Training has a positive impact on employees performance	Pearson Correlation ( $r = 0.347$ )	$p \leq 0.05$ (Accepted, where $p = 0.000$ )
4. E-Evaluation has a positive impact on employees performance	Pearson Correlation ( $r = 0.385$ )	$p \leq 0.05$ (Accepted, where $p = 0.000$ )

### Hypothesis Related to Participants' Profiles (Analysis of Responses)

**H5: There are statistically significant differences at  $\alpha \leq 0.05$  in the responses of the research sample according to the demographic profile (Gender, Age, Educational attainment, Workplace, Experience and Job title).**

This hypothesis predicted differences in participants' opinions toward using Electronic HRM practices (E-Recruitment and Selection, E-Compensation, E-Training, and E-Evaluation) and employees' performance according to the demographic variables.

The Mann-Whitney and Kruskal-Wallis tests are nonparametric methods used to detect whether two or more samples come from the same distribution. They also test whether

medians between comparison groups are different, assuming that the shapes of the underlying distributions are the same.

**H 5.1: There are Statistically Significant Differences at  $\alpha \leq 0.05$  in the Responses of the Research Sample Due to Gender.**

**Table 4.22: Kruskal Wallis Test Grouping by Gender**

<b>Constructs</b>	<b>Sig</b>
Electronic Recruitment and Selection	0.261
Electronic Compensation	0.530
Electronic Training	0.674
Electronic Evaluation	0.629
Employees Performance	0.637

**Table 4.22** demonstrates that in all domains (E-Recruitment and Selection, E-Compensation, E-Training, E-Evaluation, and Employees Performance) in the table shown above that the p-value (Sig.) was more significant than the level of significance  $\alpha \leq 0.05$ . No significant difference was found among the participants of any domains in this study due to gender. The researcher concludes that gender did not affect any domains in this study (E-Recruitment and Selection, E-Compensation, E- Training, E-Evaluation, and Employees Performance).

**H 5.2: There are Statistically Significant Differences at  $\alpha \leq 0.05$  in the Responses of the Research Sample Due to Age.**

**Table 4.23: Kruskal Wallis Test Grouping by age**

<b>Constructs</b>	<b>Sig</b>
Electronic Recruitment and Selection	0.723
Electronic compensation	0.916
Electronic Training	0.938
Electronic Evaluation	0.972
Employees Performance	0.583

**Table 4.23** exhibits that in all domains (E-Recruitment and Selection, E-Compensation, E- Training, E-Evaluation, and Employees Performance) in the table displayed above that the p-value (Sig.) was greater than the level of significance  $\alpha \leq 0.05$ . No significant difference was perceived among the participants of any domains in this study due to age. The researcher draws that age did not affect any domains in this study (E-Recruitment and Selection, E-Compensation, E- Training, E-Evaluation, and Employees Performance).

**H 5.3: There are Statistically Significant Differences at  $\alpha \leq 0.05$  in the Responses of the Research Sample Due to Educational Attainment.**

**Table 4.24: Kruskal Wallis Test Grouping by Educational Attainment**

<b>Constructs</b>	<b>Sig</b>
Electronic Recruitment and Selection	0.583
Electronic compensation	0.821
Electronic Training	0.832
Electronic Evaluation	0.992
Employees Performance	0.188

**Table 4.24** presents that all domains (E-Recruitment and Selection, E-Compensation, E- Training, E-Evaluation, and Employees Performance) in the above table specify that the p-value (Sig.) was greater than the level of significance  $\alpha \leq 0.05$ . No significant difference was found among the participants of any domains in this study due to educational attainment. The researcher concludes that educational attainment did not affect any domains in this study (E-Recruitment and Selection, E-Compensation, E- Training, E-Evaluation, and Employees Performance).

**H 5.4: There are Statistically Significant Differences at  $\alpha \leq 0.05$  in the Responses of the Research Sample Due to Experience.**

**table 4.25:Kruskal Wallis Test Grouping by Experience**

<b>Constructs</b>	<b>Sig</b>
Electronic Recruitment and Selection	0.175
Electronic compensation	0.358
Electronic Training	0.480
Electronic Evaluation	0.606
Employees Performance	0.582

**Table 4.25** discloses that all domains (E-Recruitment and Selection, E-Compensation, E- Training, E-Evaluation, and Employees Performance) in the above table represented that the p-value (Sig.) was greater than the level of significance  $\alpha \leq 0.05$ . No significant difference was found among the participants of any domains in this study due to experience. The researcher explains that experience did not affect any domains in this study (E-Recruitment and Selection, E-Compensation, E- Training, E-Evaluation, and Employees Performance).

**H 5.5: There are Statistically Significant Differences at  $\alpha \leq 0.05$  in the Responses of the Research Sample Due to Workplace.**

**Table 4.26:Kruskal Wallis Test Grouping by workplace**

<b>Constructs</b>	<b>Sig</b>
Electronic Recruitment and Selection	0.000
Electronic compensation	0.004
Electronic Training	0.001
Electronic Evaluation	0.000
Employees Performance	0.499

**Table 4.26** illustrates that the p-value (Sig.) was smaller than the level of significance  $\alpha \leq 0.05$  for the domains: E-Recruitment and Selection, E-Compensation, E-Training,

and E-Evaluation, there was also a significant difference among the participants in domains due to workplace. The researcher derived that the workplace affected these domains. Concerning the employee performance domain, the p-value (Sig.) was greater than the significance level of significance  $\alpha \leq 0.05$ . No significant difference was found among the participants in employee performance due to workplace. The researcher concludes that the workplace did not affect Employees Performance.

**H 5.6: There are Statistically Significant Differences at  $\alpha \leq 0.05$  in the Responses of the Research Sample Due to Job Title.**

**Table 4.27: Kruskal Wallis Test grouping by Job Title**

<b>Constructs</b>	<b>Sig</b>
Electronic Recruitment and Selection	0.646
Electronic compensation	0.185
Electronic Training	0.950
Electronic Evaluation	0.169
Employees Performance	0.148

**Table 4.27** shows that all domains (E-Recruitment and Selection, E-Compensation, E-Training, E-Evaluation, and Employees Performance) in the above table state that the p-value (Sig.) was greater than the level of significance  $\alpha \leq 0.05$ . No significant difference was found among the participants of any domains in this study due to job title. The researcher identifies that the job title had no effect on any domains in this study (E-Recruitment and Selection, E-Compensation, E- Training, E-Evaluation, and Employees Performance).

**H6: E-HRM Practices Through (E-Recruitment and Selection, E-Compensation, E-Training and E-Evaluation) will Positively Explain the Variation of Employee Performance in Palestinian Higher Educational Institutions, WEST BANK.**

**Table 4.26: Multiple Regressions Analysis**

<b>Constructs</b>	<b>Beta</b>	<b>T</b>	<b>Sig</b>	<b>R<sup>2</sup></b>
Electronic Recruitment and Selection	-.090	-1.021	.308	
Electronic compensation	.142	1.660	.099	
Electronic Training	.169	1.978	.049	0.180
Electronic Evaluation	.250	2.530	.012	

Predictors: E-Recruitment and Selection, E- Compensation, E-Training and E-Evaluation

Multiple Regressions have been conducted to test the variance in the dependent variable and whether employee performance in Palestinian Higher Educational Institutions could be explained by four independent variables (E-Recruitment and Selection, E-Compensation, E- Training, E-Evaluation). The result shows that 18 % of the variance (R-Square) in employees' performance could be significantly explained by four independent variables (E-Recruitment and Selection, E-Compensation, E- Training, E-Evaluation). By looking at the Beta value, the highest number in Beta was 0.250 for (E-Evaluation), which is significant at the 0.000 level. This means that (Electronic Evaluation) is influenced most of the variance in employee Performance. In contrast, (Recruitment and Selection and E-compensation) did not influence employees' performance because their significant value was greater than the significant level.

This outcome implies that the independent variables (E-Training and E-Evaluation) positively explained the variance in the dependent variable (employee performance). This supports hypothesis 6. In contrast, (E-Recruitment and Selection and E-Compensation) did not clarify the variance in employees' Performance. Therefore, it also did not support hypothesis 6.

## **Findings and Results:**

### **How do you Rank Electronic Human Resource Management Practices (E-HRM) in Order of Importance to you**

The first order is given to (E-Recruitment and Selection) with ( $M=4.02$ ), the second practice is given to (E-Evaluation), ( $M=3.96$ ), the third is given to (E-Training), ( $M=3.95$ ) and the last one is given to (E-compensation), ( $M=3.89$ ).

### **To What Extent are you Satisfied with Electronic Human Resource Management Practices in your Organization?**

47% of participants answered this question, 79% were satisfied with E-HRM practices while 21% were not satisfied.

### **What are the Challenges you face in Dealing with Electronic Systems Used by Human Resources Department in your Organization?**

35% of participants introduced answers for this question, they mentioned many challenges:

- Many old faculty members and the elderly are ineffective with Electronic technologies and systems.
- The incompatibility of electronic systems with the ability of employees who work on such systems.
- Lack of coordination between Departments.
- Technical problems related to Internet issues and some network error connections problems in Program interruptions, crashes, power outages, and deadlock.
- Lack of training.
- Lack of transparency.
- Complicated and complex to use Electronic HRM system.

**How do you Think you can Overcome Challenges you Face in Dealing with Electronic Systems Used by the Human Resources Department in your Organization?**

35% of participants provided answers to this question. They introduced many suggested solutions:

- By exchanging experiences with experts ' employees.
- Continuous training and holding intensive courses.
- Raising the level of efficiency of managers and HR employees.
- Communicating with the Information Systems teams.
- Pre-coordination between departments and building a unified database.
- Conducting continuous courses for all employees to explain the working mechanism.
- Develop the network infrastructure.
- Using Transparency, integrity, and justice.
- Creating a guide for using electronic programs to avoid any difficulty.
- Make a clear policy for defining job tasks based on employees' experience in each department separately.
- Increase awareness of how to deal with electronic systems.
- Learning and holding internal courses and related workshops.

**To What Extent do you Think Electronic Human Resources Management Practices Increase your Interaction with HR Activities?**

30% of participants were active with this question, 63% of them thought that E-HRM practices lead to an increase in the interaction with HR activities, while 37% of participants do not think so.

**Do You Believe That The Use Of Technology In Human Resource Management Practices Motivates You To Self-Create And Develops Internal Service Standards In Your Organization?**

35% of participants answered this question, and 80% agreed that using technology in HRM practices motivates them to self-create and develop internal services standards in their workplace, while 20% did not believe in that.

**Appendix A: Correlation Coefficient**

*Correlation Coefficient Of Each Item Of “Attraction And Electronic Selection ” And The Total Domain.*

Item	Correlation Coefficient(Pearson)	P-Value
E-Recruitment facilitates the process of selecting the best human competencies.	.522**	.000
Online Recruitment gives me equal access to recruitment data.	.528**	.000
Electronic technologies help raise the rates of recruitment and selection.	.539**	.000
Electronic technologies help increase the level of transparency in the recruitment and selection process.	.579**	.000
E-Recruitment makes me more interactive with technological development.	.559**	.000

\*\* . Correlation is significant at 0.01 levels (2-tailed).

***Correlation Coefficient Of Each Item Of “Electronic Compensation ” And The Total Domain.***

Item	Correlation Coefficient(Pearson)	P-Value
I feel reassured that the Compensation system in my organization is electronic.	.577**	.000
The Electronic Compensation system accurately records my overtime.	.547**	.000
The Electronic Compensation system makes it easier for me to access my Compensation information and benefits.	.586**	.000
The Electronic Compensation system keeps my financial data accurate.	.564**	.000
The Electronic Compensation system helps in the integration of Human Resource processes such as linking performance to rewards.	.637**	.000

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

***Correlation Coefficient Of Each Item Of “Electronic Training ” And The Total Domain.***

Item	Correlation Coefficient(Pearson)	P-Value
E-Training gives me the opportunity for self-learning without time and space restrictions.	.596**	.000
I can choose the E-Training program that matches my job needs.	.589**	.000
The E-Training system enables me to control the content of the training material.	.515**	.000
The interactive E-Training environment develops the skill of communicating with others.	.500**	.000
The E-training system gives me the ability to return to the training material at any time.	.562**	.000

\*\* . Correlation is significant at 0.01 levels (2-tailed).

***Correlation Coefficient Of Each Item Of “Electronic Evaluation ” And The Total Domain.***

Item	Correlation Coefficient(Pearson)	P-Value
The E-Evaluation system contributes to increasing my reliability of assessment results.	.631**	.000
The E-Evaluation system makes it easy to refer to my assessment records for any modifications.	.662**	.000
The E-Evaluation system supports my right to receive promotions.	.690**	.000
The E-Evaluation system constantly motivates me to improve my job performance.	.680**	.000
I feel the fairness of the E-Evaluation system in my institution.	.687**	.000
The E-Evaluation system provides continuous feedback on my job performance.	.696**	.000

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

***Correlation Coefficient Of Each Item Of “Knowledge And Skill ” And The Total Domain.***

Item	Correlation Coefficient(Pearson)	P-Value
My desire for self-learning increases the level of my skills and abilities.	.470**	.000
Receiving continuous training develops my functional skills.	.483**	.000
Building good relationships with my colleagues helps me acquire new skills.	.454**	.000
Adopting modern technological techniques at work raises the level of my technological knowledge.	.563**	.000

\*\* . Correlation is significant at 0.01 levels (2-tailed).

***Correlation Coefficient Of Each Item Of “Fostering A Positive Workflow ”***

***And The Total Domain.***

Item	Correlation Coefficient(Pearson)	P-Value
The positive work environment motivates me to perform my duties with high quality.	.463**	.000
The culture of teamwork increases the efficiency of workflow in my organization.	.544**	.000
Clarity of work procedures in my organization facilitates workflow management.	.583**	.000
Effective communication with my colleagues achieves stability in the workflow.	.484**	.000

\*\* . Correlation is significant at 0.01 levels (2-tailed).

***Correlation Coefficient Of Each Item Of “Performing On Time ” And The***

***Total Domain.***

Item	Correlation Coefficient(Pearson)	P-Value
Time management helps me complete my tasks on time.	.567**	.000
Effective planning facilitates the completion of my work in the required time.	.511**	.000
Clarity of performance standards helps me do my tasks faster.	.518**	.000
The Electronic systems used in my organization help in accelerating the pace of my work.	.581**	.000

\*\* . Correlation is significant at 0.01 levels (2-tailed).

## **Chapter 5: Conclusions and Recommendations**

The main objective of this study was to examine the potential relationship between E-HRM practices and employee performance in Palestinian Higher Educational Institutions in the West Bank.

This chapter is devoted to concluding questions and hypotheses after generating the data analysis results. Also, this chapter comes up with the researcher's recommendations for this study.

### **5.1 Summary of the Study**

This study considered the impact of E-HRM practices on employee performance in Palestinian Higher Educational institutions. A comprehensive review of the literature was conducted as part of the examination to achieve the study's objectives. Moreover, realizing the E-HRM practices comprehensively, their relevance to employee performance, and studying the variables (E-Recruitment and Selection, E-Compensation, E-Training, E-Evaluation). Employees of the Palestinian Higher Educational Institutions, West Bank, constituted the study population with simple random sampling. The questionnaire's analysis results were quantitative, descriptive, and inferential.

### **5.2 Conclusion of the Study Findings, Questions and Hypotheses**

The researcher analyzed five main questions to achieve the study objectives and draw the findings of this study.

### 5.2.1 Findings Related to the First Question

The first question aimed to assess the impact of E-HRM practices on employees' performance in the Palestinian Higher Educational Institutions in the West Bank. Results from the administered questionnaire to the employees indicated that the Palestinian employees of Higher Educational institutions agreed about the impact of E-Recruitment and Selection practices on the Employees' Performance ( $M=3.85$ ). Also, the researcher found that most employees agreed that (E-recruitment and Selection) facilitate selecting the best human competencies, giving employees equal access to recruitment data. In addition, electronic technologies help raise the rates of recruitment and selection; Moreover, it increases transparency in the recruitment and selection process. Furthermore, E-recruitment and Selection make employees more interactive with technological development. When the researcher investigated the linear correlation between E-HRM practices (E-recruitment and Selection) on employees' performance, she found that the relationship between the E-HRM practices (E-recruitment and Selection) and employees' performance was (low) positive. Also, the Pearson Correlation between E-HRM practices (E-recruitment and Selection) and employees' performance showed that the test was significant. Thus, the first hypothesis (H1) was accepted. According to demographic data, the researcher found a high dealing of (E-recruitment and Selection). However, in accordance with the ranking in terms of experience, the researcher detected that the employees who had years of experience 5 to 15 and more than 50 years old see their institutions achieved a high level of using (E-recruitment and Selection) practices. Also, Palestine Technical University- Kadoorie and Al-Quds Open University were the categories with a high rate of use (E-recruitment and Selection). In

addition, male master's and Ph.D. degree holders recognize that their institutions use the practices of (E-recruitment and Selection).

### **5.2.2 Findings Related to the Second Question**

The second question aimed to assess the impact of E-HRM practices (E-Compensation) on the performance of employees in the Palestinian Higher Education Institutions in the West Bank. Results acquired that the Palestinian Higher Educational Institutions employees corresponded to the impact of E-Compensation practices on the Employees' Performance (M= 3.81). Employees feel reassured that the Compensation system in their institutions is electronic and agreed that it accurately records employees overtime. It allows them to have easy access to their compensation information and benefits. In addition, (E-Compensation) system keeps employees' financial data accurate. The researcher found that the relationship between the E-HRM practices (E-Compensation) and employees' performance was (low) positive. Moreover, the Pearson Correlation between E-HRM practices (E-Compensation) and employees' performance showed that the test was significant. Therefore, the second hypothesis (H2) was accepted. According to demographic data, females with more than 50 years old, PHD degree, more than 15 years of experience, Palestine Technical University- Kadoorie found the most categories with a high rate of use (E-Compensation).

### **5.2.3 Findings Related to the Third Question**

The third question aimed to assess the impact of E-HRM Practices (E-Training) on the performance of employees in the Palestinian Higher Educational Institutions in the West Bank. Outcomes obtained that the Higher Educational Institutions in the West Bank

employees agreed about the impact of (E-Training) on employee performance (M=3.96). The researcher found that most of the employees also agreed that (E-training) gives them the opportunity for self-learning without time and space restrictions, allowing them to choose the electronic training program that matches their job needs. In addition, the electronic interactive training environment develops employees' skills in communicating with others and gives them the ability to return to the training material at any time. When the researcher examined the linear correlation between (E-training) on employees' performance, a (low) positive relationship was found. Furthermore, the Pearson Correlation between E-HRM Practices (E-training) and employees' performance showed that the test was significant. Thus, the third hypothesis (H3) was accepted. Regarding demographic data, female employees with less than 31 years, Bachelor's degree with an experience of more than 15 years, Palestine Technical University-Kadoorie and Al-Quds Open University found the most categories that had a higher usage of (E-Training) practices.

#### **5.2.4 Findings Related to the Fourth Question**

The fourth question aimed to assess the impact of E-HRM practices (E-Evaluation) on employee performance in Palestinian Higher Educational Institutions in the West Bank. Results showed that employees agreed with the impact of (E-Evaluation) on employees' performance (M=3.80) which, as a result, revealed that most of the employees agreed that (the Electronic Assessment) system contributes to increasing employees' reliability of the assessment results, assists employees to refer to their assessment records for any modifications. Moreover, the Electronic Evaluation system provides continuous feedback on employees' performance and makes them feel fair and motivated. The

researcher detected that the relationship between E-HRM practices (E-Evaluation) and employees' performance was (low) positive. The Pearson Correlation between (E-Evaluation) and employee performance showed that the test was significant too. Then, the fourth hypothesis (H4) was accepted. Regarding demographic data, females, employees over 31 years of age and more than 15 years of experience, Ph.D. degrees, Palestine Technical University- Kadoorie, and Al-Quds Open University were classified as the most categories with a high-level usage of (E-Evaluation).

### **5.2.5 Findings Related to the Fifth Question**

The fifth question aimed to conclude whether the four practices of E-HRM affect employees' performance. The researcher found that employees agreed about the impact of E-HRM practices on employees' performance ( $M=3.85$ ).

### **5.2.6 Findings Related to Employees' Performance**

The objective was to assess the impact of E-HRM practices on employee performance in Palestinian Higher Educational Institutions in the West Bank. The researcher found that E-HRM practices were significant to employees' performance and affected employees working in the Palestinian Higher Educational Institutions in the West Bank. Further, employees of age more than 31 years old with experience between 5 yrs to 15 yrs, master's degree holders, Palestine Technical University- Kadoorie agreed that high level of (knowledge and skills, positive workflow, and performing on time), ( $M=4.28$ ), ( $M=4.31$ ), ( $M=4.26$ ), respectively were significant factors to improve employees performance.

After using multiple regression, the result implies that 18% of the variance in employee performance could be significantly explained by the four independent variables (E-Recruitment and selection, E-Compensation, E-Training, and E-Evaluation). As to more clarifications, (E-Evaluation) influenced most of the variance in employees' performance. In addition, (Electronic Training and Electronic Evaluation) were positively explained the variance in employee Performance. In contrast, (E-Recruitment and selection and E-Compensation) did not influence employees' Performance.

### **5.2.8 Findings Related to the Challenges and Solutions**

The researcher concluded that employees of Palestinian Higher Educational Institutions faced some challenges. Some of these changes are that a significant category of the elderly is ineffective in dealing with electronic technologies and systems. In addition, other changes are found to the incompatibility of electronic systems with the ability of employees who work on such systems. Moreover, the researcher finds a lack of coordination between departments and technical problems related to the internet. In the same fashion, some challenges like issues and some network error connection problems in program interruptions, crashes and power outages, lack of transparency, lack of training, and the complexity of using an E-HRM system.

It can be concluded that employees have the following solutions: exchanging experiences with experts employee, continuous training, and holding intensive learning (courses, workshops, etc.). Other solutions are functional like increasing the level of efficiency of managers and HR employees, communicating with the information systems teams, pre-coordination between departments and building a unified database, developing the network infrastructure, adopting transparency, integrity, justice, and

fairness, creating a guide for using electronic systems to increase awareness and avoid any difficulties. In addition, set a clear policy for defining job tasks based on employees' experience in each department separately.

### **5.3 Recommendations**

#### **5.3.1 Support from the Top Management Level**

The top management level's contribution positively affects E-HRM system adoption and utilization. Such support can be done through budget allocation for training on related systems and techniques, using relevant specialized systems that help HR professionals meet their needs, and continuously updating the E-HRM system.

#### **5.3.2 Involve Managers in the Design of the E-HRM System**

Creativity, innovation, and good relationships are required, and more involvement in E-HRM system design ensures its relevance and employee fulfillment.

#### **5.3.3 Employing Flexibility to E-HRM Needs**

Resilience and adoption of the changes that may occur in the work environment are essential to E-HRM effectiveness.

#### **5.3.4 E-HRM Results-Based Efficient HRM Practices**

Providing high-quality services with higher strategic contribution and using E-HRM systems should be linked to communication with employees for better utilization of E-HRM applications and fostering problem-solving.

### **5.3.5 Building Trust with Employees**

The success of E-HRM systems depends heavily on employees. Therefore, creating a culture that contributes to maintaining good relationships between the HRM department and employees is required through positive communication, transparency, and confidence since E-HRM systems tend to substitute face-to-face interactions with screen-based communications.

### **5.3.6 E-HRM Systems Should be Strategically Aligned with HR Needs**

When the HR department considers E-HRM systems' alignment to its needs, it facilitates HR planning.

### **5.3.7 Understanding the Challenges Related to the E-HRM Systems Usage**

Such as data entry errors, misuse of the system, security issues, and technical problems related to internet and network error connection problems.

### **5.3.8 Accepting to the Voice of Employees**

Listening to employees' suggestions and complaints concerning their well-being and involving them in the decision-making process make them feel that they are an integral part of the organization.

## **5.4 Recommendations for Further Studies**

Some related topics can be investigated in the future by interested researchers who are:

1. Key success factors of E-HRM practices in institutions.
2. Assessing the effectiveness of E-HRM practices.

3. The impact of electronic, human resources management on the organizational development, a comparative study between Higher Educational institutions in Gaza and West Bank.
4. The impact of E-HRM on employees performance by studying the following variables (Safety, Employee Engagement, Job turnover, and employee satisfaction).

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## Appendixes

### Appendix A: Questionnaire Revision

Number	Referee	Place of Work
1.	Dr. Imad Waladali	Arab American University
2.	Dr. Yusuf Abufara	Al.Quds Open University
3.	Dr. Amal Nazzal	Beirzait University
4.	Dr. Zahi Yasin	Arab American University
5.	Dr. Monthir Dweikat	An-najah National University
6.	Dr. Raed Ireqat	Arab American University



## Appendix B: Questioner- Arabic

الموظفون الأعزّاء،

تحية طيبة وبعد،

### الموضوع: استبانة لرسالة علمية

تقوم الباحثة بإجراء دراسة بعنوان "تأثير ممارسات إدارة الموارد البشرية الإلكترونية على فعالية الأداء الوظيفي في مؤسسات التعليم العالي الفلسطينية"، حيث تهدف هذه الدراسة إلى تحديد مدى تأثير هذه الممارسات الإلكترونية على فعالية الأداء الوظيفي؛ لذلك فإني أهيّبُ بكم تعبئة فقرات هذه الاستبانة، وذلك بغرض استكمال هذا البحث. تهدف الدراسة إلى معرفة تأثير ممارسات إدارة الموارد البشرية الإلكترونية على فعالية الأداء الوظيفي للعاملين في المؤسسة والذي ينعكس بدوره على أداء المؤسسة ككل. فمن خلال الرجوع إلى العديد من الأبحاث والدراسات السابقة ذات العلاقة بموضوع البحث الحالي، فإن ممارسات إدارة الموارد البشرية الإلكترونية ينعكس على فعالية أداء الفرد في المؤسسة وبالتالي فإن الهدف من الدراسة هو معرفة مدى تأثير هذه الممارسات الإلكترونية على معرفة الموظف ومهاراته، سير العمل في بيئة العمل إضافة إلى إنجاز الموظف لمهامه في الوقت المحدد. وعليه فإني أمل منكم التكرم بالتعاون مع الباحثة في تعبئة هذه الاستبانة بأمانة وموضوعية، إذ إنّ البيانات التي سيتم جمعها مهمة وضرورية لإنجاح البحث واستكمال متطلبات نيل شهادة الماجستير في تخصص إدارة الموارد البشرية.

ملحوظة: إنّ البيانات التي سيتم جمعها من خلالكم هي لأغراض البحث العلمي فقط وبسرّية تامة، ولا حاجة للإدلاء بأي معلومة شخصية تخصكم.

وفي حال كانت لديكم أية استفسارات يمكنكم التواصل مع الباحثة من خلال :

البريد الإلكتروني: [sarashaabaan11@hotmail.com](mailto:sarashaabaan11@hotmail.com)

رقم الهاتف: 0593695969

شاكرين ومُقدّرين حُسن تعاونكم

الباحثة: سارة شعبان

القسم الأول: البيانات الديموغرافية للمبحوثين: بالرجاء الإجابة على هذه البيانات من خلال وضع علامة "√"

• الجنس:

ذكر

أنثى

• الفئة العمرية:

31 عام فأقل

31-50 عام

51 عام فأكثر

• المؤهل العلمي:

بكالوريوس

ماجستير

دكتوراة

غير ذلك، من فضلك حدد.....

• مكان العمل:

الجامعة العربية الأمريكية

جامعة النجاح الوطنية

جامعة القدس المفتوحة

جامعة فلسطين التقنية- خضوري

غير ذلك، من فضلك حدد.....

• سنوات الخبرة:

5 أعوام فأقل

6-15 عام

16 عام فأكثر

• المسمى الوظيفي:

- موظف إداري
- عضو هيئة تدريسية
- رئيس قسم
- مدير دائرة
- غير ذلك، من فضلك حدد.....

ثانياً: ممارسات إدارة الموارد البشرية الإلكترونية:

الرجاء تحديد مدى انطباق العبارات التالية على ممارسات إدارة الموارد البشرية الإلكترونية في المؤسسة التي تعمل بها من خلال التعبير عن درجة موافقتك على توفر السمة فيها. يمكنك أن تعكس ذلك من خلال واقع

تجربتك الشخصية. علماً أن الإجابة ستكون وفقاً لمقياس ليكارت الخماسي (Likert Scale) حيث

(القيمة العظمة للسلم = 5 وتعني موافق بشدة، والقيمة الصغرى للسلم = 1 وتعني معارض بشدة).

فيما يلي توضيح لرموز السلم:

موافق بشدة	موافق	إلى حد ما	غير موافق بشدة
م.ب	م	إلى حد ما	غ.م.ب

م.ب	م.ب	م	إلى حد ما	م.ب	البيان
<b>الاستقطاب والاختيار الإلكتروني</b>					
					1 يسهل التوظيف الإلكتروني عملية اختيار أفضل الكفاءات البشرية.
					2 يمنحني التوظيف الإلكتروني فرصة متساوية في الوصول إلى بيانات التوظيف.
					3 تساعد التقنيات الإلكترونية في رفع نسب الاستقطاب والاختيار.
					4 تساعد التقنيات الإلكترونية في زيادة مستوى الشفافية في عملية الاستقطاب والاختيار.
					5 التوظيف الإلكتروني يجعلني أكثر تفاعلا مع التطور التكنولوجي.
<b>التعويض الإلكتروني</b>					
					1 اشعر بالطمأنينة لأن نظام التعويض في مؤسستي الالكتروني.
					2 يسجل نظام التعويض الإلكتروني ساعات عملي الإضافية بدقة.
					3 يسهل نظام التعويض الإلكتروني وصولي إلى معلومات ومزايا التعويض الخاصة بي.
					4 نظام التعويض الإلكتروني يحتفظ ببياناتي المالية بدقة.
					5 يساعد نظام التعويض الإلكتروني في تكاملية عمليات الموارد البشرية مثل ربط الأداء بالمكافآت.
<b>التدريب الإلكتروني</b>					
					1 يتيح لي التدريب الإلكتروني فرصة التعلم الذاتي دون قيود زمانية ومكانية.
					2 أستطيع اختيار البرنامج التدريبي الإلكتروني الذي يتفق مع احتياجي الوظيفي.
					3 يمكنني نظام التدريب الإلكتروني من التحكم في محتوى المادة التدريبية.
					4 تنمي بيئة التدريب التفاعلية الإلكترونية لدي مهارة التواصل مع الآخرين.
					5 يمنحني نظام التدريب الإلكتروني إمكانية الرجوع للمادة التدريبية بأي وقت.
<b>التقييم الإلكتروني</b>					
					1 يسهم نظام التقييم الإلكتروني في زيادة موثوقيتني بنتائج التقييم.
					2 يسهل نظام التقييم الإلكتروني الرجوع إلى سجلات التقييم الخاصة بي لإجراء أية تعديلات.

					3	يدعم نظام التقييم الإلكتروني حقي في الحصول على الترقيات.
					4	نظام التقييم الإلكتروني يحفزني باستمرار على تحسين أدائي الوظيفي.
					5	أشعر بعدالة نظام التقييم الإلكتروني في مؤسستي.
					6	يقدم نظام التقييم الإلكتروني تغذية راجعة مستمرة عن أدائي الوظيفي.

ثالثًا- العوامل التي تعزز أداء الموظف : هناك مجموعة من العوامل المرتبطة بأداء الموظف والتي ترفع من مستوى أدائه في عمله، منها: " المعرفة والمهارات، سير العمل الإيجابي في بيئة العمل والأداء في الوقت المحدد "، الرجاء تحديد درجة موافقتك على كل فقرة من الفقرات الآتية:.

غ.م.ب	غ.م	إلى حد ما	م	م.ب	البيان	
<b>المعرفة والمهارات: Knowledge and Skill</b>						
					1	رغبتني في التعلم الذاتي ترفع من مستوى مهاراتي وقدراتي.
					2	تلقي التدريبات المستمرة يطور مهاراتي الوظيفية.
					3	بناء علاقات جيدة مع زملائي يساعدني في اكتساب مهارات جديدة.
					4	تبني تقنيات تكنولوجية حديثة في العمل يرفع من مستوى معرفتي التكنولوجية.
<b>تعزيز سير العمل الإيجابي في بيئة العمل: Fostering a positive workflow</b>						
					1	بيئة العمل الإيجابية تحفزني على أداء مهامي بجودة عالية.
					2	ثقافة العمل الجماعي ترفع من كفاءة سير العمل في مؤسستي.
					3	وضوح إجراءات العمل في مؤسستي يسهل إدارة سير العمل .
					4	التواصل الفعال مع زملائي يحقق الاستقرار في سير العمل.
<b>الأداء في الوقت المحدد: Performing on time</b>						
					1	إدارة الوقت تساعدني في إنجاز مهامي في الوقت المحدد.
					2	التخطيط الفعال يسهل إنجازي لعملي في الوقت المطلوب.
					3	وضوح معايير الأداء يساعدني في القيام بمهامي بشكل أسرع.
					4	الأنظمة الإلكترونية المستخدمة في مؤسستي تساعد في تسريع وتيرة أدائي لعملي.

رابعًا- هذا الجزء اختياري، يمكنكم الإجابة عنه بناءً على رغبتكم:  
كيف تصنف ممارسات إدارة الموارد البشرية الإلكترونية من حيث درجة الأهمية بالنسبة  
إليكحيث:

1 = الأقل أهمية

5 = الأكثر أهمية

5	4	3	2	1	ممارسات إدارة الموارد البشرية الإلكترونية
					الاستقطاب والاختيار الإلكتروني
					التعويض الإلكتروني
					التدريب الإلكتروني
					التقييم الإلكتروني

إلى أي مدى تشعر بالرضا عن ممارسات إدارة الموارد البشرية الإلكترونية في مؤسستك ؟

ما التحديات التي تواجهها في التعامل مع الأنظمة الإلكترونية التي تستخدمها إدارة الموارد  
البشرية في مؤسستك ؟

كيف برأيك يمكن التغلب على التحديات التي تواجهك في التعامل مع الأنظمة الإلكترونية التي تستخدمها إدارة الموارد البشرية في مؤسستك ؟

إلى أي مدى ترى بأن ممارسات إدارة الموارد البشرية الإلكترونية تؤدي إلى زيادة تفاعلك مع أنشطة الموارد البشرية ؟

هل ترى بأن استخدام التكنولوجيا في ممارسات إدارة الموارد البشرية يحفزك على الإبداع الذاتي ويطور معايير الخدمات الداخلية في مؤسستك ؟

أي نقاط ترغب بإضافتها، من فضلك اكتبها هنا، وسأكون سعيدة برؤيتها:

انتهت الاستبانة

مع خالص الشكر لكم

## Appendix C: Questioner- English

*Arab American University*

*Ramallah Site*



الجامعة العربية الأمريكية □

موقع رام الله

Dear employees,,

May God bless your times and then,,

### **Subject: A questionnaire for thesis study**

The researcher is conducting a study entitled "The Impact of Electronic Human Resources Management Practices on the Effectiveness of Job Performance in Palestinian Higher Educational Institutions", where this study aims to determine the extent of the impact of these electronic practices on the effectiveness of job performance; Therefore, I urge you to fill out the paragraphs of this questionnaire, in order to complete this study.

### **About the study**

This study aims to know the impact of electronic human resources management practices on the effectiveness of the job performance of employees in the organization, which in turn is reflected on the performance of the institution as a whole. By referring to many previous studies related to the topic of the current study, the practices of electronic human resources management are reflected on the effectiveness of the performance of the individual in the organization, and therefore the aim of this study is to know the extent of the impact of these electronic practices on the employee's knowledge and skills, the workflow in the work environment in addition to the employee's completion of his tasks on time.

Accordingly, I hope that you will kindly cooperate with the researcher in filling out this questionnaire honestly and objectively, as the data that will be collected is important

and necessary for the success of the study and the completion of the requirements for obtaining a master's degree in human resource management.

Note: The data collected through you will only be used to serve this study, with complete ease, and no need to provide any personal information concerning you.

In the event of any inquiry, you can contact the researcher at the following contact information: E-mail: [sarashaaban11@hotmail.com](mailto:sarashaaban11@hotmail.com)

Phone number: **0593695969**

**Thank you for your cooperation.**

**Researcher: Sara Shaban**

**I. Demographic data for the researchers: please respond to this data by placing a "√" reference**

- **Sex:**
  - male
  - female
  
- **Age group:**
  - 30 years and less.
  - 31-50 years old
  - 51 years and older
  
- **Educational attainment:**
  - Bachelor
  - Master
  - PhD
  - Others, pls. specify: .....
  
- **Workplace:**
  - Arab American University
  - Al-Quds Open University
  - An-Najah National University
  - Palestine Technical University – Kadoorie
  - Others pls. specify: .....
  
- **Years of experience:**
  - 5 years and less.
  - 6-15 years old
  - 16 years and above
  
- **Job title:**
  - Administrative employee
  - Faculty member
  - Head of department
  - Department Manager
  - Others pls. specify: .....

**II. Electronic Human resources management practices:**

Please determine the applicability of the following terms to the electronic human resources management practices in your organization, by expressing your approval of the availability of the feature in it, and you can reflect this through the



5	The electronic compensation system helps in the integration of HR work, such as linking performance with rewards.					
<b>Electronic Training</b>						
1	E-training gives me the opportunity for self-learning without time and space restrictions.					
2	I can choose the electronic training program that matches my job needs.					
3	The electronic training system enables me to control the content of the training material.					
4	The electronic interactive training environment develops the skill of communicating with others.					
5	The e-training system gives me the ability to return to the training material at any time.					
<b>Electronic Evaluation</b>						
1	The electronic evaluation system contributes to increasing my reliability of assessment results.					
2	The electronic evaluation system makes it easy to refer to my assessment records for any modifications.					
3	The electronic evaluation system supports my right to receive promotions.					
4	The electronic evaluation system constantly motivates me to improve my job performance.					
5	I feel the fairness of the electronic evaluation system in my institution.					
6	The electronic evaluation system provides continuous feedback on my job performance.					

**III. Factors that enhance employee performance: There are a number of factors related to employee performance that raise the level of his performance in his work, including: “knowledge and skills, a positive and motivating work environment, and performance on time.” Please specify the degree of your agreement with each of the following paragraphs:**

M	Statement	S.A.	A	N	D.A.	S.D.A
<b>Knowledge and Skill: المعرفة والمهارات</b>						
1	My desire for self-learning increases the level of my skills and abilities.					
2	Receiving continuous training develops my functional skills.					
3	Building good relationships with my colleagues helps me acquire new skills.					
4	Adopting modern technological techniques at work raises the level of my technological knowledge.					
<b>Fostering a positive workflow: تعزيز سير العمل الإيجابي في بيئة العمل</b>						
1	The positive work environment motivates me to perform my duties with high quality.					
2	The culture of teamwork increases the efficiency of workflow in my organization.					
3	Clarity of work procedures in my organization facilitates workflow management.					
4	Effective communication with my colleagues achieves stability in the workflow.					
<b>Performing on time: الأداء في الوقت المحدد</b>						
1	Time management helps me complete my tasks on time.					
2	Effective planning facilitates the completion of my work in the required time.					
3	Clarity of performance standards helps me do my					

	tasks faster.					
4	The electronic systems used in my organization help in accelerating the pace of my work.					

**IV. This part is optional, which you can answer at your request:**

**How do you rank Electronic Human Resource Management practices (E-HRM) in order of importance to you, as:**

**1= least important**

**5 = most important**

1	2	3	4	5

**To what extent are you satisfied with Electronic Human Resource Management practices in your organization?**

**What are the challenges you face in dealing with Electronic systems used by Human Resources department in your organization?**

**How do you think you can overcome the challenges you face in dealing with the electronic systems used by the human resources department in your organization?**

**To what extent do you think that Electronic Human Resources Management practices lead to increase your interaction with HR activities?**

**Do you believe that use of technology in Human Resource Management practices motivates you to self-create and develops internal service standards in your organization?**

**Any points you would like to add, please write them here and I'll be glad to see them:**

**The end of the questionnaire**

**With my sincere thanks**

### المخلص

هدفت الدراسة إلى التحقق من تأثير ممارسات إدارة الموارد البشرية الإلكترونية على الأداء الوظيفي في مؤسسات التعليم العالي الفلسطينية، استخدمت الباحثة المنهج (الكمي) لجمع البيانات المطلوبة، ويتمثل مجتمع الدراسة بإجمالي عدد العاملين في مؤسسات التعليم العالي الفلسطينية في المناطق الشمالية من الضفة الغربية (الجامعة العربية الأمريكية، جامعة القدس المفتوحة، جامعة النجاح الوطنية وجامعة فلسطين التقنية- خضوري) في كل من جنين، نابلس وطولكرم. ومن أجل تحقيق العينة المطلوبة، وزعت الباحثة 300 استبانة على الموظفين في مؤسسات التعليم العالي الفلسطينية في المناطق شمال الضفة الغربية، تم جمع 236 استبانة، 201 منها استوفت المعايير المطلوبة وتم تحليلها، كما تم أيضا اختبار وتحليل فرضيات الدراسة باستخدام اختبار "معامل بيرسون" بواسطة الحزمة الإحصائية للعلوم الاجتماعية (SPSS) للبيانات التي تم جمعها باستخدام التقنية الكمية. أظهرت الدراسة وجود علاقة بين ممارسات إدارة الموارد البشرية الإلكترونية وأداء الموظفين، كما كشفت الدراسة اتفاق الموظفين على وجود تأثير للمعرفة والمهارات، وسير العمل الإيجابي والأداء في الوقت المحدد على أداء الموظف. من ناحية أخرى، برزت أهمية ممارسات إدارة الموارد البشرية الإلكترونية في إحداث فرق داخل مؤسسات التعليم العالي الفلسطينية. وأظهرت النتائج أن توظيف ممارسات إدارة الموارد البشرية الإلكترونية له تأثير إيجابي على أداء الموظف والمؤسسة ككل. تسمح أنظمة معلومات الموارد البشرية للموظفين بأداء الأنشطة المتعلقة بالموارد البشرية بشكل أسرع وأكثر راحة، بحيث يمكن للموظفين تركيز جهودهم على العديد من المهام الأساسية الأخرى. بالإضافة إلى ذلك، يضمن نظام إدارة معلومات الموارد البشرية الإلكتروني ممارسة الإدارة دون أخطاء من خلال إجراء المهام بالشكل الصحيح والمناسب الأمر الذي يساعد في تحقيق أهداف المنظمة.

**الكلمات المفتاحية:** إدارة الموارد البشرية، ممارسات إدارة الموارد البشرية الإلكترونية، الاستقطاب والاختيار الإلكتروني، التعويض الإلكتروني، التدريب الإلكتروني، التقييم الإلكتروني، أداء الموظفين، التأثير ومؤسسات التعليم العالي الفلسطينية.