



## A COMPREHENSIVE COMPARISON OF VIRTUAL HUMAN RESOURCES EFFECTS BEFORE AND AFTER COVID-19

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Article history:	Abstract:
<b>Received:</b> 26 <sup>th</sup> August 2024	The COVID-19 pandemic played a great and effective role in changing the policies and structures of virtual human resources (VHR) systems of institutions and organizations, whether governmental or private sector. This pandemic has become a wake-up call for these institutions and organizations, as the role of virtual human resources (VHR) has become more important than ever. Human resources specialists are responsible for the health and well-being of employees and must be able to identify and manage risks in addition to their need to be truly aware and able to make communication between employees in order to provide them with a support. What has been mentioned is the basis of human resources structures and their responsibilities and duties towards employees. In this article, a comparative study will be conducted. An analytical study on the importance of virtual human resources before and after the COVID-19 pandemic in three main areas: health and safety, communications and employee support. This study showed after conducting a real survey in one of the institutions affiliated with the Ministry of Higher Education and Scientific Research for ten employees working in human resources as well as another sample of 100 employees who communicate directly with human resources employees
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**Keywords:** COVID-19, virtual human resources, health, safety, communications, employee support

### I. INTRODUCTION

The period in which the Corona pandemic began and spread throughout the world has become a difficult period for everyone, and companies and institutions are no exception. Therefore, companies and institutions had to start making difficult to protect the human resources of those companies and institutions from collapsing due to the pandemic. Perhaps the main function of human resources expressed as to make an assest to meet these change(s) [1, 2].

Over time, in times of crisis, human resources functions become more sensitive and more important as well. Accordingly, there are a number of ways in which human resources played a vital role during the pandemic, namely: communicating with employees, managing changes in the institution or company's policy, addressing employee absences, providing support to employees in

difficult times, and assisting with remote work arrangements [3].

First condition of human resources is to work as a main communication channel between people who works in management and those as employees. Human resources are functionality responsible for the updated communication(s) and the relative change(s). The pandemic is made a forced for a lot of businesses(s) which is leads to those changes in the core operations [4 – 6].

The attendance expressed as another main role for HR. Normally it is not easy, but some-times it plays a role as it may be became so complex in the mentioned period. [7].

That pandemic period is expressed so difficult in that time and it is effected directly to the companies and universities especially those expressed HR is the main core for their work. [8 – 10].

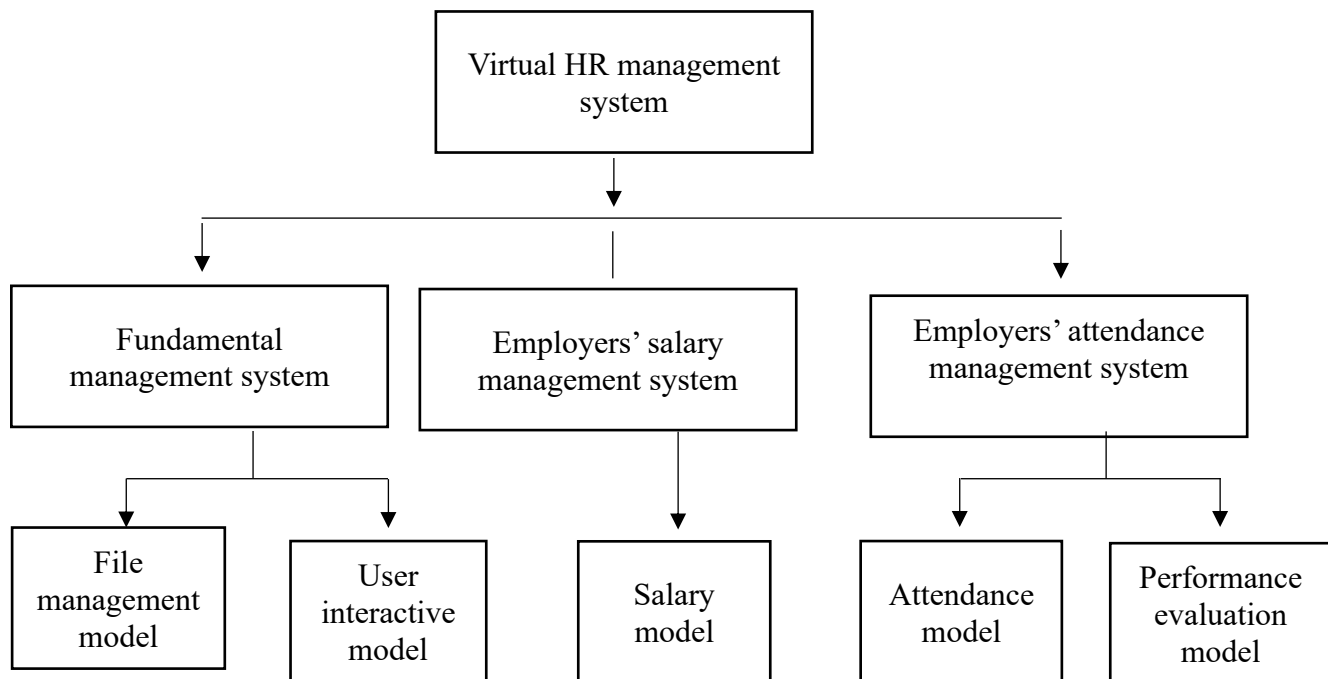


## II. VIRTUAL HUMAN RESOURCE

Virtual Human Resources (also known as Virtual Human Resources) is an important and real process that performs the function of linking employees electronically and virtually to a set of technologies, programs and systems, especially human resources services, especially when needed. This enables those employees to interact and work directly with resources through the presence of a self-service platform without the need for the classic method of constantly passing through the human resources representative on site [11 – 14 ]. The Virtual Human Resource (VHR) system is already established and available for almost countries for a while but it is started to be the main core for companies in some periods and decays. One of the most important period and decay is after 2020's when Covid-19 is becoming active and reached to its peak effect. Therefore, the managers they

are responsible for HR and the head of companies starts to construct the VHR infrastructure based on the given requirements for Covid-19 [15 – 17].

The virtual human resource system is divided into three main parts or subsystems. The first sub-system is responsible for the basic functionality for the management systems such as file management section, recruitment training management section and the employer-user information management section. The second sub-system is the money transactions management sub-system which is responsible for and virtual and electronic salary and money management section. The third sub-system is responsible for the attendance sub-system which is mainly divided into two functionalities: the management model of attendance and the performance evaluation management model. See figure (1).



**Figure 1.** Virtual HR management system.

Remote work must be done by taking some measures and by making an agreement with dimensions and directions between both the employer and the employee. In addition, the agreement referred to must also be an agreement that clarifies the place of work. Other additional and important factors that need to be clarified between the parties involved in the remote communication process are the schedule, the tools used

in communication, the tasks to be performed, the methods and means of supervision and notification of the work that has been completed [18 – 20].

Employers should pay attention to the smallest details related to workers and employees, such as livelihoods, obstacles and impediments they face. At the same time, employees should pay attention to the practical resources they have and the expected results, in



addition to taking time into consideration and overcoming difficulties as much as possible [21].

In the era of Covid-19, management required additional efforts and different goals, especially in human resources. The work space has expanded, working hours have become inside homes, and many other factors have contributed and will contribute to the success of remote work in institutions managed by remote human resources

and which have structures established for this purpose [22].

### **III. MATERIALS AND METHODOLOGY**

Sample questionnaire consists of ten employees working in human resources as well as another sample of 100 employees who communicate directly with human resources employees as shown in the following tables:

**Table (1):** gender of the studied sample.

#	Human sample	Number
1	Mail	90
2	Femail	20
Sum		110

**Table (2):** HR employers from the studied sample.

#	HR Employers	Number
1	Mail	8
2	Femail	2
Sum		10

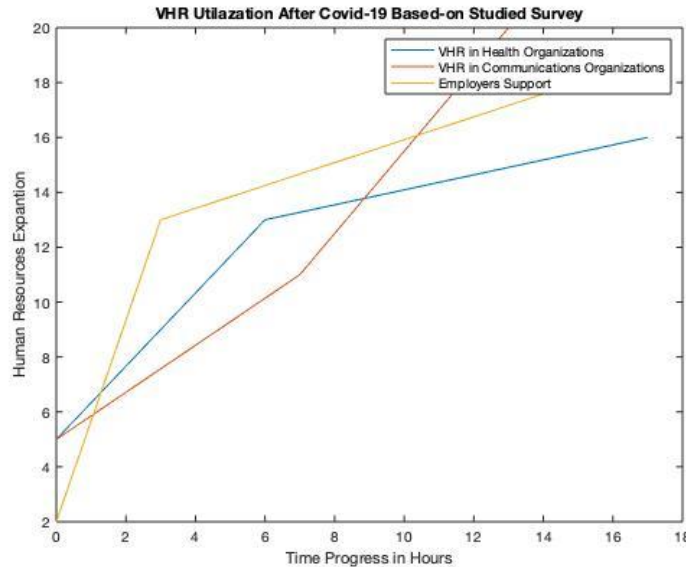
**Table (3):** Direct contacting with the HR employers of the studied sample.

#	Direct HR Contact	Number
1	Mail	50
2	Femail	8
Sum		58

In addition to that, in this study paper there are three main cores studied which are: health organizations, communications and employee support.

### **IV. RESULTS AND DISCUSION**

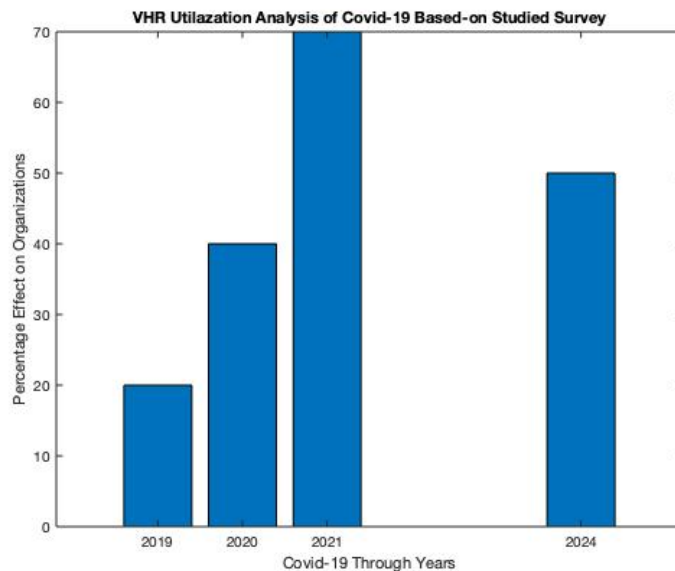
Based on the sample questionnaire for the 110 samples and the three main cores studied areas (i.e., health, communication and employee support, figure (3) shows these three areas how the communications arise after Covid-19 which deal with VHR effects.



**Figure 3.** VHR utilization after Covid-19 based on studied survey.

Figure (4) shows the VHR utilization before Covid-19 in the beginning of year 2019 and how it arises in 2020 and the peak of Covid-19 effects on 2021. While it is failed down in 2024 (now) such that there is no Covid-19 but it

is still higher than the VHR system before Covid-19 because the organizations still use the effective VHR which are already established and it is cost these organizations nothing more.



**Figure 4.** VHR utilization analysis of Covid-19 based-on studied survey.

**V. CONCLUSIONS**

Based on the samples used in this analytical study on virtual human resources, their transactions, and the employees working in them and interacting directly and indirectly before and after the Corona pandemic. Through the questionnaire, analyses and results in this study, it was found that the number of males is greater than the

number of females working in virtual human resources, and the use of virtual human resources was at a certain level before the pandemic began. Then, after the period of pandemic appeared, it was necessary to deal with virtual human resources that began to increase, and organizations and companies began to deal with them



and consider them a basic pillar of the pillars of building those organizations and institutions.

In addition, the three axes that were relied upon in the study and analysis, namely health, communications and employee support, showed that the communications index rose above the rest of the indicators after the pandemic appeared.

the recommendations that can be taken into consideration is studying the administrative organizational structure as a whole and its relationship to virtual human resources, in addition to dealing with electronic platforms and increasing the culture and awareness of employees and workers in human resources for this purpose.

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