
**Adoption of Human Resource Information Systems by Faculty Members:
Qualitative Evidence from Universities in Pakistan**

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Received: Aug 20, 2021; Revised: Jan 12, 2022; Accepted: March 16, 2022

Abstract: In the digital age of today, a large number of higher education institutions have adopted Human Resource Information Systems (HRIS) to improve the overall efficiency of operations. With the exponential growth in education sector of Pakistan and the onset of the COVID-19 pandemic, the role of HRIS has considerably expanded for all stakeholders, particularly faculty members of universities. This study aims to explore the factors that motivate universities to implement HRIS, the role of HRIS in enhancing the productivity of faculty members, and the constraints associated with the use of HRIS. This qualitative study follows the descriptive phenomenology approach to explore the significance of HRIS for faculty members. Non-probability purposeful sampling was used to select 14 faculty members who were interviewed at seven Pakistani universities. The study establishes that HRIS is considered a valuable technology for streamlining HR functions of universities in general and faculty members in particular.

Keywords: *HRIS, faculty members, universities, HR.*

Introduction

With the constantly evolving dynamics of the world, organizations need to adapt and transform their internal operations. The COVID-19 pandemic has caused unexpected changes in how organizations function and has obligated them to accelerate their transition from manual to digital processes (Gigauri, 2020). The most prominent change in the external environment is that of information technology; thus, in order to compete, organizations now require efficient use of technology for major functions. One of the protruding problems faced by today's organizations is the preservation of their Human Resource (HR). In this day and age, technology has massively impacted the HR practices of organizations. Consequently, organizations now require advanced methods to ensure smooth functioning of HR departments in order to ultimately ensure employee satisfaction and retention (Lumi, 2020).

With the increase in automation of HR practices, the use of Human Resource Information Systems (HRIS) has become a vital part of organizations. HRIS refers to an integrated technology that facilitates organizations in gathering and storing data of their human resource. It requires various hardware and software applications that ensure accurate input and storage of employee data for an organization (Sulistyo and Suharti, 2018). It assists the HR departments by processing more information in less time, thereby, improving communication and reducing costs to a great extent (Nawaz, 2017). A number of studies have been conducted on the utility of HRIS at various organizations of developed countries, mainly in Europe and America.

¹ <https://doi.org/10.51659/josi.21.153>

However, the significance of HRIS and the challenges that organizations face have largely remained unexplored outside of the developed countries (Al-Dmour et al., 2015). Thus, the objective of this study is to explore the significance of HRIS in the context of higher education institutions of a developing country like Pakistan.

The number of educational institutions in Pakistan is increasing at a rapid pace, resulting in an increase of faculty employment. As per the Ministry of Federal Education and Professional Training (2020), there are a total of 211 universities and 60.3 thousand faculty members in Pakistan. The student enrolment in Pakistani universities has also increased by at least 2.5% from the previous year, amounting to 1.91 million students. This enormous surge has also mandated the deployment of a system that ensures smooth functioning of higher education institutions.

This study contributes in determining the significance of HRIS for educational institutions of Pakistan by exploring the motivators that lead to implementation of HRIS, ascertaining the experience of faculty members who are the end-users, discovering the factors that lead to mismatch of use, and the challenges faced by faculty members while interacting with the system on a daily basis. The following research questions were pursued in this study:

1. What are the reasons behind the implementation of HRIS at higher education institutions?
2. How has the overall experience of using HRIS been for faculty members and how was their experience different before the implementation of HRIS at their institutions?
3. How do faculty members benefit from HRIS?
4. What contextual and intervening conditions influence the implementation of HRIS at higher education institutions?
5. What is the significance of HRIS for faculty members?

Owing to the range of benefits associated with the use of HRIS, organizations and institutions in developing countries are now moving towards adopting technology in their daily operations pertaining to HR. The extent of involvement of technology at organizations and institutions, however, remains limited in developing countries due to shortage of funds, resistance to new methods, lack of willingness by senior management, and inadequate knowledge and infrastructure to support automation. This also presents immense potential for research on the use of HRIS at organizations and institutions of the developing world (Quaosar, 2018).

Literature Review

Empirical research indicates that the use of HRIS will play a major role in the success or failure of organizations (Nath and Naidu, 2015). A review of the literature suggests that organizations, particularly in the developing countries, are actively making efforts to adopt HRIS into their HR operations in order to survive and meet the demands of the evolving times. However, the significance of HRIS for higher education institutions of developing countries remains to be explored (Quaosar & Rahman, 2021).

Human Resource in Digital Age

According to Sharma and Shukla (2013), the use of technology to assist various functions has rapidly been increasing within organizations. These technologies are also used to handle numerous processes and functions of HR. The advancement of technology can have various implications for HR departments. Palmer et al. (2017) explained how HR was affected when 'Adobe', a leading software house, shifted to a cloud-based approach. This shift not only changed the way consumers' downloaded the software, but also transformed the way employees worked. In this case, the HR department acted as a business partner and worked closely with the top management to develop stimulating and diverse jobs, thereby, engaging and facilitating the new-generation employees in performing their duties. The appraisal of employees in the case of Adobe shifted from an annual performance review to providing real-time feedback through the help of various systems. Thus, it is important for HR departments to

adapt to digital change in order to cope with technological developments within and outside of the organizations.

Motivators behind Implementation of HRIS

Dissanayake and Nandasena (2019) investigated the external and internal motivators that lead to successful execution of HRIS in organizations and found that environmental elements such as competitive pressure, organizational support, government policies, and network externalities of the system have the most impact on adoption of HRIS in organizations. Nevertheless, internal factors such as willingness of employees, support by management, organization's culture and structure, perceived payoffs, and overall demographics of employees have a significant impact on an organization's successful adoption of HRIS.

HRIS plays a significant role in improving HR planning of an organization through decision-assisting applications. Moreover, through the use of HRIS, information processing and feedback become faster compared to manual systems. The communication between employees at various levels of hierarchy also increases with the implementation of HRIS. Most importantly, however, HRIS facilitates the reduction of costs and enhances the reliability of information owing to reduced number of errors (Chandra, 2009). In Pakistan, HRIS is mainly utilized for managing basic data of employees, handling attendance, and appraising employees. The main objective of HRIS has been associated with receiving immediate responses with minimal chances of mistakes and switching to paperless systems of operations (Khan et al., 2016).

HRIS provides accurate and precise employee data in a timely manner; therefore, it also facilitates the decision-making process at institutions. Some organizations, however, may not be able to implement HRIS successfully owing to a range of factors. Organizations can leverage the benefits of HRIS depending on company size, organization's philosophy, employee competence, and willingness of top management to spend monetary and non-monetary resources on HRIS (Naik and Reddy, 2017).

HRIS at Higher Education Institutions: The Global Context

A study conducted to evaluate the utility of HRIS and perception of employees serving the HR departments of public sector higher education institutions in Saudi Arabia found that six major elements impacted the use of HRIS. These elements included benefits derived from HRIS, facilitating the strategic decision-making process, features and applications of HRIS, comfort level of employees with HRIS, individual factors (societal elements affecting an individual), and the integration of HR with other functions. The study revealed that features of the system, the service provided by those features, and user-friendliness of the system had a positive impact in forming positive perceptions of employees, thereby, enabling the institutions to successfully implement HRIS (Aletaibi, 2016).

A research carried out to examine the teaching staff's perception about the benefits of HRIS revealed that the most significant perceived advantages were reduction in the amount of time required to process information, easy access to data, decrease in laborious paperwork and improvement in the overall productivity. The research identified that reduction in inaccuracies and facilitation of informal decision-making were believed to be the least significant advantages of HRIS. The study also concluded that quick access to data and better control over information were the most common advantages of HRIS. Thus, the results of the research supported past researches regarding the role of HRIS in considerably improving output pertaining to employment in universities. However, the study discovered that HRIS was not being utilized to its complete potential and its utility as a decision-making application instead of a data-processing application was not being fully realized by universities. The study also found that gender and age of faculty members played no part in forming or changing their perception of HRIS. However, the perception of assistant professors and lecturers as well as PhD qualified and non-PhD qualified faculty members varied when it came to responses on

performance evaluation, streamlining processes, and facilitating informal decisions. Therefore, the study concluded that perception of participants at higher education institutions varied according to their demographics such as employment positions and qualifications (Bamel et al., 2014).

In the context of Jordanian higher education institutions, a study examined the utility of HRIS. The criterion for qualification of universities was to have more than 1,000 employees. Respondents were selected from six universities of Jordan and were asked to fill out a questionnaire that consisted of four sections: general information of HRIS, barriers to HRIS, applications of HRIS, and advantages of HRIS. The results of the study revealed that improved response time and quicker access to data were the major advantages of HRIS. On the other hand, lack of willingness of top management to adopt HRIS and resistance of employees to familiarize themselves with a new technology were discovered to be the main barriers in successful implementation of HRIS across higher education institutions of Jordan (Altarawneh and Al-Shqairat, 2010).

Constraints attached to HRIS

Exploring the usage and problems in implementation of HRIS, a study by Matimbwa and Masue (2019) concluded that despite the various benefits that HRIS can bring to an organization, such as updated data records, quick HR reports, relevant trainings provided to employees and effective recruitment and selection decisions, there are some major challenges faced by organizations. Some of these included insufficient funds to implement and update the HRIS infrastructure, lack of support from top management, and lack of expertise in HR professionals to use the system.

A research investigating the advantages and challenges of HRIS for universities explained the numerous problems of HRIS for faculty members. Lack of training and inadequate understanding of technology were perceived by faculty members as major challenges. Therefore, it is also vital to create familiarity with the system and provide training to employees before implementing the system (Bamel et al., 2014).

Another study on HRIS with a special focus on higher education institutions in South Africa indicated that there is still lack of acceptance in universities. The authors examined HRIS as a process in order to determine the contributing factors and the extent of use and concluded that the process of adoption may have a direct impact on the use of HRIS by universities. Thus, at institutions where employees felt comfortable with new technology, adoption was easier and HRIS was found to be enhancing the overall productivity of employees. On the other hand, at institutions where staff felt threatened by new technology, adoption of HRIS became a challenge and the overall efficiency of HR processes did not improve to a significant extent after the implementation of HRIS (Phahlane and Kekwaletswe, 2017).

Theory Applied

The Technology Acceptance Model (TAM) has been used as a basis to understand the acceptance of HRIS at various organizations. This theory, developed by David (1989), states that an individual will accept and have intention to use new technology if they consider it easy with minimal required effort. Therefore, if employees consider HRIS as a system that is easy to use and that would help with their workload, they would readily and willingly adopt it (Sauvezon et al., 2021).

Methodology

Research Approach and Sampling Method

This study is qualitative in nature and follows the phenomenology approach to explore the significance of HRIS for faculty members. Phenomenology refers to recognizing a phenomenon based on the experiences of a group or an individual (Christensen, Johnson, & Turner, 2015). Descriptive phenomenology has been used to determine the perception and experience of faculty members regarding HRIS.

Purposeful sampling method helps the researchers gain in-depth knowledge of the phenomena under study (Patton, 2002). Therefore, non-probability purposeful sampling has been employed to select participants for this study. The participants included full-time faculty members working at higher education institutions of Pakistan who possessed a minimum of one-year teaching experience at their institutions. Faculty members possessing in-depth knowledge of HR practices and experience with the HRIS technology at universities were selected in order to gain first-hand insights from end-users. Thus, faculty members at seven renowned universities of Pakistan were interviewed to understand the significance of HRIS. The participants were nominated through the maximum selection method and belonged to diverse academic departments, namely Business Administration, Engineering, Computer Sciences and Social Sciences. In total, 14 faculty members were interviewed out of which 5 were females and 9 were males.

Instrument

In this study, semi-structured interviews were taken after developing an interview protocol to collect data. The sequence of questions asked differed depending on the responses and supplementary questions were asked from faculty members of some institutions in order to obtain additional information about HRIS and its modules. The length of interviews was kept flexible; however, the average interview lasted 30 minutes, while the longest was 1.5 hours in duration. The interview protocol was approved by domain and research experts and consisted of 15 questions that were developed as per the objectives of the study. The first couple of questions focused on obtaining the demographic information of respondents and the remaining questions focused on investigating the motivators behind the implementation of HRIS and the end-user experiences of faculty members. HRIS has an extensive range of applications, therefore, questions also aimed at exploring the expected use vs actual use, the benefits obtained, and the constraints attached.

Data Analysis Technique

After gathering primary data through interviews, the responses of faculty members were recorded as transcriptions and a thematic analysis was carried out to obtain insights. During the process of analysis, patterns were extracted from the data after coding and interpreting it (Lapadat, 2010). After allocating codes to the transcribed interviews, data was sorted and sifted to examine identical themes and to classify extracted patterns. Finally, the relevant data was arranged into categories (Miles et al., 2014). The memoing technique was employed to explore the phenomena of HRIS as experienced by faculty members of higher education institutions.

Validity and Reliability

The validity of the interview protocol was established after obtaining approvals from domain and research experts. The changes suggested by the experts were incorporated in the interview protocol. The reliability of the study depended on selecting reliable sources of data collection; therefore, based on the judgment of researchers, it was ensured that respondents who participated in the study were reliable full-time faculty members possessing a minimum of one-year experience working at their universities. A pilot interview from a faculty member was also conducted after finalizing the interview questions.

Results and Discussion

This study examined the end-user HRIS experiences of faculty members from seven Pakistani universities. Out of the seven universities under study, three were fully automated, three were using manual systems, and one was partially automated. A total of 14 interviews were conducted from 5 female and 9 male faculty members.

Table 1 summarizes the codes and themes extracted after conducting interviews of faculty members. The thematic analysis matrix, developed after sorting and sifting, has been tabulated in table 2.

Table 1: Codes and Themes Derived from Interviews of Faculty Members

Codes	Sources	Themes
Time and attendance	7	Current status of HR automation
Leave record	4	
Employee data	4	
Payroll	2	
Appraisals	1	
Student portals	6	
On-campus, off-campus record	2	
Recruitment	2	
No. Functions that are frequently used by faculty members have already been automated.	1	Need for automation
Yes. Need to automate basic functions.	3	
Not really. Basic functions of HR have been automated.	1	
Definitely. All functions need integration.	2	
Automation of payroll, training and succession planning is essential	1	Reasons for automation
Manual HR practices waste time	2	
Need to archive records, accurate appraisals and easy approvals	2	
24/7 access to system and employee data	2	
Technology simplifies work	2	
Minimizes paperwork	7	Motivators behind implementation of HRIS
Saves time and energy	7	
Reduces workload	7	
Improves communication across the institution	7	
Facilitates approvals	5	
Saves cost and space	1	
Reduces errors	7	
Allows easy access to data	2	

Increases transparency	7	User satisfaction
Human capital required	1	
Highly satisfied	2	
Satisfied	2	
Moderate	1	
Not satisfied	1	
To check attendance record	5	Interaction with the system
To check leave record	5	
To check salary status	2	
To get approvals	2	
To procure stationery items	2	
To use student portal	6	
To check rosters of colleagues	2	
Reduces layers of communication	7	Streamlining processes
Increases consistency of data	1	
Facilitates payroll process	2	
Integration between departments	4	
Speeds up interaction with HR	4	Simplification of routine work
Speeds up procurement	1	
Improves flow of communication	7	
Keeps faculty informed	4	
Allows faculty to focus on teaching	4	
Reduces paperwork	7	
Facilitates online testing and interaction with students	3	
Saves time and energy	4	Benefits derived
Reduces paperwork	7	
Reduces errors	7	
Improves efficiency of system and employees	5	
Improves accuracy of records	2	
Improves overall productivity	7	
Provides real-time information	1	

It has improved communication	4	Enhanced communication
It will improve communication	2	
It has enhanced my efficiency (allows me to focus on other tasks)	4	Improved efficiency
It will enhance efficiency	1	
Resistance from employees	2	Challenges associated with HRIS
Power and internet breakdowns	1	
Constant monitoring makes employees feel distrusted	1	
Training needed to understand system	1	
Used to full potential	2	Actual vs expected use
Not used to full potential	2	
Need to implement integrated system	1	
Need a 360-degree revamp	1	

Table 2: Thematic Analysis Matrix of Faculty Members

S.No.	Themes	University 1	University 2	University 3	University 4	University 5	University 6	University 7
1	Current status of HR automation	Attendance, Payroll, Leave records, Employee data, recruitment	Attendance, Leave records, short leave records, on campus/off-campus records, Employee data	Attendance, payroll, leave records, appraisals, e-learning portal, Employee data, recruitment	Attendance, leave records, daily schedules	Attendance, employee data, student portal	Attendance, Job descriptions	Attendance (Biometric and card system), student portal
2	Need for Automation	No	Yes	Not really	Definitely	Definitely	Yes	Yes
3	Reasons for Automation	-	Payroll, training and succession planning are important to be automated	-	Tedious task to take leave approvals on time	Archive employee records, accurate appraisals, easy approvals	24/7 access, quick and easy	Easy access to employee data
4	Motivators behind implementation of HRIS	Time because faculty is busy, data recording is tough, accessibility is limited	Paper work, calling HR people all the time	Mistakes, human capital required, time consuming	Time and effort	Cumbersome processes, waiting for approvals, record keeping	Lack of routine assistance, time and efforts	Low efficiency, time, tough task, late responses from departments
5	Satisfaction with HR applications	Highly satisfied	Satisfied	Highly satisfied	Moderate	Satisfied (HR practices are good but need automation)	Not satisfied (Because of no facilitation)	-

6	Interaction with the system	When leaves are required, to check attendance	All the time	For attendance mainly, sometimes for leave records	Regularly	If implemented, regular interaction will be there	Only for attendance	-
7	Streamlining of processes	Totally	Of course	Yes	Yes	It will if implemented	It will if implemented	Will improve if used
8	Simplification of work	Yes, no need to follow-up	To some extent	Yes	Yes	-	-	-
9	Benefits derived from HRIS	Saves time and energy	Less paper work, efficiency of system and employees	Reduction in errors, record keeping, accurate appraisals	Easy access to data, less paper work	Will reduce cumbersome processes, real-time information will be provided	If used will save time, accuracy in payroll	Will save time and improve productivity
10	Enhanced Communication	Improved	Improved information	Enhanced	Improved	Will enhance flow of info	-	It will if implemented
11	Improved Efficiency	Greatly enhanced	Enhanced	Enhanced	Can now focus on teaching	Will be improved	-	-
12	Challenges associated with HRIS	Understand system, attendance is not automatic	None	None	Power or internet breakdown	Employee resistance might be there	Automation leads to check on employees	If implemented without IT knowledge, people will resist
13	Actual versus expected use	Used to full potential	Not used to full potential	Used to full potential	Should automate more functions	Need integrated system	Need 360 degrees revamp	-

Higher Education Institutions Using HRIS

Motivators: Faculty members of universities that were using HRIS stated that employee data, attendance and leave records were fully integrated with the system and they could view their record on the system. Out of the four universities that were using HRIS, two mentioned that payroll was integrated with HRIS, while the other two indicated that payroll was not integrated. The faculty member of University 4 did not mention the integration of payroll function, however; an HR professional of the same university stated that payroll was integrated with the system. This revealed that faculty members of University 4 were unaware of the payroll module. Moreover, when inquired about the need for further automation, faculty members of University 2 and University 4 declared that there was a need to automate and integrate more functions of HR. A faculty member of University 2 stated:

“Functions such as training and appraisals should be automated. Succession planning should be automated. There is no effort being made for succession planning but it is essential. Training opportunities should be displayed on the system.”

Faculty members of University 2 believed that functions of payroll, training, and particularly, succession planning should be integrated with the system. Similarly, a faculty member of University 4 pointed out that the system allowed him to check the daily status of his attendance; however, it did not facilitate him in taking leave approvals. He added that the system did not allow him to check the status of his salary. Therefore, analysis of the universities that were using HRIS revealed that two out of four universities were using HRIS for only basic or administrative functions of HR.

Faculty members of institutions that were using HRIS considered manual practices to be time-consuming and error-prone. Lack of access to data and paperwork were also considered important motivators in shifting from manual practices to HRIS.

User experience: Faculty members of University 2 and University 4 professed that they were moderately satisfied with the system and identified the need for improvements in the system. They also pointed out that they utilized HRIS only to check the statuses of their attendance and leaves. On the other hand, faculty members of University 1 and University 3 indicated that they used HRIS on a regular basis because the system allowed them to perform most of their routine tasks. Faculty members of all universities, however, were of the opinion that compared to manual practices of HR; HRIS can streamline processes to a great extent.

Change in performance: Faculty members agreed that HRIS had contributed towards simplifying their office work. The major benefits derived from the system included less wastage of time, easy access to personal data, minimization of paperwork, reduction in errors, accuracy of appraisals, and transparency.

Significance: Faculty members of universities that were using HRIS confidently acknowledged that HRIS had not only improved their efficiency, but had also improved the overall flow of information, thereby, enhancing communication across the institution. A faculty member of University 4 stated:

“The system enables me to concentrate on my teaching because I no longer have to think about how many leaves have I consumed or what time can I schedule a meeting. I utilize this time on my lectures, research and students.”

Mismatch of use: Faculty members of University 2 and University 3 faced no challenge in using HRIS, however, a faculty member of University 1 revealed that in the beginning, the system was difficult for her to understand, but with the help of her colleagues, she learnt how to use the system

and faced no difficulty after that. She further identified a drawback indicating that although the attendance was integrated, it was not immediately updated on the portal. She revealed that an employee had specifically been designated to update daily attendance of employees on the portal, and hence, if that employee did not come on a particular day, faculty members had to wait for a day to apply for leaves.

A faculty member of University 4 highlighted an important challenge associated with HRIS by stating that the system is dependent on the availability of internet and power. Thus, power breakdowns can lead to a temporary, and in some cases, permanent loss of data. Therefore, employees feel handicapped in case of internet or power failure.

Finally, faculty members of University 2 and University 4 emphasized that HRIS is not being used to its full potential and has a lot of scope for improvement. The faculty members of both universities suggested that more HR functions needed automation and integration with HRIS.

Higher Education Institutions Not Using HRIS

Motivators: Faculty members of universities that were not using HRIS were in favour of using it and considered it to be extremely useful for archiving employee records, retrieving information and getting timely approvals from management. All of these universities had automated their time and attendance systems, and except for one university, the universities were also using student portals that enabled faculty members to interact with students and students could also access material related to their courses. All three universities that were not using HRIS considered manual practices of HR to be cumbersome. A faculty member of University 7 expressed the potential benefits of HRIS in the following words:

“At present, the process involves moving files from one office to another for approvals and there is a need to automate this. Procurement of goods such as stationery items is also cumbersome and needs automation.”

User experience: Faculty members, although satisfied with the HR practices of their universities, highlighted the need for further automation. A faculty member of University 5 identified the functions that needed automation in the following words:

“A major HR function that requires automation is storage of employee record. This includes academic and professional records, performance appraisals etc. I feel there is a need to have a system for procurement that will look into equipment being acquired for labs or stationery items needed by faculty.”

Change in performance: Faculty members were of the opinion that implementation of HRIS at their institutions will save their time and energy, provide real-time information, and ensure accuracy of payroll. A faculty member of University 5 revealed:

“Manual HR practices involve a lot of paperwork and time. Implementation of technology-based HR is going to reduce paperwork. Having soft versions of personal files on a system will save time, reduce workload, and save paper.”

Therefore, after analyzing the interviews, it was discovered that all faculty members of universities who had not adopted HRIS considered it to be a useful system and were willing to use it if their institutions implemented it.

Significance: While exploring the significance of technology-based information systems from faculty members, most respondents were of the opinion that if technology is implemented, it will enhance the flow of information between faculty members and the HR department. As a result, the faculty members would benefit from timely interaction and efficiency of work.

Reasons for mismatch: Although faculty members considered HRIS to be a useful technology, some believed that employees might resist if this system was implemented at their institutions. A faculty member of University 6 said:

“The major drawback of Biometric Attendance System is that it restricts the movement of faculty members. Constant monitoring indicates lack of trust by the top management.”

Thus, one important concern highlighted by a faculty member was that after the adoption of HRIS, there might be constant monitoring over them that can result in general dissatisfaction among employees because they might feel bound and distrusted by the management.

Conclusion

This study aimed to investigate the role of HRIS at higher education institutions of Pakistan along with the benefits derived and the challenges faced by faculty members. After obtaining in-depth insights from faculty members, it was discovered that HRIS is perceived as a valuable technology that should be implemented because it enhances communication and efficiency across the institution. The major benefits derived by faculty members included reduction in wastage of time, access to real-time information, timely approvals, and decline in paperwork. This finding is in line with a study by Bamel et al. (2014) which concluded that HRIS streamlines HR functions for employees across the organization. Faculty members highlighted that they can pay more attention to their lectures, research-work and students if they do not have to run from one office to another for approvals. On the other hand, some faculty members indicated that HRIS restricts their movement because it tracks the hours logged-in on campus. Faculty members considered breakdown of power and breach of privacy as major concerns associated with the use of HRIS. In addition, some faculty members were of the opinion that without proper knowledge of the benefits that can be derived from HRIS, individuals might resist this technology. These results support the findings of a research by Phahlane and Kekwaletswe (2017) which indicated that employees need to be comfortable and trained in order to ensure smooth functioning of technological systems at organizations. Conversely, some faculty members stated that HRIS brings no challenge and is a useful technology for higher education institutions.

Theoretical and Practical Implications

The results of this study confirm the Technology Acceptance Model by David (1989) and indicate a strong relationship between the perceived usefulness of HRIS and the positive behaviour of faculty members towards adoption of new technology.

Successful implementation of HRIS can assist universities with their succession planning. Once a faculty member decides to leave the university, HRIS can facilitate smooth transition of his/her courses and responsibilities by identifying the most appropriate replacement. This will not only save time but will also place the right people at the right jobs. The results also indicate that the overall productivity and job satisfaction of faculty members increases with the adoption of HRIS. HRIS reduces paperwork, saves time and facilitates smooth communication between the HR department and the employees. Faculty members working at universities that employed HRIS were found to be more satisfied with their workload since they were able to focus on their lesson plans. Thus, universities in general and faculty members in particular will both benefit from the use of HRIS.

Limitations and Dimensions for Future Research

Owing to the onset of the global COVID-19 pandemic, this research has taken a limited number of universities as its sample. Review of the literature suggests that qualifications and designations of faculty members can influence the acceptance of HRIS at universities; hence, a study taking

into account the demographics of employees in relation to use of HRIS can also be undertaken in the future. This study was limited to private universities while the perception of faculty members may differ at public sector universities of Pakistan. Therefore, a comparison of faculty members' perception at public and private universities of Pakistan can also be carried out in the future.

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