

Impact of Management Support, IT Support, Social Influence on HR Professionals' Satisfaction with Human Resource Information System (HRIS): Mediating Role of Work Engagement

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Abstract

This study strives to make a valuable contribution to the existing body of research through investigating the impact of management support and IT staff support on the level of satisfaction experienced by Human Resource (HR) professionals with Human Resource Information System (HRIS). Moreover, we examine the potential mediating influence of work engagement and the moderating impact of effort expectancy on the aforementioned interpersonal interactions. The cross-sectional survey research used the convenience sampling technique. A total of 219 human resources professionals participated in the online questionnaire. The ultimate sample, subsequent to the removal of responses lacking logical coherence, comprised 164 male and 55 female human resources professionals. The findings of this study suggest the presence of management support, IT support, and social influence significantly contribute to the enhancement of HR professionals' satisfaction with HRIS. Additionally, the results we obtained indicate that work engagement significantly influences the strength of these relationships. Effort expectancy serves as a moderating factor in the relationship between management support and the satisfaction of HR professionals. Offering assistance to top management and IT personnel can contribute to the improvement of HR professionals' overall satisfaction with Human Resource Information Systems (HRIS). This support can manifest in the form of favorable attitudes towards information technology, acknowledgment of the system's significance, and understanding of its strategic capabilities. Moreover, the provision of proficient technical user support has the potential to positively influence the attitudes of HR professionals towards HRIS, consequently leading to an increased level of satisfaction with the system. It is imperative for organizations to diligently monitor the level of work engagement among employees when making decisions regarding technology-related initiatives. The presence of a high level of work engagement among employees is crucial and advantageous for the successful implementation of such initiatives. It has been determined that investigating the effectiveness of technology-related initiatives, such as HRIS,

necessitates the consideration of mediating mechanisms, such as work engagement. Further investigation should be conducted to explore additional mediators that can contribute to theory development in this particular field.

Keywords: HRIS Effectiveness, HR Professionals, Work Engagement, Management Support, IT staff support.

Introduction

The enactment of Human Resource Information Systems (HRIS) has had a profound impact on the functioning of human resource systems within organizations. Human resource information systems (HRIS) are software systems extensively utilized by human resource professionals for the purpose of storing and managing employee data, encompassing payroll, benefits, performance evaluations, and training records. Human Resource Information System (HRIS) solutions are designed with the purpose of automating various HR operations and facilitating the efficient management of employee information. The implementation of a Human Resource Information System (HRIS) has the potential to enhance a company's long-term productivity and profitability through the optimization of operational efficiency and the modernization of the HR department.

Despite the abundance of research conducted on the effectiveness of Human Resource Information Systems (HRIS), it is imperative to comprehend the pivotal role that Human Resource (HR) professionals assume in facilitating the successful implementation and utilization of these systems. The criticality of evaluating the satisfaction of HR professionals with HRIS has been highlighted in recent research conducted by [Pani \(2015\)](#). The individuals' perspectives on the adoption of HRIS are significantly shaped by their evaluations of the system's efficacy and user-friendliness ([Davis, 1989](#)). Therefore, it is imperative to prioritize the satisfaction of HR professionals, as it directly influences the strategic capabilities and overall effectiveness of the Human Resource Information System (HRIS) within the organization ([Bondarouk & Ruël, 2009](#); [Lee, 2007](#); [Strohmeier, 2007](#); [Tansley, Huang, & Foster, 2013](#)).

Management support is a crucial element impacting HR professionals' satisfaction with HRIS (Al-Dmour, Love, & Al-Zu'bi, 2013; Al-Dmour & Zu'bi, 2014; Kolatshi, 2017). When human resources (HR) professionals observe the endorsement of HR information systems (HRIS) implementation by top-level management, it cultivates positive attitudes and facilitates the alignment of HR management (HRM) goals with the broader business objectives (Kheybari et al., 2020; Torrington, Hall, & Taylor, 2005). Understanding the intricate workings of different organizational factors, including top management support, IT staff assistance, and social influence, is imperative in comprehending the impact they have on the level of satisfaction experienced by HR professionals with HRIS. The examination of work engagement as a potential mediator in these interactions is warranted due to its established status as both an antecedent and outcome of various work-related behaviors (Christian & Ellis, 2011; Crawford, LePine, & Rich, 2010; Lesener, Gusy, & Wolter, 2019).

This study seeks to strengthen the current research by investigating the impact of top management support, IT staff support, and social influence on the level of satisfaction experienced by HR professionals with HRIS. Additionally, we look at the mediating influence of work engagement and the moderating influence of effort expectancy on these associations.

HRIS and its effectiveness

The implementation of Human Resource Information Systems (HRIS) has significantly revolutionized the manner in which organizations effectively administer their human resources. According to Hendrickson (2003), these systems facilitate the procurement, retention, administration, examination, categorization, and dissemination of relevant human resource data within an organizational context. The effective use of Human Resource Information Systems (HRIS) has been shown to enhance the efficiency of Human Resource Management (HRM) through the provision of a centralized database that consolidates information obtained from multiple applications (Akai & Fishbein, 2012).

The use of Human Resource Information Systems (HRIS) has been shown to enhance various aspects of the recruitment process, including the ability to attract

candidates in both the short and long term, facilitate prescreening and application processing, as well as streamline the hiring and onboarding of fresh hires (Keim & Weitzel, 2009). HRIS facilitates long-term planning by offering personnel planning information and supply and demand forecasts (Dessler, Cole, & Sutherland, 2008). In addition, the use of Human Resource Information Systems (HRIS) can contribute to the management of risks and security concerns by effectively addressing the handling of confidential and highly sensitive personal information, as well as implementing robust security measures across multiple platforms.

The main objective of implementing a Human Resource Information System (HRIS) within a business is to attain a competitive edge within the market (Al-Dmour et al., 2013). Many organizations that have successfully integrated Human Resource Information Systems (HRIS) have gained a competitive advantage. In the current era of knowledge-based economies, organizations are increasingly inclined towards reducing long-term human resources (HR) expenditures while simultaneously assuming a strategic position within firms (Khan, Hasan, & Rubel, 2015).

HR professionals satisfaction with HRIS

The widespread use of Human Resources Information Systems (HRIS) has emerged as a crucial undertaking in order to fully harness the strategic capabilities of Human Resources Management (HRM) (Bondarouk & Ruël, 2009; Lee, 2007; Strohmeier, 2007; Tansley et al., 2013). Strategic coordination and Information Systems (IS) support for HR procedures have often lagged behind despite the advancements in technological and management developments that have been employed to enhance main business processes (Hussain, Wallace, & Cornelius, 2007). The use of a Human Resource Information System (HRIS) facilitates the automation of various HR functions and the delivery of efficient HR services across the organization, thereby elevating the HR department's role to that of a strategic participant within the corporation (Ulrich, 1996).

Human Resource Information Systems (HRIS) deployment has had a substantial influence on the responsibilities and tasks work of HR professionals (Pani, 2015). These systems facilitate the procurement, retention, administration,

examination, categorization, and dissemination of relevant human resource data within an organizational context. The use of Human Resource Information Systems (HRIS) enables HR professionals to allocate their attention toward additional HR responsibilities, including facilitating organizational change, establishing strategic partnerships, and monitoring employee well-being. This is achieved through the facilitation of data accessibility and the quick processing of administrative information (Hussain et al., 2007).

According to Davis (1989), when an organization implements a Human Resource Information System (HRIS), it is customary for employees who engage with the system to assess its efficacy and user-friendliness. The acquisition of knowledge and proficiency necessary for the operation of the novel system constitutes a pivotal factor in shaping the degree of success in the adoption of HRIS among human resources personnel (Panayotopoulou, Vakola, & Galanaki, 2007). However, a significant number of human resources (HR) personnel exhibit a deficiency in the necessary skills, thereby constraining their ability to effectively leverage a Human Resource Information System (HRIS) (Lukaszewski, Stone, & Stone-Romero, 2008).

Employees who possess limited knowledge regarding the full range of capabilities offered by the Human Resource Information System (HRIS) may develop a negative perception of its effectiveness. In contrast, human resources (HR) personnel who possess a comprehensive understanding of the system's functionalities and the enhanced efficacy it offers in their professional tasks perceive the human resource information system (HRIS) as a more advantageous and user-friendly tool. The perceptions regarding the utility and user-friendliness of the HRIS have a significant impact on the comprehensive assessment of the system and subsequently shape the attitude of HR personnel towards its implementation (Davis, 1989).

The attitudes of human resources personnel toward the usage of a Human Resource Information System (HRIS) are determined by their evaluation of its usefulness and ease of use (Taylor & Todd, 1995). Human resources (HR) employees have high expectations regarding the potential benefits of implementing a Human

Resource Information System (HRIS). They believe that an HRIS has the capacity to enhance the efficiency of HR processes, automate administrative tasks, and support decision-making in HR management. Consequently, they anticipate that the adoption of an HRIS will lead to an elevated status within the organization and create new career prospects for HR professionals (Beckers & Bsai, 2002; Bondarouk & Ruël, 2009; Hussain et al., 2007; Lawler & Mohrman, 2003; Lukaszewski et al., 2008). In contrast, changes in tasks, operations, and responsibilities necessitated by a new HRIS can result in a negative evaluation (Panayotopoulou et al., 2007; Ruel, Bondarouk, & Van der Velde, 2007).

In their research, Panayotopoulou et al. (2007) stress how important it is to address HR staff's worries about how their workflows and responsibilities will change when Human Resource Information Systems (HRIS) are put in place. This is crucial for fostering positive perceptions and attitudes towards the HRIS. In a similar vein, the authors Ruel et al. (2007) underscore the importance of implementing comprehensive training and support mechanisms to address potential challenges and resistance that may arise during the installation of HRIS. This approach ultimately leads to heightened satisfaction among HR professionals and enhances their ability to maximise the use of the HRIS.

Bondarouk and Ruël (2009), Beckers and Bsai (2002), and Lukaszewski et al. (2008) research indicates that an HRIS has the potential to yield various advantages, including enhanced efficiency in HR processes and increased opportunities for career development among HR professionals. In contrast, Panayotopoulou et al. (2007) and Ruel et al. (2007) highlight the challenges and opposition that can arise in the process of implementing HRIS, primarily as a result of alterations in tasks and responsibilities.

In a nutshell, the level of satisfaction experienced by HR professionals with an HRIS is contingent upon their subjective evaluations of its perceived utility and user-friendliness. The effective use of a Human Resource Information System (HRIS) is heavily influenced by positive perceptions, as they motivate individuals to embrace the system. Conversely, negative perceptions can result in resistance and impede the realization of the HRIS's strategic potential.

Effect of Top management support

The effectiveness of Human Resource Information Systems is contingent upon the vital backing provided by top management (Al-Dmour et al., 2013; Al-Dmour & Zu'bi, 2014; Kolatshi, 2017). Extensive research has established the significant influence of senior management support on employees' perceptions of information systems and the level of excitement experienced by developers and users (Igarria & Tan, 1997; Lawrence & Low, 1993). The distribution of resources necessary for the successful adoption of Human Resource Information Systems (HRIS) is influenced by several factors, including positive attitudes toward IT, recognition of the system's importance, and awareness of its strategic potential (Al-Dmour et al., 2013; Kheybari et al., 2020; Torrington et al., 2005). Executives' positional power can help in overcoming political opposition to HRIS implementation. In addition, their participation in information system management and development committees is essential to the development of a successful HRIS (Kheybari et al., 2020; Torrington et al., 2005).

HRIS acceptability is directly related to the size of the organization (Bondarouk, Parry, & Furmueller, 2017). It may be easier to implement such systems in small and large organizations if senior management is aware of them and supports them. Support from senior management ensures the availability of resources such as hardware, software, employees, and funding necessary for HRIS design, implementation, and development (Kovach & Cathcart Jr, 1999). Acknowledging the significance of human resources (HR) and integrating technological advancements to streamline its operations contributes to the enhanced efficacy of human resource information system (HRIS) implementation (Lengnick-Hall & Moritz, 2003).

The availability of top management support is commonly linked to increased levels of user satisfaction and perceived usefulness (Igarria & Tan, 1997; Lawrence & Low, 1993). It is imperative to acknowledge that certain studies have failed to establish a substantial correlation between top management support and user satisfaction (Haines & Petit, 1997).

According to the current research, it is generally accepted that the provision of top management support plays a vital part in determining users' satisfaction levels

with Human Resource Information Systems (HRIS). We put forth the subsequent hypothesis.

H1: Top management support is positively related with HR professionals' satisfaction with HRIS.

IT staff support

Human Resource Information Systems (HRIS) play a vital part in improving the level of service delivered to Human Resources (HR) professionals (Watson et al., 1993). The assessment of HR staff productivity is influenced by the implementation of HRIS, with service quality emerging as a crucial determinant. It is suggested that an enhancement in service quality leads to an overall improvement in efficiency (Watson et al., 1998). Information technology (IT) professionals play a significant role in shaping users' perspectives on technology by providing valuable contributions to human resources (HR) personnel and information systems.

The perceptions of technology among users are significantly shaped by their interactions, conduct, and affiliations with information technology (IT) personnel. The support provided by the IS organization and IT professionals, as defined by Petter, DeLone, and McLean (2013), has an impact on user attitudes and acceptance of HRIS. Human resources professionals depend on information technology workers to provide operational support, maintain human resources information systems (HRIS), and facilitate human resources processes. The provision of technical user support plays a crucial role in shaping user attitudes and, ultimately, the acceptance of a system.

In general, the level of support that human resources (HR) staff receives from information technology (IT) staff, in terms of both tangible and intangible services, has a significant impact on their experience with human resource information systems (HRIS). The provision of technical support is of utmost importance in influencing user perceptions and overall satisfaction with Human Resource Information Systems (HRIS). The optimization of HRIS usage and overall HR productivity is contingent upon the provision of effective IT staff support. Therefore, we present the following hypothesis:

H2: IT staff support positively affects HR professionals' satisfaction with HRIS.

Social Influence

Extensive research has been conducted on the impact of social influence on the effectiveness of Human Resource Information Systems (HRIS) and the adoption of technology. Social influence is a phenomenon that occurs when an individual's beliefs, feelings, attitudes, or behaviors undergo a transformation as a result of interacting with individuals who are perceived to be similar, desirable, or possessing expertise (Kelman, 1958). The framework of IS research encompasses social influence, which is conceptualized as the "interpersonal considerations" involved in the acceptance and use of technology. This perspective acknowledges the collaborative nature of decision-making processes and the impact they have on individuals within a social context.

The significance of comprehending the determinants that impact technology adoption choices has escalated due to the proliferation of information and communication technologies (ICT) in various aspects of our daily existence. The growing presence of emerging technologies, specifically social technologies, has led to a heightened significance of social influence in determining the success of these technologies (Junglas et al., 2013; Tsai & Bagozzi, 2014). It is imperative for researchers and practitioners to have a comprehensive understanding of the manner in which social influences impact the process of technology adoption.

Despite the existence of a theoretical consensus regarding the significance of social impact in the process of technology adoption, conflicting empirical findings have raised doubts about its explanatory capacity and the accuracy of its current conceptual framework. There is available a body of research providing evidence for the influence of social impact on the adoption of information technology (IT), while conversely, there are studies that do not support this relationship.

The study conducted by Dholakia, Bagozzi, and Pearo (2004) examined virtual communities by focusing on group-level factors, including group norms and social identity. Sarker and Valacich (2010) assert that scholars in the field of academia explore the phenomenon of group-level technology adoption decisions with the aim of comprehending the intricate social dynamics involved. The theoretical and

empirical examination of communal "we-intentions" within the framework of technology adoption has also been explored (Shen, Cheung, & Lee, 2013).

In order to take full advantage of the potential of HRIS and other technological innovations, it is important to comprehend the significance of social influence on technology adoption. Based on a review of the current research, we propose the following hypothesis:

H3: Social influence positively affects HR professional's satisfaction with HRIS.

Work Engagement as Mediator

Research and systematic reviews consistently show a connection between work engagement and various job-related antecedents (Christian & Ellis, 2011; Crawford et al., 2010; Lesener et al., 2019). These studies place significant emphasis on the significance of employment resources, job demands, and personal traits in influencing work engagement. The significance of positive leadership styles, including ethical, honest, and transformative leadership, has been acknowledged as a crucial determinant of work engagement.

The significance of work engagement in achieving organisational success lies in its direct influence on employee performance and overall outcomes (Schaufeli & Bakker, 2004). The concept encapsulates the enthusiasm, commitment, and vigour exhibited by employees in their professional endeavours. Work engagement can be impacted by multiple factors, such as the presence of organisational and management support, as well as the existence of a social support system within the workplace. The level of work engagement experienced by employees tends to increase when they perceive the presence of a strong and comprehensive support system within their respective organisations (Eisenberger et al., 2001) In terms of improving employee work engagement, it is necessary to acknowledge the significance of senior management support (Saks, 2006).

The work engagement of employees is significantly impacted by the presence of social support within the workplace (Rich, Lepine, & Crawford, 2010). Research has shown that individuals who possess robust social connections and receive support and motivation from their colleagues tend to exhibit higher levels of work

engagement. The provision of social support in the workplace functions as a valuable job-related asset, enhancing the emotional well-being of employees and fostering heightened levels of work engagement. Employees who are actively involved in their work are likely to exhibit greater receptiveness to change and a heightened enthusiasm towards embracing novel technologies such as HRIS. This, in turn, can lead to improved individual performance and an overall increase in organisational productivity. Therefore, drawing from existing literature, it is reasonable to posit that work engagement serves as a possible mediator between the independent variables of this study and HR professionals' satisfaction with HRIS. We put forth the following hypotheses.

H4: Work Engagement positively mediates the relationship between top management support and HR professionals' satisfaction with HRIS.

H5: Work Engagement positively mediates the relationship between IT staff support and HR professionals' satisfaction with HRIS.

H6: Work Engagement positively mediates the relationship between social influence and HR professionals' satisfaction with HRIS.

Effort Expectancy

The moderating impact of effort expectancy, defined as the perceived ease of use of a system, on the satisfaction of HR professionals utilizing Human Resource Information Systems (HRIS) can be observed. There are two significant factors that impact the acceptance of HRIS: perceived usefulness, also known as performance expectancy, and perceived ease of use, also known as effort expectancy. The aforementioned elements are integral components of the foundational models employed for elucidating the adoption of Human Resource Information Systems (HRIS) (Menant, Gilibert, & Sauvezon, 2021). Human resources professionals are more likely to embrace and proficiently use a system if they hold the perception that it possesses a user-friendly interface. If users perceive the system as being challenging to utilize, their inclination to adopt and utilize it may diminish. It is postulated that the level of effort expectancy plays a moderating role in the association between the independent variables and the satisfaction of HR professionals with HRIS.

H7: Effort expectancy moderates the relationship between top management support and HR professionals' satisfaction with HRIS.

H8: Effort expectancy moderates the relationship between IT support and HR professionals' satisfaction with HRIS.

H9: Effort expectancy moderates the relationship between social influence and HR professionals' satisfaction with HRIS.

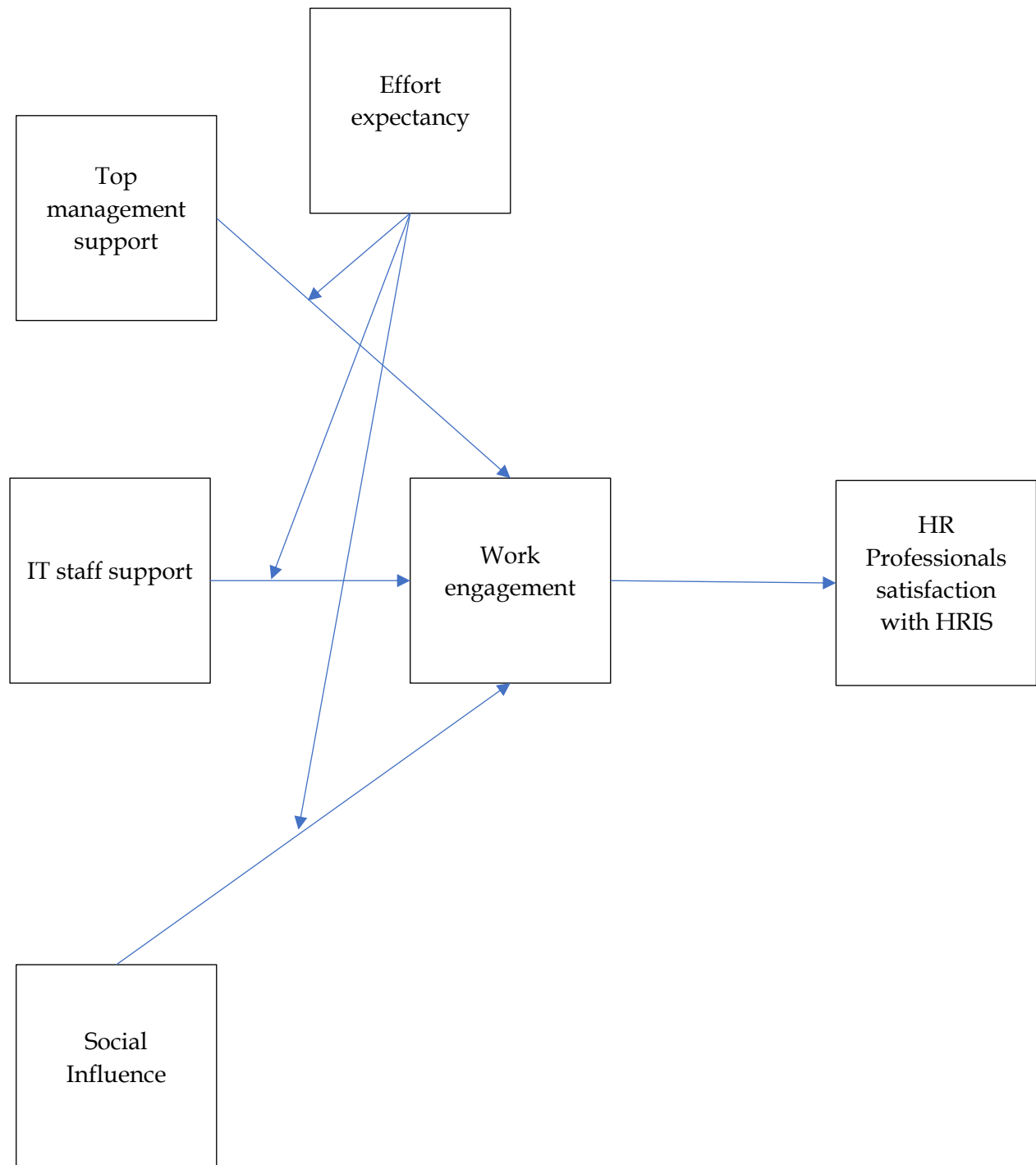


Figure 1: Research framework

Methods

Target Population and sample

The objective of this study was to assess the efficacy of HRIS through the evaluation of HR professionals' satisfaction. To achieve this, HR employees from various organisations in Saudi Arabia were recruited. Prior to data collection, it was verified that the organisations of the selected respondents were already utilising standardised Human Resource Information Systems (HRIS) for their HR-related activities.

Convenience sampling was employed as the method of data collection due to the absence of a sampling frame. The data was obtained via online surveys. A total of 219 participants completed the questionnaire. The survey questionnaire was constructed utilising validated scales, as evidenced in [Table 1](#).

Measurement Scales

Following is the description of the scale items used in this research ([Table 1](#)).

Table 1: Measurement Scales

HR professionals satisfaction with HRIS	(Kolatschi, 2017)
1-Overall I am satisfied with our HRIS.	
2- Overall I am satisfied with the modules or applications that are installed and available for use.	
3- In general, I feel that HRIS supports my professional status.	
4- The employees of the human resources department appear to be satisfied with our HRIS.	
5- I feel that using HRIS to perform HR activities make my organization to be higher in comparison with the other organizations.	
6- HRIS makes the HR department more important to the organisation.	
7- HRIS could be better utilized.	
8- HRIS meets my expectations for what I hope to do regards to HR Activities	
9- I am satisfied with the level of using HRIS in performing the routine tasks related to human resources.	
10- I am satisfied with the level of using HRIS in performing the strategic activities related to human resources, for example, planning HR	

 Top management support (Kolatshi, 2017)

- 1- In general, top management supports the use of HRIS.
- 2- Top management is aware of the benefits that can be achieved with the use of HRIS.
- 3- Top management recognises HRIS as a tool to increase the productivity of HR professional.
- 4- There is an enough support from top management for requirements of applications of HRIS for example, material requirements (hardware and software).
- 5- The required financial support is available for adopting and Maintenance of HRIS.
- 6- Top management recognises the potential of HRIS as a competitive tool.
- 7- Management is really keen to see people happy with using the system.
- 8- Top management recognises that HRM is one of the most important activities in the organisation.
- 9- Top management recognises the important of adopting HRIS in HR activities.
- 10- Top management intends to keep pace with changes in the surrounding environment in order to developing the system, and then meet the growing demand for information.
- 11- Top management always personally involved in matters related to the use of IT within the firm, for example, participation in committees related to technology.

 Social influence (Venkatesh & Davis, 2000)

- 1- In general, HR employees support in the use of HRIS.
- 2- There is cooperation between employees who run HRIS with each other.
- 3- Employees who run HRIS have initiative for improving method or style of work by using HRIS.
- 4- Employees who run HRIS accept constructive criticism and feedback in the system from others.
- 5- Employees who are responsible for running the system have technical required skills for running the current applications of the system.
- 6- There is an agreement over important issues between the managers of the different units that use HRIS.
- 7- HR staff provide new ideas related to using information systems.
- 8- Managers team of HRIS unit recognise the potential of the system as a competitive tool.
- 9- Managers team of HRIS department recognise the system as a tool to increase the productivity of professional employees.
- 10- Managers and employees of different departments meet frequently to discuss important issues

 IT staff support (Kolatshi, 2017)

- 1- Interaction between employees who run HRIS and IT staff is cooperative and productive.
 - 2- IT staff show a sincere interest in solving user problems.
 - 3- Required time with which the IT staff responds to user requests for changes in existing HRIS or services is timely and fast.
 - 4- The technical competence of the IT staff is up-to-date.
 - 5- A specific person (or group) is available for assistance with hardware and software difficulties.
 - 6- The behaviour of IT staff instills confidence in users.
 - 7- IT staff has sufficient technology skills and expertise to do their job well
 8. IT staff are always willing to help user.
 - 9- IT staff are consistently courteous with user.
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Effort Expectancy	(Dey & Saha, 2020)
1. Learning how to use HRIS is effortless	
2. HRIS platform is easily understandable	
3. Overall I find HRIS easy to use	
Work Engagement	(Schaufeli et al., 2017)
1. At my work, I feel bursting with energy.	
2. I am enthusiastic about my job.	
3. I am immersed in my work.	

Data Analysis

The data was analysed using the Smart pls 4 software. There exist multiple rationales for our selection of variance-based structural equation modelling (PLS-SEM) over covariance-based SEM (CB-SEM). Initially, it should be noted that CB-based SEM is employed for the purpose of testing existing theories, while PLS-based SEM is particularly suited for theory development and prediction in the exploratory phase. Furthermore, Partial Least Squares (PLS)-based Structural Equation Modelling (SEM) has the capability to examine both formative and reflective relationships. In contrast, Covariance-Based (CB) SEM solely focuses on reflective relationships. Partial least squares structural equation modelling (PLS-SEM) provides a more comprehensive explanation of the variance in the dependent variable that is attributable to the independent variable (Hair Jr et al., 2017).

Results

Table 2 presents the reliability and validity of scales. According to results are measurement scales are valid and reliable for this study.

Table 2: Reliability and Validity

	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)
TMS	0.081	0.764	0.608
ITSS	0.0793	0.801	0.761
SI	0.864	0.867	0.697
WE	0.706	0.833	0.734
HPS	0.764	0.799	0.684
EE	0.867	0.874	0.844

Note: TMS= Top Management Support; ITSS= IT Staff Support; SI= Social Influence; WE= Work Engagement; HPS= HR Professional Satisfaction; EE= Effort Expectancy

This study employs two distinct techniques, namely the Hetero-Trait-Mono-Trait (HTMT) ratio and the Fornell & Larcker criteria, to assess the discriminant validity. [Henseler, Ringle, and Sarstedt \(2015\)](#) assert that HTMT is a novel technique employed for the purpose of establishing discriminant validity. [Henseler, Ringle, and Sarstedt \(2015\)](#) established that the values of HTMT should not surpass the threshold of 0.90. If the values of the matrix surpass this benchmark, it signifies an issue in establishing discriminant validity. The values presented in [Table 4](#) indicate that all the values in the HTMT table exceed the threshold of 0.90.

Table 3: HTMT

	TMS	ITSS	SI	WE	HPS	EE
TMS						
ITSS	0.467					
SI	0.583	0.367				
WE	0.469	0.508	0.511			
HPS	0.603	0.499	0.604	0.649		
EE	0.567	0.534	0.537	0.502	0.536	

Note: TMS= Top Management Support; ITSS= IT Staff Support; SI= Social Influence; WE= Work Engagement; HPS= HR Professional Satisfaction; EE= Effort Expectancy

Furthermore, the researchers also utilised the Fornell and Larcker criteria to evaluate the discriminant validity. Based on the criteria established by [Fornell and Larcker \(1981\)](#), it is necessary for the square root of the average variance extracted (AVE) of the variables to exceed the correlation of the remaining values within the matrix. To validate these criteria, the square root values are positioned along the diagonal of [Table 5](#). The aforementioned values exhibit a higher magnitude in comparison to the remaining values within the table.

Following the evaluation of discriminant validity, the subsequent step involves the assessment of the values of Inner VIF. The evaluation of Variance Inflation Factor (VIF) is crucial in order to ascertain that the constructs being studied do not exhibit excessive overlap. According to the study conducted by [Hair Jr et al. \(2017\)](#), it is recommended that the values of the inner Variance Inflation Factor (VIF) should be below 5. The data presented in [Table 6](#) demonstrates that these criteria are also satisfied. Therefore, the occurrence of multicollinearity among variables is eliminated.

Table 4: Fornell & Larcker

	TMS	ITSS	SI	WE	HPS	EE
TMS	0.789					
ITSS	0.347	0.766				
SI	0.267	0.346	0.805			
WE	0.467	0.409	0.367	0.794		
HPS	0.390	0.467	0.429	0.537	0.809	
EE	0.300	0.462	0.324	0.468	0.462	0.780

Note: TMS= Top Management Support; ITSS= IT Staff Support; SI= Social Influence; WE= Work Engagement; HPS= HR Professional Satisfaction; EE= Effort Expectancy

Table 5: VIF

	WE	HPS
TMS	2.301	
ITSS	2.114	
SI	1.287	
WE		2.014
HPS		
EE		1.717
EE	2.341	

Note: TMS= Top Management Support; ITSS= IT Staff Support; SI= Social Influence; WE= Work Engagement; HPS= HR Professional Satisfaction; EE= Effort Expectancy

The measurement framework of the study has been effectively evaluated at this stage. This process involves the assessment of a structural model, which includes the evaluation of coefficients of determination and hypothesis testing. The degree to which the independent variable explains the variation in the dependent variable is indicated by the coefficient of determination, commonly referred to as R-squared. The R-squared values indicate the extent to which the independent variable(s) collectively influence the dependent variable. The primary objective of Partial Least Squares Structural Equation Modelling (PLS-SEM) is to improve the coefficient of determination (R square value). This implies that the model's predictive accuracy will be higher if the R square value is higher. According to scholarly researchers, a value of R square exceeding 0.33 is regarded as indicative of a moderate level. [Table 8](#) displays the moderate R square values observed in this study.

Table 6: R square

	R square
WE	0.499
HPS	0.543

Table 7: Direct Results

	Path	Beta	SD	T value	P Values	Decision
H1	TMS -> WE	0.255	0.048	2.67	0.000	Accept
H2	ITSS -> WE	0.197	0.037	2.66	0.000	Accept
H3	SS -> WE	0.198	0.052	3.29	0.000	Accept
	WE -> HPS	0.264	0.056	2.88	0.000	
H7	Moderating Effect TMS-->EE --> WE	0.347	0.049	3.21	0.000	Accept
H8	Moderating Effect ITSS -> EE -->WE	0.071	0.055	1.22	0.167	Reject
H9	Moderating Effect SI -> EE -->WE	0.028	0.040	0.587	0.215	Reject
	WE --> HPS	0.346	0.047	3.89	0.000	

Note: TMS= Top Management Support; ITSS= IT Staff Support; SI= Social Influence; WE= Work Engagement; HPS= HR Professional Satisfaction; EE= Effort Expectancy

Table 8: Mediating Results

	REL	B	SD	T value	P Values	
H4	TMS -> WE -> HPS	0.061	0.022	2.67	0.000	Accept
H5	ITSS -> WE -> HPS	0.072	0.021	3.20	0.000	Accept
H6	SI -> WE -> HPS	0.068	0.025	3.68	0.000	Accept

Note: TMS= Top Management Support; ITSS= IT Staff Support; SI= Social Influence; WE= Work Engagement; HPS= HR Professional Satisfaction; EE= Effort Expectancy

The examination of predictive relevance is also conducted at the conclusion. According to [Vinzi, Trinchera, and Amato \(2010\)](#), in order to establish predictive relevance, it is necessary for the value of the Q square to be greater than zero. [Table 9](#) demonstrates that the outcomes of Q square surpass zero, thereby establishing the predictive relevance.

Table 9: Q square

	Q ²
WE	0.467
HPSS	0.401

Hypotheses Testing

The current investigation is designed to examine nine hypotheses pertaining to the level of satisfaction among Human Resource (HR) professionals with Human Resource Information Systems (HRIS). Tables 7 and 8 present a summary of the findings. The initial hypothesis (H1) was confirmed, positing a positive correlation between top management support and HR professionals' satisfaction with HRIS. The acceptance of the second hypothesis (H2) was also observed, which posits that the level of IT staff support has an impact on the satisfaction of HR professionals with HRIS. The acceptance of the third hypothesis (H3) suggests that there is a significant influence of social influence on the level of happiness experienced by HR professionals with HRIS.

Based on the fourth, fifth, and sixth hypotheses (H4, H5, H6), it can be argued that work engagement serves as a positive mediator in the association between top management support, IT staff support, and social influence, and the level of satisfaction experienced by HR professionals with HRIS. All three hypotheses were accepted.

The acceptance of the seventh hypothesis (H7) indicates that there is evidence supporting the notion that effort expectancy plays a moderating role in the association between top management support and the level of satisfaction experienced by HR professionals with HRIS. Based on the eighth and ninth hypotheses (H8, H9), it can be posited that the relationship between IT support and social influence and the level of satisfaction experienced by HR professionals with HRIS is influenced by effort expectancy. Both of these hypotheses were found to be invalid and were subsequently rejected.

Discussion

Based on the findings, there exists a positive correlation between the level of satisfaction among HR professionals with HRIS and the extent of support provided by top management. The present discovery aligns with existing scholarly literature, which suggests that the effectiveness of Human Resource Information Systems (HRIS) is

contingent upon the support of senior management (Al-Dmour et al., 2013; Al-Dmour & Zu'bi, 2014; Kolatshi, 2017). The positive perspectives of top-level executives towards information technology (IT), their acknowledgment of the significance of the system, and their recognition of its potential for strategic purposes collectively contribute to the allocation of necessary resources for the successful adoption of Human Resource Information Systems (HRIS) (Kheybari et al., 2020; Torrington et al., 2005). According to Al-Dmour et al. (2013), the authority associated with executive positions can be advantageous in managing and overcoming political resistance toward the implementation of Human Resource Information Systems (HRIS). In addition, it is essential to actively participate in information system management and development committees in order to effectively establish a successful Human Resource Information System (HRIS) (Kheybari et al., 2020; Torrington et al., 2005).

The findings of our research indicate that the level of satisfaction among HR professionals with HRIS is positively impacted by the assistance provided by IT staff. This finding aligns with previous research, which suggests that the involvement of IT personnel plays a crucial role in shaping user perceptions and contentment with Human Resource Information Systems (HRIS) (Petter et al., 2013). The provision of technical user support plays a crucial role in influencing user attitudes and, ultimately, the acceptance of a system. The perceptions of technology held by users are significantly shaped by their interactions, behavior, and associations with IT professionals. The level of service quality provided by IT experts has a significant impact on the way users perceive and accept Human Resource Information Systems (HRIS) (Petter et al., 2013). This finding suggests that the provision of effective IT staff support has the potential to positively impact the level of satisfaction experienced by HR professionals in relation to HRIS.

Additionally, our research indicates that the satisfaction of HR professionals with HRIS is influenced by social factors. This discovery provides support for the idea that social influence may have a significant impact on the acceptance of technology (Junglas et al., 2013; Tsai & Bagozzi, 2014). The comprehension of the impact of social factors on the adoption of technology is of utmost importance in order to fully harness the potential of Human Resource Information Systems (HRIS) and other technological

advancements. Despite the existence of a theoretical consensus regarding the importance of social influence in the process of technology adoption, the presence of conflicting empirical evidence raises questions about its explanatory capability and the validity of its current conceptual framework (Chatterjee, Sarker, & Valacich, 2015; Dickinger, Arami, & Meyer, 2008; Sykes, Venkatesh, & Gosain, 2009). This discovery enhances the existing body of literature by providing empirical evidence that highlights the significant influence of social factors on the formation of HR professionals' attitudes towards HRIS, ultimately contributing to the enhancement of their performance.

Furthermore, our research has shown that Work Engagement serves as a beneficial intermediary factor in the correlation between top management support and the level of satisfaction experienced by HR professionals with HRIS. This discovery suggests that when employees perceive a robust support system within their workplace, their level of work engagement is enhanced, leading to increased satisfaction among HR professionals with HRIS. This finding aligns with previous research indicating that work engagement is positively influenced by strong management support (Eisenberger et al., 2001; Saks, 2006). The significance of work engagement in organizational success lies in its impact on employee performance and overall outcomes (Schaufeli & Bakker, 2004). The findings of this study suggest that providing support from top management may have theoretical implications for enhancing work engagement among human resources professionals. Consequently, this may lead to an improvement in their satisfaction with Human Resource Information Systems (HRIS).

Corresponding to the situation with top management support, work engagement serves as a mediator in the positive relationship between IT staff support and HR professionals' satisfaction with HRIS. According to Rich et al. (2010), the results of this study suggest that individuals who experience high levels of social interaction with their colleagues, particularly those in the IT department, and receive support from them, demonstrate higher levels of work engagement. Engaged employees have been observed to exhibit a greater propensity for embracing change and displaying enthusiasm toward the adoption

and integration of novel technological solutions, such as Human Resource Information Systems (HRIS). The findings of this study suggest that the provision of effective IT staff support can have a positive impact on work engagement levels among HR professionals. Consequently, this increased work engagement may lead to higher levels of satisfaction with HRIS among these professionals. In a similar vein, our research outcomes also indicate that work engagement serves as a mediator in the positive association between social influence and the satisfaction of HR professionals with HRIS. This suggests that social support has the potential to serve as a valuable job resource, thereby enhancing employees' emotional well-being and subsequently resulting in increased levels of work engagement.

Regarding the moderating effects, our research has provided evidence that effort expectancy plays a moderating role in the relationship between top management support and HR professionals' satisfaction with HRIS. According to [Menant et al. \(2021\)](#), the perception of a system's ease of use by users can potentially increase their inclination to adopt and utilise it, particularly when there is support from top management. The satisfaction of HR professionals with Human Resource Information Systems (HRIS) can be influenced by the level of effort expectancy. In theory, the enhancement of perceived usability of the system may potentially enhance the positive effects of top management support on the satisfaction of HR professionals with HRIS. The insignificance of the other two moderating effects of effort expectancy suggests that effort expectancy does not play a moderating role in the relationship between IT support and HR professional's effectiveness, as well as between social influence and HR professional's satisfaction.

Theoretical Implications

This research contributes to the existing research on the efficacy of Human Resource Information Systems (HRIS) by providing concrete proof regarding the factors that impact the satisfaction of HR professionals with HRIS. The findings indicate that HR professionals' satisfaction with HRIS is positively influenced by top management

support, IT staff assistance, and social influence. Moreover, it was found that work engagement serves as a beneficial mediator in the relationship between these attributes and the level of satisfaction that HR professionals experience with HRIS.

The significance of work engagement in the success of HRIS, or any other technology-related initiative, is noteworthy. The driving force has been identified in these situations. The successful implementation of any technology-related initiative necessitates the commitment and active involvement of its users. Therefore, it is proposed that the inclusion of work engagement as a significant factor is crucial in the examination of the efficacy of technology-driven initiatives within an organisational context.

Practical Implications

The findings of this study have several practical implications for organizations seeking to enhance the satisfaction of HR professionals with Human Resource Information Systems (HRIS). Providing assistance to senior management and IT personnel can contribute to the improvement of HR professionals' satisfaction with Human Resource Information Systems (HRIS). This form of support can manifest in the form of favorable attitudes towards information technology, acknowledgment of the significance of the system, and understanding of its strategic capabilities. In addition, the provision of proficient technical user support has the potential to positively influence the attitudes of HR professionals towards HRIS, thereby increasing their satisfaction with the system.

Second, encouraging a conducive social environment can contribute to increased job satisfaction among HR professionals in relation to HRIS. The attitudes of HR professionals towards HRIS can be significantly influenced by social factors, making it imperative to understand the role of social influence in technology adoption.

Furthermore, it is important for organizations to closely monitor the level of work engagement exhibited by their employees when making decisions regarding technology-related initiatives. The presence of a high level of work engagement among employees is crucial and advantageous for the successful implementation of such initiatives.

Limitations and Directions for future research

The current research encompasses several limitations that warrant consideration when interpreting the results. Firstly, it is important to note that the sample size utilized in this study may be limited in scope and may not accurately reflect the characteristics and dynamics of all businesses or industries. Furthermore, it is important to note that the findings of this study are derived from self-reported data provided by the participants, which introduces the potential for bias. Furthermore, the scope of this study was limited to a narrow range of factors that potentially impact the level of satisfaction among HR professionals with Human Resource Information Systems (HRIS).

Further investigation is warranted to explore supplementary factors that could potentially impact the perspectives and contentment of human resources professionals in relation to human resource information systems (HRIS). Future research should consider the inclusion of additional mediating variables, such as organizational citizenship behaviors, in order to gain a deeper understanding of the underlying mechanisms that impact the effectiveness of Human Resource Information Systems (HRIS).

Acknowledgment

This work was supported by the Deanship of Scientific Research, Vice Presidency for Graduate Studies and Scientific Research, King Faisal University, Saudi Arabia [Grant No. 4097].

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