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Understanding Behavioural Intention (BI) toward Electronic Human Resource Management (e-HRM) Adoption in Public Sector Higher Education Institutions (HEIs): A Unified Theory of Acceptance and Use of Technology (UTAUT)-Based Mediation Model

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Abstract

Electronic human resource management (e-HRM) facilitates human resource management (HRM) functions to comply with the human resource demands of the organisation through web-based networks. The aim of this study is to examine the behavioural intention (BI) to adopt e-HRM among HR staff working at the public sector higher educational institutions (HEIs), Pakistan. This study has employed Unified Theory of Acceptance and Use of Technology (UTAUT-1) as the underpinning theory. This study is based on preliminary investigation. The data was collected from 48 respondents of officer cadre employees in HRM departments. Simple linear regression analysis was employed to examine the research hypotheses with the help of the Statistical Package for Social Sciences (SPSS). The results showed that effort expectancy (EE), performance expectancy (PE), and social influence (SI) were significant predictors for the BI to use e-HRM. Further, facilitating conditions (FC) significantly influence the BI and the actual use of e-HRM. Moreover, attitude (ATT) depicted a significant full mediation between PE and BI while partial mediation influence between EE, SI, and FC with BI. Overall, study found explanatory variables explained variation in BI to use e-HRM. The study expectations to obtain greater insights into the UTAUT-1 applicability for the future research on the topic of e-HRM adoption.

Keywords: Electronic Human Resource Management (e-HRM); Higher Education Institution (HEIs); Mediation Analysis; Preliminary Investigation; Statistical Package for Social Sciences (SPSS); Unified Theory of Acceptance and Use of Technology (UTAUT-1)

JEL Classification: M15 - IT Management; O33 - Technological Change: Choices and Consequences; Diffusion Processes, O15 - Human Resources; O32 - Management of Technological Innovation and R&D

1. Introduction

Things which were accepted in the past are no longer acceptable in the present and in the future due to the digital revolution and the explosion of knowledge, complemented by continued transformations in the internal and external working environment. Hence, the adoption of e-HRM became a necessity for all organisations (Al-Hawary et al. 2020). In the late 1990s and early 2000s, the internet advent raised the use of web-based HRM also termed as e-HRM. These systems empowered organisations for delivery of HR services through online platforms, augmenting approachability and user-friendliness (Ruël, Bondarouk, and Looise 2014). e-HRM systems also enabled self-service functionalities, letting employees to access and apprise their personal information, leave application, and performance appraisals online submission (Strohmeier and Piazza 2015).

Therefore, all organisations have become aware of the worth of managing human resources effectively and efficiently, as the human element is a key. Following traditional ways, such as manual record keeping of staff information, has now disappeared with the emergence of the technological revolution, replaced by electronic databases (Al-Hawary et al. 2020). e-HRM use poses the likelihood of enabling HRM functions to undertake a strategic role within an organisation. The HRM functions are confronted with a complex and dynamic environment (Parry & Battista, 2019). It is expected that HRM will develop from the role of "traditional administrative partner" to a "strategic business partner" (Ulrich, 1997). e-HRM is considered a crucial source for transformation of HRM functions and improving its strategic contribution for organisations (Ceric and Parton 2024; Marler and Parry 2016;

MSW MANAGEMENT -Multidisciplinary, Scientific Work and Management Journal
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Vol. 36 Issue 1, Jan-June 2026, Pages: 289-304

Bondarouk, Parry, and Furtmueller 2017; Strohmeier 2020).

Moreover, literature recommended that the use of e-HRM will substantially increase the potency of HRM at the policy level and practice level. e-HRM plays a significant role in strengthening the HRM functions by augmenting the HR messages' stability (Siam & Alhaderi 2019). Review of the literature revealed that adoption of e-HRM is affected by several factors (Al-Hawary & Al-Rasheedy, 2021). These were categorized as technological, organisational, and people factors (Bondarouk et al. 2017). The employee characteristics, top management support, information technology (IT) infrastructure, e-HRM compatibility, and pressure from industry (Masum et al., 2015). Other critical factors identified by Rathee and Bhuntel (2021) are perceived ease of use, usefulness, experience with IT, organisational support, and usage intention. Yusliza and Ramayah (2012) described that the attitude towards e-HRM acceptance, e-HRM ease of use, and its usefulness TAM perspective.

In today's business environment, e-HRM is one of the crucial part of organisations. Several past studies on e-HRM have been conducted in the developed countries like USA, UK, and Canada. The findings of these studies are not appropriate for the context of developing countries. Hence, this needs to be addressed. e-HRM is relatively a new concept from the Pakistani perspective. Studies have been done regarding e-HRM implementation in most of private sectors in Pakistan like banking sector, manufacturing sector, small and medium enterprises (SMEs), while limited from the public sector (Waheed et al. 2020). Therefore, this study aims to investigate e-HRM adoption in Pakistan a developing country.

Further, this study aims to examine how EE, PE, SI and FC influence BI; FC influence on BI and actual use; and the mediating role of ATT on the relationship between PE, EE, SI, FC and BI. The study used UTAUT-1, a widely used and validated theory which predicts technology acceptance. The research model and hypotheses were tested empirically by employing the simple regression with the help of SPSS.

The paper is organised as follows. The past literature on e-HRM adoption with special emphasis on UTAUT is presented in the next section, along with the explanation of UTAUT as an underpinning theory. This study employed a quantitative research design to examine the underlying research hypotheses given after the literature review. Data was collected from 48 respondents working at Public Sector HEIs of Pakistan. The findings and discussion are presented with study limitations, future research directions, and a conclusion.

2. Literature Review

2.1 e-HRM adoption

e-HRM is not a very old concept, nor is it a very new concept, as per the digitisation of corporate culture. The use of e-HRM in Western organisations is very generous and popular. The e-HRM use will substantially increase the potency of HRM at the policy level and practice level. e-HRM plays a significant role in HRM functions strengthening by enhancing the HR messages' stability (Siam & Alhaderi 2019). Although the cost reduction offered by e-HRM, its performance effectiveness, and the benefits of primacy for HR administrators, acceptance of its users is a critical factor (Al-Ajlouni et al. 2019). Hence, the current study examined the impact of different factors on e-HRM adoption.

Fraij (2022) asserted that due to external and internal dynamic forces, the adoption of e-HRM is low among employees of developing countries. For the provision of better working experience with e-HRM, it is essential to investigate which factors may influence its adoption. The study investigated the reasons why e-HRM is used or not used by employees of the telecommunication sector of Jordan. Results revealed that e-HRM adoption behaviour is significantly influenced by PE, SI, and FC, while EE showed insignificant influence toward e-HRM adoption behaviour. The study suggested that by employing a conceptual model, companies can better understand the e-HRM adoption behaviour (Fraij 2022).

Priyashantha & Chandradasa (2021) used UTAUT to empirically test the factors that may influence e-HRM adoption in the banking sector of Sri Lanka. Authors stated that the e-HRM adoption rate in the context of developing countries is relatively low. The results of the study depicted that PE, SI, and FC are the main determinants of e-HRM adoption behaviour, while EE depicted an insignificant influence.

Results from a study conducted in private universities of Jordan revealed that PE influences BI to use e-HRM, and FC significantly influence the actual use of e-HRM. However, EE and SI showed insignificant influence on BI. BI also significantly predicted the actual use of e-HRM. Results of the study provided supportive evidence of using the UTAUT model in the context of developing country settings (Al-Ajlouni et al. 2019).

The UTAUT model was tested by Noutsa Fobang et al. (2019) in SMEs of Cameroon, a developing country. Employees working in HR departments of SMEs were targeted, and results confirmed that PE and SI significantly

MSW MANAGEMENT -Multidisciplinary, Scientific Work and Management Journal
ISSN: 1053-7899
Vol. 36 Issue 1, Jan-June 2026, Pages: 289-304

influenced the BI in HRIS adoption. Authors stated that due to the rising impact of globalisation and technology, HRIS plays an essential role in modern organisations of today's world. However, developing countries are facing challenges in HRIS implementation (Noutsa Fobang et al 2019). Alkhwaldi et al., (2023) found the same results when they studied HRIS adoption in the public sector of Jordan.

Results of the study cannot be generalised as each study was conducted in a single industry and a single county (Siam & Alhaderi 2019). Other than e-HRM and HRIS, UTAUT-1 has also been used in other technology adoption studies, like e-learning and AI adoption. Putro et al. (2022) investigated the influential factors for e-learning adoption in Indonesian universities. Authors concluded that technology acceptance (PE, EE, SI, FC, usefulness, and perceived benefits), organisational resources (well-designed IT infrastructure, training, technical support) influence e-learning adoption.

In another study by Venkatesh (2022), discussed how some critical factors hinder the AI adoption decision of employees by employing UTAUT as a theoretical base. The model is used to propose individual features, technological features, environmental features, and interventions for future research directions that not only contribute toward literature on adoption but also AI tools, and it could lead to help organisations to positively influence adoption.

Chao (2019) by employing UTAUT, investigated factors affecting the BI of the students toward mobile learning (m-learning). The findings of this study revealed that PE and EE significantly influence the BI toward m-learning. In another study by El-Masri & Tarhini (2017) examined the factors affecting e-learning adoption by the students in HEIs of the United Kingdom (UK) by employing UTAUT. PE, SI, and EE showed significant influence on e-learning, while FC insignificantly influenced the BI toward e-learning.

The above discussion depicted that different constructs of UTAUT have shown variation in results. In some cases, they depicted significant results, and in other cases depicted insignificant results. APPENDIX A presents a summary of past literature on e-HRM and HRIS adoption and results.

2.2 Underpinning Theory

The use and adoption of a wide variety of technologies are successfully predicted by several well-established theories in the growing field of research on technology adoption among employees (Venkatesh & Zhang 2016). In information systems (IS) and IT acceptance research, there are several models with different sets of technology adoption determinants. Venkatesh et al. (2003) detected that researchers of IS/IT were encountered with a choice among different technology adoption models and theories. These researchers were constrained to select constructs from the established models and theories. They felt a need for a synthesised model to get a "unified view" of technology acceptance (Venkatesh et al. 2003).

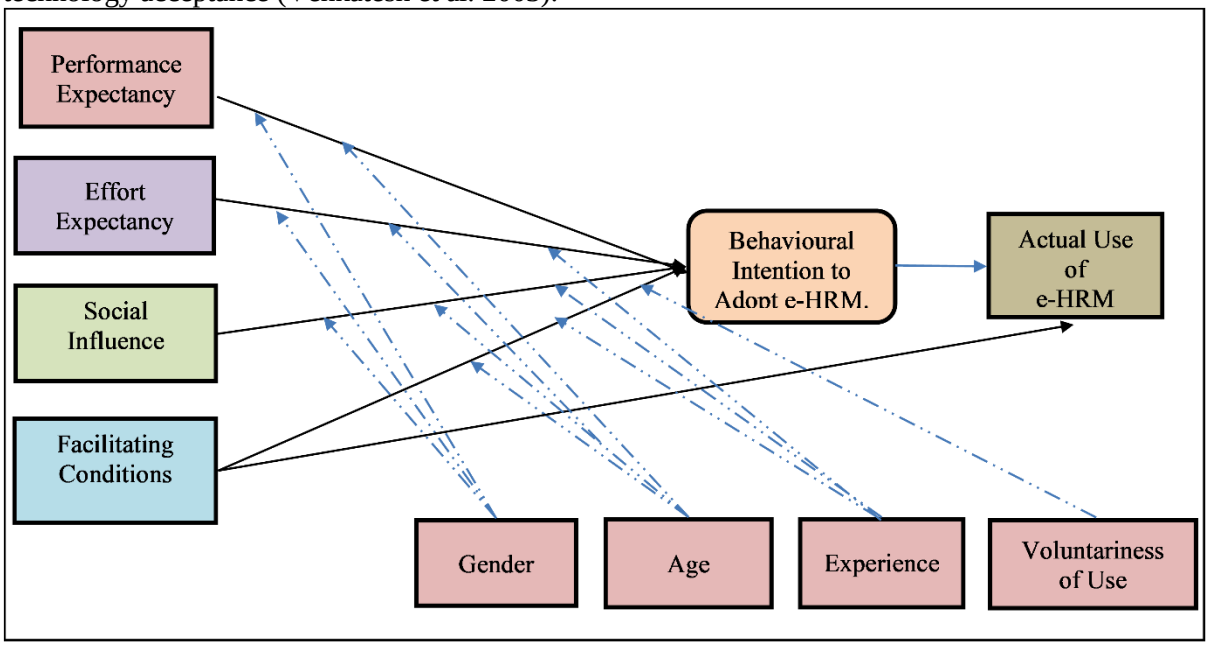


Figure 1: Unified Theory of Acceptance and Use of Technology (UTAUT-1)
Source: Venkatesh et al. (2003)

MSW MANAGEMENT -Multidisciplinary, Scientific Work and Management Journal
ISSN: 1053-7899
Vol. 36 Issue 1, Jan-June 2026, Pages: 289-304

Venkatesh et al. (2003) reviewed past literature and compared eight major models on user acceptance. These eight models were, (1) theory of reasoned action (TR), (2) technology acceptance model (TAM), (3) motivational model (MM), (4) theory of planned behaviour (TPB), (5) a model combining the TAM & TPB (C-TAM & TPB), (6) the model of personal computer utilization (MPCU), (7) diffusion of innovation (DOI), and (8) the social cognitive theory (SCT). They formulated a unified view by integrating constructs of these theories and validated them. The authors named this view as UTAUT-1. The model comprises PE, EE, SI, and FC as main determinants, with four demographic moderators e.g., age, gender, experience and voluntariness of use that leads BI and actual use of technology (Viswanath Venkatesh et al. 2003). The model is shown in shown in above Figure 1.

To explain the technology acceptance behaviour, the UTAUT-1 was developed. The theory proposes various factors affecting technology acceptance, with behavioural intention to use and actual usage behaviour as measures of technology acceptance. One of the most popular theories, the UTAUT has been successfully replicated multiple times and is actually used to analyse a wide range of technologies and even scenarios outside of employee adoption. Importantly, it is known that certain contextual factors and characteristics unique to certain technologies influence their ultimate adoption and use (Brown et al. 2010; Hong et al. 2014).

The UTAUT by Venkatesh et al. (2003) have been used as a main framework in technology adoption research. Main constructs of the theory were used by different researchers as antecedents of e-HRM adoption (Al-Ajlouni et al. 2019; Fraij 2022; Siam & Alhaderi 2019). This theory has also been used in different IS and IT adoptions, like HRIS (Noutsa Fobang et al. 2019), e-learning (Putro et al. 2022), and AI adoption (Venkatesh 2022). Further, it is also noted that studies on e-HRM are mainly in the Western context (Siam & Alhaderi 2019).

The constructs from UTAUT-1 used in the current study are PE, EE, SI, FC, BI and actual use, while ATT is taken from TAM. PE is perceived usefulness, and EE means ease of use of e-HRM applications. SI consists of subjective norms, and FC means support from the organisations. The PE, EE, and SI predict the BI towards using e-HRM. FC and BI influence the actual use of e-HRM.

2.3 Literature Gaps

Even though, growing interest in the field of e-HRM in developed countries, there are few studies in the context of Pakistan and the public sector. It is noted that studies on e-HRM are mainly in the Western context (Siam & Alhaderi 2019). Further, e-HRM adoption is still lacking in developing countries and is thought to be crucial (Shah, Michael & Chalu 2020). The current study extends the UTAUT-1 model to predict BI to use e-HRM in the public sector HEIs of Pakistan.

The UTAUT have been applied in technology adoption research. Like it has been used to predict BI to adopt e-HRM (Al-Ajlouni et al. 2019; Fraij 2022; Siam & Alhaderi 2019), HRIS (Noutsa Fobang et al. 2019), e-learning (Putro et al. 2022), and AI adoption (Venkatesh 2022). In this preliminary investigation, the relationship between UTAUT is examined with the introduction of a mediating relation of ATT between predictors of the theory (EE, PE, SI and FC) and outcome (BI).

Attitude is the predictor of TAM-1 and later it was dropped in TAM-2. Two school of thoughts prevail one who favour the ATT and those who are not in favour of adding ATT (López-Bonilla & López-Bonilla 2017). This study integrated ATT from TAM as a mediator between predictor of UTAUT and BI to adopt e-HRM.

2.4 Hypotheses Development

2.4.1 Effort Expectancy (EE)

EE means ease of use of e-HRM applications. It is evident from past literature that users use the system if it does not require more effort to accomplish the tasks as compared with traditional techniques, which require more effort. Hence, high ease means more likely to be used. It is hypothesized that EE is a significant predictor of BI in UTAUT (Venkatesh & Zhang, 2010). Past studies tested the influence of EE on BI (Fraij 2022; Priyashantha & Chandradasa 2021; Obeidat, 2016; Tarhini et al., 2016; Al-Ajlouni et al. 2019; Noutsa Fobang et al. 2019; Alkhwaldi et al., (2023). Based on the above discussion, it is hypothesized that:

H1: EE will significantly influence BI to adopt e-HRM.

2.4.2 Performance Expectancy (PE)

As per Venkatesh et al. (2003), PE means the perceived usefulness a user expects while performing to attain a reward while using IS. For this study, PE denotes attaining a better performance level while using e-HRM. It is widely conceded that any IS user would likely adopt it if they perceived it as beneficial. It is evident from the literature that employed UTAUT, PE depicted as a significant predictor of BI to use e-HRM (Fraij 2022; Priyashantha & Chandradasa 2021; Al-Ajlouni et al. 2019) and HRIS (Noutsa Fobang et al. 2019; Alkhwaldi et al.,

MSW MANAGEMENT -Multidisciplinary, Scientific Work and Management Journal
ISSN: 1053-7899
Vol. 36 Issue 1, Jan-June 2026, Pages: 289-304

2023). Hence, this study expected that PE would play a significant role in BI to adopt e-HRM. The given hypothesis is constructed regarding the influence of PE on BI, regarding the above discussion.

H2: PE will significantly influence BI to adopt e-HRM.

2.4.3 Social Influence (SI)

SI stands for whether people who are important to an individual think that he/she should perform a particular behaviour. SI is a predictor of BI to adopt IS. It is used by different authors in the field of e-HRM as a predictor of BI (Fraij 2022; Priyashantha & Chandradasa 2021; Al-Ajlouni et al. 2019) and HRIS adoption (Noutsa Fobang et al. (2019; Alkhwaldi et al., 2023). The following hypothesis is developed to examine the influence of SI on BI based on the above discussion.

H3: SI will significantly influence BI to adopt e-HRM.

2.4.4 Facilitating Conditions (FC)

In the UTAUT, it is theorized that FC has a direct influence on the actual use of IS (Viswanath Venkatesh et al. 2003). Users feel encouraged to use IS when FC is available. FC are thought to be one of the factors that most strongly influence the user how they use technology (Venkatesh & Zhang 2010). Previous research finds its significant influence on the use of e-HRM (Fraij 2022; Priyashantha & Chandradasa 2021; Al-Ajlouni et al. 2019) and HRIS (Noutsa Fobang et al. 2019; Alkhwaldi et al., 2023). It is to noting that FC also have an insignificant influence on HRIS adoption as reported by Noutsa et al. (2017). The following hypothesis is constructed regarding the influence of FC on actual use of e-HRM:

H4: FC will significantly influence the BI to adopt e-HRM.

H5: FC will significantly influence the actual use of e-HRM.

2.4.5 Attitude (ATT)

General feeling of the user, either favourable or unfavourable toward IS termed as attitude (Fishbein and Ajzen 1975; Icek Ajzen 1991; I. Ajzen and Fishbein 1980). In past literature, results depicted the influence of attitude on BI (Davis, Bagozzi, and Warshaw 1989; Taylor and Todd 1995). Past studies also validated the significant impact of attitude on the BI toward e-HRM adoption and usage (Alenezi et al., 2010; Jan et al., 2012). Past literature also examined the mediating role of ATT between SI and BI (Hawash et al. 2020; Dwivedi et al. 2019). For the current study, it is used as a mediating variable between the relationship of EE and BI; PE and BI; SI and BI; and FC and BI to use e-HRM. The following hypotheses are constructed regarding the mediating influence of attitude with the UTAUT constructs.

H6: The association between EE and BI to adopt e-HRM will be mediated by ATT to use e-HRM.

H7: The association between PE and BI to adopt e-HRM will be mediated by ATT to use e-HRM.

H8: The association between SI and BI to adopt e-HRM will be mediated by ATT to use e-HRM.

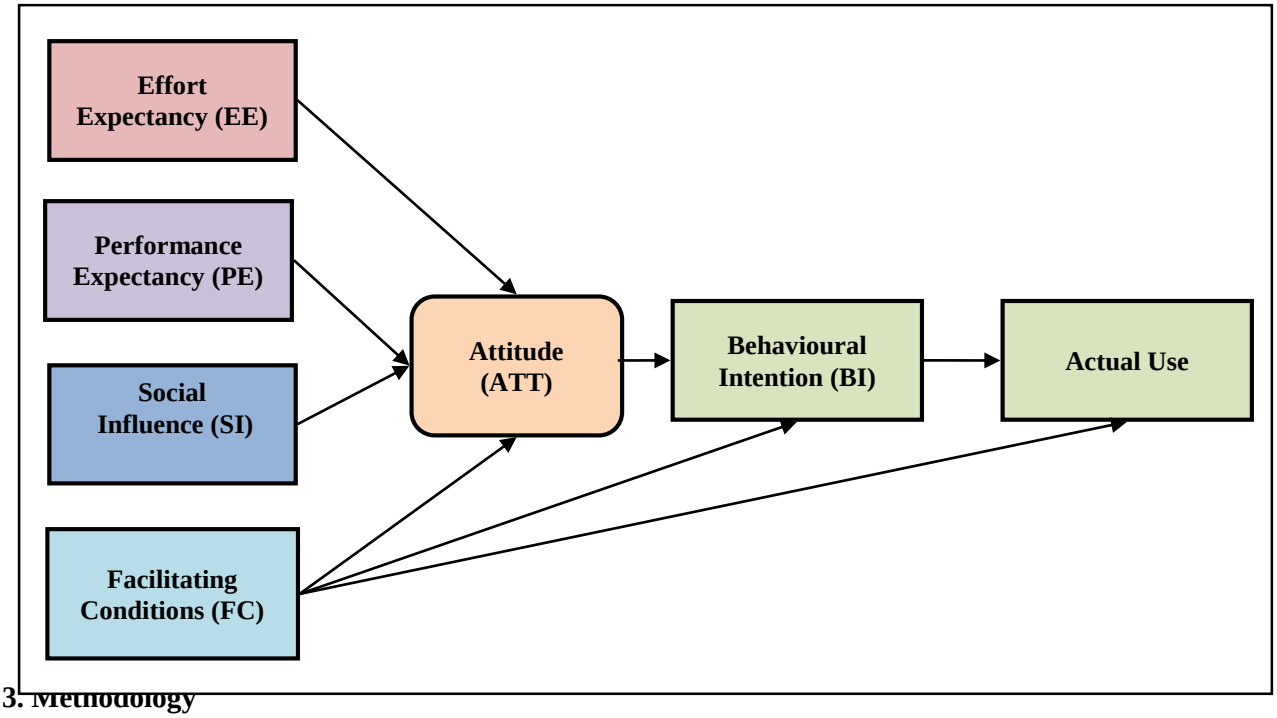
H9: The association between FC and BI to adopt e-HRM will be mediated by ATT to use e-HRM.

2.4.6 Behavioural Intention (BI)

The intention of a user to use a technology system is referred to as BI. It incorporates the user's motivational factors that influence IS/IT usage behaviour (Ajzen 1991). Behavioural theories also posit that adoption intention is determined by ATT toward SI (Fishbein and Ajzen 1975; I. Ajzen and Fishbein 1980). Several empirical studies have also confirmed that ATT has a significant influence on BI toward e-HRM adoption (Raaij and Schepers 2008; Yu et al. 2007; Yong, Yusliza, and Fawehinmi 2019). One of the key indicators of a system's actual utilization is BI. The concept shows individual's readiness to act. The UTAUT also theorized BI as an antecedent, and the relationship is confirmed in several empirical researches that examined the UTAUT model (Tarhini et al. 2016). The given hypothesis is postulated to examine the influence of BI on the actual use of e-HRM based on the above discussion.

MSW MANAGEMENT -Multidisciplinary, Scientific Work and Management Journal
ISSN: 1053-7899
Vol. 36 Issue 1, Jan-June 2026, Pages: 289-304

H10: BI will significantly influence the actual use of e-HRM.



3. Methodology

3.1 Data Collection Procedure

This study utilized an online data collection method. The survey was built in Google Forms. An embedded link was sent to The Registrars/ head of HR departments of different public sector HEIs located in Capital Territory of Islamabad, Pakistan for the approval of conducting an online survey and their support in sharing Google Form link to relevant staff. It was also shared that participation in the survey is voluntary. Data was collected over eight weeks in August-September 2024. After follow-up, 49 responses were gathered. The study utilized 48 questionnaires after reviewing relevant and complete responses. Out of 48, 33 (68.8%) were male, and 15 (31.25%) were female.

3.2 Research Instrument

The study adapted research instruments employed in past literature. A 6-item scale by Al-Alwan et al., (2022); Al-Ajlouni et al., (2019); Esen & Özbağ, (2014); Venkatesh et al., (2003); Moore & Benbasat, (1991); and Davis, (1989) were utilized to measure the EE, a 7-item scale for PE from Al-Alwan et al., (2022); Al-Ajlouni et al., (2019); Esen & Özbağ, (2014); Venkatesh et al., (2003); Moore & Benbasat, (1991); and Davis, (1989); 6 items scale by Al-Ajlouni et al., (2019); Venkatesh et al., (2003); Taylor & Todd, (1995); Ajzen, (1991); and Davis, (1989) to measure the SI, a 7-item scale to measure FC by Al-Ajlouni et al., (2019); Alam & Islam, (2021); Rahman et al., (2016); Venkatesh et al., (2003); Taylor & Todd, (1995); and Ajzen, (1991). To measure the BI, 5 items adapted from Al-Ajlouni et al., (2019); Rahman et al., (2016); Venkatesh et al., (2003); and Esen & Özbağ, (2014). ATT was measured with 5 items by Taylor & Todd, (1995); Davis, (1989); and Fishbein & Ajzen, (1975). Actual use was measured with 4 items (frequencies) adapted from Wang & Shih (2009); Tukiran et al., 92022); Venkatesh & Bala, (2008).

3.3 Data Analysis

3.3.1 Demographics

A. Profile of the Respondents

Most of the respondents (68.8%) were males, followed by females (31.3%). A major part of the age group representation is 35 to 44 years, comprising over half (25 respondents), suggesting that middle-aged individuals are the predominant participants in the study. 12 respondents belong to the 25 to 34 years of age, representing younger employees. Younger respondents (<25) and older respondents (55+) are rare, with only one person in each group (2.1%). Most of the respondents are highly qualified. Out of 48, there are 27 (56.3%) PhD, followed by 13 (27.1%) with Master's/ MPhil/ MS degree. While 4 (8.3%) have qualifications of a Graduation/bachelor's degree. Most respondents (35.4%) reported having 10 to 14 years of experience, followed by 25.0% with 5 to 9 years of experience. Only 6.3% had less than 5 years of experience, while 14.6% had 21 years or more (Table 1).

MSW MANAGEMENT -Multidisciplinary, Scientific Work and Management Journal
ISSN: 1053-7899
Vol. 36 Issue 1, Jan-June 2026, Pages: 289-304

Table 1: Demographics

Demographics	Categories	Frequencies	Percentage
Gender	Male	33	68.8
	Female	15	31.3
	Total	**48**	**100.0**
Age	less than 25	1	2.1
	25 to 34 years	12	25.0
	35 to 44 years	25	52.1
	45 to 54 years	9	18.8
	55 and above	1	2.1
	Total	**48**	**100.0**
Education	Graduation/Bachelor	4	8.3
	Masters/M.Phil. /MS	13	27.1
	PhD	27	56.3
	Others	4	8.3
	Total	**48**	**100.0**
Professional Experience	Less than 5 years	3	6.3
	5 to 9 years	12	25.0
	10 to 14 years	17	35.4
	15 years to 20 years	9	18.8
	21 years or more	7	14.6
	Total	**48**	**100.0**
Experience with e-HRM	Less than 5 years	19	39.6
	6 to10 years	10	20.8
	11 to 15 years	13	27.1
	15 to 20 years	2	4.2
	More than 20 years	4	8.3
	Total	**48**	**100.0**

Source: Authors

The majority of respondents (39.6%) reported using e-HRM for less than 5 years, followed by 27.1% who have used it for 11 to 15 years. Approximately 20.8% of respondents have used e-HRM for 6 to 10 years, while 8.3% have used it for more than 20 years. Only 4.2% have been using e-HRM for 15 to 20 years. The cumulative percentage shows that 87.5% of users have adopted e-HRM within the last 15 years (Table 1).

B. e-HRM Adoption at Respondent HEIs

Respondents have been asked whether the organisations have adopted e-HRM. All 48 respondents replied "yes", depicting that all HEIs under study have adopted e-HRM. Respondents were further asked about the adoption level of e-HRM in the respective HEI. Out of 48, 14 (29.17%) have respondents that their HEI have fully adopted e-HRM. 22 HEIs (45.83%) have partially adopted, while 12 (25.00%) slightly adopted e-HRM (Table 2). The distribution suggests moderate-to-high adoption levels, with a small portion lagging.

Table 2: Adoption Level of e-HRM

e-HRM adoption	Yes	48	100
	No	0	0
Level of e-HRM adoption	Fully adopted	14	29.17
	Partially adopted	22	45.83
	Slightly adopted	12	25.00
	Not at all	0	0.00
	Total	**48**	**100.0**

Source: Authors

The extent of e-HRM practices implementation is the application that are being used in the organisation. For the current study, the uses of e-HRM are categorised into eight different HRM practices. These were adopted from the past literature on e-HRM as these are frequently mentioned. Findings shown in the Table **Error! Reference source not found.**3 indicates that the extent of most of e-HRM being practiced is good, since their mean values are more than the mean value of the scale (which is 3). The scale mean = Σ Degrees of the *scale* / 5 = 1+2+3+4+5 / 5 = 3).

The results indicate that the highest-rated e-HRM practice is "**payroll and benefits management"** (Mean = 3.31, Percentage = 66.25%), followed by "**internal and external communication"** (Mean = 3.25, Percentage = 65.00%). The lowest-rated practice is **"performance appraisal"** (Mean = 2.67, Percentage = 53.33%). The standard deviations range from 1.018 (performance appraisal) to 1.310 (attendance and absenteeism record), suggesting variability in responses. Overall, most e-HRM practices received moderate ratings, with mean scores ranging between 2.67 and 3.31 on a 5-point scale (Table 3).

MSW MANAGEMENT -Multidisciplinary, Scientific Work and Management Journal
ISSN: 1053-7899
Vol. 36 Issue 1, Jan-June 2026, Pages: 289-304

Table 3: Adoption Level of e-HRM Practices

e-HRM Practices	N	Minimum	Maximum	Mean	Percentage	Standard Deviation
Employee record keeping	48	1	5	3.15	62.92	1.185
Attendance and absenteeism record	48	1	5	3.17	63.33	1.310
Recruitment and selection	48	1	5	2.83	56.67	1.173
Training and development	48	1	5	3.13	62.50	1.231
Payroll and benefits management	48	1	5	3.31	66.25	1.095
Performance appraisal	48	1	5	2.67	53.33	1.018
Internal and external communication	48	1	5	3.25	65.00	1.120
HR planning	48	1	5	2.85	57.08	1.288
Valid N (listwise)	**48**				**0.00**	

Source: Authors

3.3.2 Goodness of Measures

Reliability is used as one of the main criterions for testing goodness measures. Reliability means "assessment of the degree of consistency between multiple measurements of a variable" (Hair et al. 2006. Cronbach's Alpha is a notorious indicator for reliability in the fields of behavioural and social sciences (Cavana et al. 2001). The Cronbach's Alpha > 0.70 and above is recommended to ensure internal consistency of different measures of their respective constructs (Hair, 2006; Nunnally & Bernstein 1994). The results showed that the measures are sufficiently reliable with Cronbach's Alpha values ranging from 0.814 to 0.960. Those items which did not meet the threshold values were deleted. For EE, there are 5 items after deleting 1, as the value was < 0.7 (Table 4).

Table 4: Loadings and Cross Loadings

Constructs of the Study	Items	Indicator Reliability	Convergent Validity	Internal Consistency	
		Loading >0.60	AVE >0.50	Composite Reliability >0.70	Cronbach's Alpha >.70
Effort Expectancy	EE1	0.743	0.529	0.848	0.899
	EE2	0.706			
	EE3	0.635			
	EE4	0.749			
	EE6	0.794			
Performance Expectancy	PE1	0.678		0.565	0.901
	PE2	0.727			
	PE3	0.758			
	PE4	0.769			
	PE5	0.788			
	PE6	0.693			
	PE7	0.836			
Social Influence	SI1	0.521	0.499	0.803	0.814
	SI3	0.769			
	SI4	0.827			
	SI5	0.557			
	SI6	0.679			
Facilitating Conditions	FC1	0.750	0.585	0.907	0.909
	FC2	0.711			
	FC3	0.880			
	FC4	0.800			
	FC5	0.775			
	FC6	0.737			
	FC7	0.683			
Attitude	ATT1	0.852	0.681	0.914	0.960
	ATTI2	0.759			
	ATTI3	0.849			
	ATTI4	0.820			
	ATTI5	0.845			
Behavioural Intention	BI1	0.898	0.637	0.912	0.927
	BI2	0.815			
	BI3	0.859			
	BI4	0.705			
	BI5	0.645			
	BI6	0.838			

Source: Authors

MSW MANAGEMENT -Multidisciplinary, Scientific Work and Management Journal
ISSN: 1053-7899
Vol. 36 Issue 1, Jan-June 2026, Pages: 289-304

Validity is another criterion for testing goodness measures. Validity assesses how successfully a designed instrument measures specific notion it is meant to evaluate (Sekaran and Bougie 2010). For current study, convergent validity was measured. It is a "degree to which multiple items to measure the same concept are in agreement"(Sekaran and Bougie 2010). Hair et al. (2010) suggested to use factor loadings to measure indicator reliability, average variance extracted (AVE) for convergent validity, composite reliability and Cronbach's Alpha for internal consistency. The outer loadings values were recoded > 0.60 as recommended by (Hair et al. 2010) for all items except SI, which was recorded as 0.499 approximately near the recommended one (Table 4).

Composite reliability depicts the "degree to which the construct indicators indicate the latent construct". Table 4 gives the composite values ranged from 0.802 to 0.914. The values exceeded the 0.7 value as recommended by Hair et al., (2010). The AVE measures the variance taken by the indicators of the constructs as compared to the measurement error. AVE should be > 0.50 for justification of construct use (Hair et al. 2010). The AVE extracted for all items recorded above the given range. The AVE ranged from 0.499 and 0.681 (Table 4).

The Kaiser-Meyer-Olkin (KMO) was executed to gauge the adequacy of the sample for factor analysis. Kaiser & Rice (1974) stated that any Indices of Factorial Simplicity (IFS) must be between zero and one. IFS values "in the 0.90s means marvellous", "in the 0.80s means meritorious", "in the 0.70s means middling", "in the 0.60s means mediocre", "in the 0.50s means miserable", and "below 0.50s means unacceptable".

The KMO value reported lies between 0.718 to 0.882, indicating a good sampling adequacy level (Kaiser and Rice 1974). Further, Bartlett's Test of Sphericity reported significant results ($p < 0.001$), confirming that the correlation matrix suitable for the factor analysis (Bartlett 1954). These results indicate appropriateness of dataset for factor analysis (Table 5).

Table 5: KMO and Bartlett's Test of Sphericity

Variable and test		Values
Effort Expectancy (EE)		
KMO Measure for adequacy of sampling		.821
Bartlett's Test	Approx. Chi-Square	120.690
	df	10
	Sig.	.000
Performance Expectancy (PE)		
KMO Measure for adequacy of sampling		.882
Bartlett's Test	Approx. Chi-Square	190.001
	df	21
	Sig.	.000
Social Influence (SI)		
KMO Measure for adequacy of sampling		.718
Bartlett's Test	Approx. Chi-Square	118.641
	df	15
	Sig.	.000
Facilitating Conditions (FC)		
KMO Measure for adequacy of sampling		.813
Bartlett's Test	Approx. Chi-Square	206.044
	df	21
	Sig.	.000
Attitude (ATT)		
KMO Measure for adequacy of sampling		.843
Bartlett's Test	Approx. Chi-Square	259.002
	df	10
	Sig.	.000
Behavioural Intention (BI)		
KMO Measure for adequacy of sampling		.761
Bartlett's Test	Approx. Chi-Square	222.643
	df	15
	Sig.	.000

Source: Authors

3.4.3 Descriptive Statistics

The values calculated to measure the mean and standard deviation (SD) latent variables ranged 3.63 to 6.08 and 1.448 to 2.090, respectively, on a 7-point Likert scale (Table 6). The mean value of each variable noted above the middle point of 3.50.

MSW MANAGEMENT -Multidisciplinary, Scientific Work and Management Journal
ISSN: 1053-7899
Vol. 36 Issue 1, Jan-June 2026, Pages: 289-304

Table 6: Results of Descriptive Analysis

Constructs	Indicator	N	Minimum	Maximum	Mean	SD
Effort Expectancy (EE)	EE1	48	2	7	5.77	1.448
Mean = 5.172	EE2	48	1	7	5.42	1.609
	EE3	48	1	7	5.23	1.653
	EE4	48	2	7	5.56	1.428
	EE6	48	1	7	5.42	1.528
Performance Expectancy (PE)	PE1	48	1	7	6.08	1.285
Mean = 5.581	PE2	48	1	7	5.67	1.449
	PE3	48	2	7	5.63	1.453
	PE4	48	1	7	5.40	1.634
	PE5	48	0	7	5.38	1.721
	PE6	48	1	7	5.37	1.579
	PE7	48	1	7	5.54	1.543
Social Influence (SI)	SI1	45	1	7	4.73	1.814
Mean = 5.098	SI3	48	2	7	5.33	1.589
	SI4	48	1	7	5.60	1.608
	SI5	48	0	7	5.02	1.973
	SI6	48	1	7	5.29	1.786
Facilitating Conditions (FC)	FC1	48	1	7	5.02	1.756
Mean = 5.079	FC2	48	1	7	4.88	1.770
	FC3	48	1	7	5.27	1.498
	FC4	48	0	7	5.19	1.580
	FC5	48	2	7	5.42	1.485
	FC6	48	1	7	4.75	1.792
	FC7	48	1	7	5.02	1.657
Attitude (ATT)	ATT1	48	1	7	5.90	1.462
Mean = 5.780	ATT2	48	2	7	5.67	1.548
	ATT3	48	1	7	5.73	1.498
	ATT4	48	2	7	5.83	1.548
	ATT5	48	1	7	5.77	1.627
Behavioural Intention (BI)	BI1	48	1	7	5.94	1.508
Mean = 5.525	BI2	48	1	7	5.65	1.550
	BI3	48	1	7	5.85	1.502
	BI4	48	1	7	5.02	1.780
	BI5	48	1	7	4.98	1.940
	BI6	48	2	7	5.71	1.650

Source: Authors

Multiple regression analysis was performed to test the effect of IV on DV. The model comprises of ten hypotheses which measured the direct and indirect (mediation) relationship among variables. Different parameters (coefficient of determination (R^2) and path coefficient) have been applied. The values of R^2 are stated as substantial (0.75), moderate (0.50 and weak (0.25) (Hair et al. 2014). The given Table 7 indicates that EE accounted for 44.7% of the variation in BI. Subsequently, PE accounted for 56.0%, SI 55.3%, and FC accounted for 69.2% variation in BI. FC and BI accounted for accounted for 12.52 % and 14.7% variation in actual use respectively.

PE, SI, and FC showed substantial impact on BI, while EE showed near to moderate but significant variation in its respective dependent variable. FC and BI have shown weak significant variation in actual use of e-HRM. Further findings revealed a strong correlation between EE and BI ($\beta = .669$, $t = 6.103$, $p = .000$), PE and BI ($\beta = .749$, $t = 7.656$, $p = .000$), SI and BI ($\beta = 0.744$, $t = 7.547$, $p = 0.000$), and FC and BI ($\beta = 0.832$, $t = 10.155$, $p = 0.000$). While FC with actual use ($\beta = 0.353$, $t = 2.562$, $p = 0.014$), and BI with actual use ($\beta = 0.383$, $t = 2.816$, $p = 0.007$). The H1, H2, and H3 have big beta values and strong R^2, depicting a significant impact. H5 and H10 also depicted significant results, but the beta and R^2 values are low but the results were statistically supported (Table 7).

Table 7: Results (Direct Effects)

Hypotheses	Beta	R^2	SE	F	t-value	p-value	Results
H1: EE > BI	.669	.447	1.0669	37.428	6.103	.000	Supported
H2: PE > BI	.749	.560	.95155	58.614	7.656	.000	Supported
H3: SI > BI	.744	.553	.95919	56.954	7.547	.000	Supported
H4: FC > BI	.832	.692	.79698	103.128	10.155	.000	Supported
H5: FC > AU	.353	.125	1.5722	6.564	2.562	.014	Supported
H10: BI > AU	.383	.147	1.32527	7.931	2.816	.007	Supported

SE: Standard Error, EE: Effort Expectancy, PE: Performance Expectancy, SI: Social Influence, FC: Facilitating Conditions, BI: Behavioral Intention, AU: Actual Use

Source: Authors

Mediation analysis was performed to assess the mediating role of ATT in the relationship between IV (EE, PE, SI, and FC) and DV (BI). For this study, bootstrapping procedure was performed to confirm the mediation by choosing

MSW MANAGEMENT -Multidisciplinary, Scientific Work and Management Journal
ISSN: 1053-7899
Vol. 36 Issue 1, Jan-June 2026, Pages: 289-304

10,000 bootstrap samples at bias corrected 95 percent. Indirect effect and direct effect were examined to estimate the significance (two-tailed) after bootstrapping. The lower bound (LB) and upper bound (UB) confidence intervals were also calculated. The LB and UB provided conditions to confirm the mediation effects (Aguinis et al. 2017). According to (Memon et al. 2018), if the confidence interval for the indirect effect straddles a zero in between, reflects non-presence of mediation effect. In short, the significance of indirect effect means existence of mediation effect (Gaskin 2016; Hair et al. 2019; Hayes 2009b). On that, the path analyses for hypothesis sixth to ninth of mediation analysis are given in Table 8.

The results revealed insignificant indirect effect of EE on BI through ATT (H6: β = 0.005, t = 0.184, p = 0.427). Further, results also revealed insignificant indirect effect of FC on BI through ATT. The findings revealed insignificant indirect effect of PE on BI through ATT (H7: β = -0.019, t = 0.184, p = 0.854). The results (Table 8) revealed insignificant indirect effect of SI on BI through ATT. The indirect effect gives the indirect effect estimate of 0.240 at P-value of 0.023, which is lower than 0.05, which confirms mediation of ATT between FC and BI. The lower bound interval is 0.083 and upper bound interval is 0.525, which does not straddle a zero in between, which further confirms mediation. Hence, Hypothesis was supported, which implies that ATT significantly mediates the relationship between FC and BI.

The indirect effect gives the indirect effect estimate of 0.309 at p-value of 0.005, which confirms mediation of ATT between PE and BI. The lower bound interval is 0.146 and upper bound interval is 0.565, which does not straddle a zero in between, which further confirms mediation. Hence, Hypothesis7 was supported, which implies that ATT significantly mediates the relationship between PE and BI. Overall, the mediation results highlighted that ATT fully mediated the relationship between PE and BI, while partially mediated the relationship between EE, SI, and FC and BI. This suggests that attitude plays a crucial role in shaping the behavioural intention, particularly in the adoption of e-HRM technology.

Table 8: Results (Mediating Effect)

Hypotheses	Total effects			Direct effect			Indirect effects					
							Percentile bootstrap 95% confidence interval					
	Beta	t-value	p-value	Beta	t-value	p-value	Beta	SE	t-value	p-value	LB	UB
H6: EE > ATI > BI	-0.163	1.586	0.056	-0.346	1.634	0.053	-0.163	0.103	1.586	0.056	-0.357	-0.018
H7: PE > ATI > BI	0.316	2.551	0.005	0.668	3.209	0.001	0.316	0.124	2.551	0.005	0.147	0.573
H8: SI > ATI > BI	-0.019	0.183	0.425	-0.040	0.187	0.426	-0.019	0.103	0.183	0.427	0.147	0.573
H10: FC > ATI > BI	0.754	6.627	0.000	0.547	2.632	0.000	0.258	0.129	2.010	0.022	0.085	0.525

Note: SE: Standard Error, LB: Lower Bound, UB: Upper Bound, EE: Effort Expectancy, PE: Performance Expectancy, SI: Social Influence, FC: Facilitating Conditions, BI: Behavioral Intention, ATT: Attitude,
Source: Authors

4. Discussion, Implications, and Conclusion

The study aimed to investigate the impact of EE, PE, FC, and SI on the BI to adopt e-HRM, FC impact on actual use of e-HRM, and the mediating role of ATT between EE, PE, FC, and SI and BI. The study used UTAUT as an underpinning theory. The theory suggests that the use of IT/IS is determined by BI of its users. Further, the perceived likelihood of the IT/IS adoption is predicted by four main constructs of UTAUT (EE, PE, SI, and FC) (Venkatesh et al., 2003). The data was collected with the help structured questionnaire from HR employees working in HEIs of Pakistan. The preliminary investigation results revealed that EE, PE, FC and SI predict the BI to adopt e-HRM, which leads to actual use of e-HRM. The FC also depicted a significant impact on the actual use of e-HRM. The mediating role of ATT depicted full and partial mediation in the association of EE, PE, FC, and SI with BI.

The results from this preliminary investigation regarding the impact of EE on BI to adopt e-HRM were consistent as predicted by UTAUT. The result is also consistent with studies where the impact of EE was found to be significant, like electronic record adoption (Hawash et al., 2020). But contrary to those results of previous studies on e-HRM, HRIS, e-learning, and mobile learning adoption, found an insignificant impact of EE on BI (Fraij 2022;

MSW MANAGEMENT -Multidisciplinary, Scientific Work and Management Journal
ISSN: 1053-7899
Vol. 36 Issue 1, Jan-June 2026, Pages: 289-304

Priyashantha & Chandradasa 2021; Al-Ajlouni et al. 2019; Al-Harazneh & Sila, 2021; Noutsa Fobang et al. 2019; Putro et al., 2022; and Chao, 2019). Insignificant results may be the fact that e-HRM systems in the public sector HEIs require more effort to operate it, which is why employees find it difficult to use.

The results of this study on PE and SI impact on BI are consistent with past studies in e-HRM and HRIS adoption by (Fraij 2022; Priyashantha & Chandradasa 2021; Al-Harazneh & Sila, 2021; Noutsa Fobang et al. 2019; and Alkhwaldi et al., 2023), e-learning and mobile learning by (Putro et al., 2022; and Chao, 2019). It was also found that BI significantly impact the actual use as predicted in UTAUT, and is consistent with the results of Al-Ajlouni et al. (2019).

The results from the current preliminary investigation revealed that FC influence the BI. The results are consistent with past studied on e-HRM adoption by (Fraij 2022; Priyashantha & Chandradasa 2021; Al-Harazneh & Sila, 2021), HRIS adoption by (Noutsa Fobang et al. 2019; and Alkhwaldi et al., 2023), e-learning and mobile learning by (Putro et al., 2022; and Chao, 2019).

The data analysis discovered that ATT mediates the relationship between EE, PE, FC, and SI with BI to adopt e-HRM. As per TAM (Davis 1989), ATT is outcome of usefulness and ease of use. The results of the study for PE and EE are consistent with TAM. Past studies also reported that the ATT mediates the association between SI and BI (Dwivedi et al., 2019; Hawash et al., 2020; Shahreki et al. 2020). It is concluded that the role of colleagues and supervisors can influence the ATT, which leads to BI adopting e-HRM.

The current study results help in validating the applicability of UTAUT in IT/IS adoption generally and e-HRM particularly. The inclusion of ATT as a mediator in this theory can enhance the use of the theory. The significant result of EE, PE, SI and FC can help decision makers at HEIs to address the reasons why employees feel that e-HRM use is difficult. Policy makers can address the issue and handle by providing training or making the system easier to use.

Next, the study also come up with a conclusion that adoption level of e-HRM in respondent public sector HEIs from moderate-to-high level adoption. The results of the study also provided a glimpse of different practices implementation. The findings indicated that the "**payroll and benefits management"** is highest-rated e-HRM practice followed by "**internal and external communication"**, "performance appraisal", and "attendance and absenteeism record". The '**performance appraisal" was t**he lowest-rated practice which is implemented in under study public sector HEIs. e-HRM adoption is not a universal practice, particularly for the public sector of a developing country, as this is a developed nation concept. e-HRM adoption is influenced by different factors. New relationships can be introduced to better understand the determinants of e-HRM adoption. The current study is limited by the fact that the sample was small. The small sample cannot generalise the results for all HR staff working in the public sector. Therefore, the same model can be applied for a large sample size to get better results. Therefore, further studies are recommended.

In conclusion, the current study examined the impact of the main constructs of UTAUT that determine BI to adopt e-HRM in public sector HEIs of Pakistan. The study introduced mediating impact of ATT between the SI and BI. The study also provided empirical results which support the applicability of UTAUT in the context of a developing country's adoption of e-HRM.

List of Abbreviations

Actual Use	ACTU
Attitude	ATT
Average Variance Extracted	AVE
Behavioural Intention	BI
Composite Reliability	CR
Dependent Variable	DV
Electronic Human Resource Management	e-HRM
Effort Expectancy	EE
Facilitating Conditions	FC
Higher Education Institution	HEIs
Independent Variable	IV
Kaiser-Meyer-Olkin	KMO
Performance Expectancy	PE
Statistical Package for Social Sciences	SPSS

MSW MANAGEMENT -Multidisciplinary, Scientific Work and Management Journal
ISSN: 1053-7899
Vol. 36 Issue 1, Jan-June 2026, Pages: 289-304

Standard Deviation	SD
Social Influence	SI
Technology Acceptance Model	TAM
Partial Least Square-Structural Equation Modelling	PLS-SEM
Unified Theory of Acceptance and Use of Technology	UTAUT

Declarations

Authors Contribution

ZK, ZKM, and AHA conceived the study, participated in scrutinizing the literature and formulated the research gaps. ZK, ZKM, and AHA formulated the methodology of this study to achieve the desired objectives. ZK created the manuscript draft. ZKM and AHA revised the original draft, and both authors finalized the document. All authors read and reviewed the intermediate versions and approved the final version of the manuscript.

Ethical approval

Ethical approval was sought and granted by the institutional ethics review boards.

Competing interests

The authors declare no competing interests.

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REFERENCES

Ajzen, I., and M. Fishbein. 1980. *Understanding Attitudes and Predicting Social Behavior*. Englewood Cliffs, NJ: PrenticeóHall.

Ajzen, Icek. 1991. “The Theory of Planned Behavior.” *Organizational Behavior and Human Decision Processes* 50 (2): 179–211. https://doi.org/doi:10.1016/0749-5978(91)90020.

Al-Ajlouni, Mohammed Iqbal, Sahem Nawafleh, Hiba Alsari, Mohammad Nassar Almarshad, and Rami Tbaishat. 2019. “Determinants of User Acceptance of Electronic-HRM through the Extension of UTAUT Model via the Structural Equation Modelling Approach.” *Journal of Information and Knowledge Management* 18 (4): 1–23. https://doi.org/10.1142/S0219649219500448.

Al-Alwan, M., D. Bader, M. Al-Qatawneh, S. Alneimat, and S. Al-Hawary. 2022. “E-HRM and Employee Flexibility in Islamic Banks in Jordan.” *International Journal of Data and Network Science* 6 (3): 703–10. https://doi.org/10.5267/j.ijdns.2022.4.002.

Al-Harazneh, Yaser M. Y.M., and Ismail Sila. 2021. “The Impact of E-HRM Usage on HRM Effectiveness: Highlighting the Roles of Top Management Support, HR Professionals, and Line Managers.” *Journal of Global Information Management* 29 (2): 148–65. https://doi.org/10.4018/JGIM.2021030107.

Al-Hawary, Sulieman Ibraheem Shelash, Ayat Saed Mohammad, Mohammad Sultan Al-Syasneh, Maysaa Salman Faleh Qandah, and Thunyan Mannaa Seham Alhajri. 2020. “Organisational Learning Capabilities of the Commercial Banks in Jordan: Do Electronic Human Resources Management Practices Matter?” *International Journal of Learning and Intellectual Capital* 17 (3): 242–66. https://doi.org/10.1504/IJLIC.2020.109927.

Alam, S.M.S., and K.M.Z. Islam. 2021. “Examining Adoption of Electronic Human Resource Management From the Perspective of Technology Organization Environment Framework.” *IEEE Engineering Management Review* 49 (4): 59–75. https://doi.org/10.1109/EMR.2021.3114034.

Alenezi, Abdulhameed Rakan, Abdul Malek ABDUL Karim, and Arsaythamby Veloo. 2010. “An Empirical Investigation into the Role of Enjoyment, Computer Anxiety, Computer Self-Efficacy and Internet Experience in Influencing the Student’s Intention to Use e-Learning A Case Study from Saudi Arabian Governmental Universities.” *The Turkish Online Journal of Educational Technology* 9 (4): 22–34.

Alkhwaldi, Abeer F., Buthina Alobidyeen, Amir A. Abdulmuhsin, and Manaf Al-Okaily. 2023. “Investigating the Antecedents of HRIS Adoption in Public Sector Oorganizations: Integration of UTAUT and TTF.” *International Journal of Organizational Analysis* 31 (7): 3251–74.

Bartlett, M. S. 1954. “A Note on the Multiplying Factors for Various Chi-Square Approximations.” *Journal of the Royal Statistical Society: Series B (Methodological)* 16 (2): 296–98.

Bondarouk, T., E. Parry, and E. Furtmueller. 2017. “Electronic HRM: Four Decades of Rresearch on Adoption and Consequences.” *The International Journal of Human Resource Management* 28 (1): 98–131.

https://doi.org/10.1080/09585192.2016.1245672.
Brown, S.A., A.R. Dennis, and V. Venkatesh. 2010. "Predicting Collaboration Technology Use: Integrating Technology Adoption and Collaboration Research." *Journal of Management Information Systems* 27 (2): 9–57.
Cavana, R.Y., B.L Delahaye, and U. Sekaran. 2001. *Applied Business Research: Qualitative and Quantitative Methods*. John Wiley & Sons Inc.
Ceric, Arnela, and Kevin Parton. 2024. "What Prevents Organisations from Achieving E-HRM Potential?" *Australasian Journal of Information Systems* 28 (2010): 1–25. https://doi.org/10.3127/ajis.v28.3877.
Chao, Cheng Min. 2019. "Factors Determining the Behavioral Intention to Use Mobile Learning: An Application and Extension of the UTAUT Model." *Frontiers in Psychology* 10 (JULY): 1–14. https://doi.org/10.3389/fpsyg.2019.01652.
Davis, Fred D., Richard P. Bagozzi, and Paul R. Warshaw. 1989. "User Acceptance of Computer Technology: A Comparison of Two Theoretical Models." *Management Science* 35 (8): 982–1003.
Davis, Fred D. 1989. "Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology." *MIS Quarterly: Management Information Systems* 13 (3): 319–40. https://doi.org/10.2307/249008.
Dwivedi, Yogesh K., Nripendra P. Rana, Anand Jeyaraj, Marc Clement, and Michael D. Williams. 2019. "Re-Examining the Unified Theory of Acceptance and Use of Technology (UTAUT): Towards a Revised Theoretical Model." *Information Systems Frontiers* 21:719–34. https://doi.org/10.1007/s10796-017-9774-y.
El-Masri, Mazen, and Ali Tarhini. 2017. "Factors Affecting the Adoption of E-Learning Systems in Qatar and USA: Extending the Unified Theory of Acceptance and Use of Technology 2 (UTAUT2)." *Educational Technology Research and Development* 65 (3): 743–63. https://doi.org/10.1007/s11423-016-9508-8.
Esen, Murat, and Gönül Kaya Özbağ. 2014. "An Investigation of the Effects of Organizational Readiness on Technology Acceptance in E-HRM Applications." *International Journal of Human Resource Studies* 4 (1): 232. https://doi.org/10.5296/ijhrs.v4i1.5643.
Fishbein, M., and I. Ajzen. 1975. *Belief, Attitude, Intention, and Behavior: An Introduction to Theory and Research*. Reading, MA: Addison-Wesley.
Fraij, Jihad. 2022. "UTAUT2 Model to Investigate the Adoption of E-HRM in the Telecommunication Sector." *Wseas Transactions on Communications* 21 (May): 72–85. https://doi.org/10.37394/23204.2022.21.12.
Hair, Joseph F. 2006. *Multivariate Data Analysis*. 6th ed. New Jersey: Pearson Prentice Hall.
Hair, Joseph F, G Tomas, M Hult, Christian M Ringle, and Marko Sarstedt. 2014. *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*. 2nd ed. Los Angeles: SAGE Publications, Inc.
Hawash, Burkan, Zawiyah M Yusof, Muaadh Mukred, and Walid Ali. 2020. "Intention to Adopt Electronic Records Management System in the Oil and Gas Sector in Yemen." *International Journal of Advanced Trends in Computer Science and Engineering* 9 (5): 6959–71. https://doi.org/10.30534/ijatcse/2020/13952020.
Hong, W., F.K.Y. Chan, J.Y.L. Thong, L. Chasalow, and G. Dhillon. 2014. "A Framework and Guidelines for Context-Specific Theorizing in Information Systems Research." *Information Systems Research* 25 (1): 111–36.
Jan, Pi Tzong, Hsi Peng Lu, and Tzu Chuan Chou. 2012. "The Adoption of E-Learning: An Institutional Theory Perspective." *Turkish Online Journal of Educational Technology* 11 (3): 326–43.
Kaiser, H. F., and J. Rice. 1974. "Little Jiffy, Mark IV." *Educational and Psychological Measurement* 34 (1): 111–17.
Marler, Janet H. J.H., and Emma Parry. 2016. "Human Resource Management, Strategic Involvement and e-HRM Technology." *International Journal of Human Resource Management* 27 (19): 2233–53.
Moore, Gary C., and Izak Benbasat. 1991. "Development of an Instrument to Measure the Perceptions of Adopting an Information Technology Innovation." *Information Systems Research* 2 (3): 192–222. https://doi.org/10.1287/isre.2.3.192.
Noutsa, Fobang Aime, S. Fosso Wamba, and J. R. Kala Kamdjoug. 2019. "Exploring Factors Affecting the Adoption of HRIS in SMEs in a Developing Country: Evidence from Cameroon." In *ICT for a Better Life and a Better World*, 30:281–95. https://doi.org/10.1007/978-3-030-10737-6_18.
Noutsa, Fobang Aime, Jean Robert Kala Kamdjoug, and Samuel Fosso Wamba. 2017. "Acceptance and Use of

HRIS and Influence on Organizational Performance of SMEs in a Developing Economy: The Case of Cameroon." *Recent Advances in Information Systems and Technologies* 569 (April): 563–80. https://doi.org/10.1007/978-3-319-56535-4_57.

Nunnally, J. C., and I. H Bernstein. 1994. *Psychometric Theory*. Edited by New York McGraw-Hill. 3rd ed.

Obeidat, S.M. 2016. "The Link Between E-HRM Use and HRM Effectiveness: An Empirical Study." *Personnel Review* 45 (6): 1281–1301. https://doi.org/10.1108/PR-04-2015-0111.

Priyashantha, K. G., and I. Chandradasa. 2021. "Key Determinants of E-HRM Adoption Behavior: Banking Sector in Sri Lanka." *Human Resource Management* 2:281–92.

Putro, Herry Porda Nugroho, Sutarto Hadi, Ismi Rajiani, Ersis Warmansyah Abbas, and Mutiani. 2022. "Adoption of E-Learning in Indonesian Higher Education: Innovation or Irritation?" *Educational Sciences: Theory and Practice* 22 (1): 36–45. https://doi.org/10.12738/jestp.2022.1.0004.

Raaij, Erik M. Van, and Jeroen J.L. Schepers. 2008. "The Acceptance and Use of a Virtual Learning Environment in China." *Computers & Education* 50 (3): 838–52. https://doi.org/10.1016/j.compedu.2006.09.001.

Rahman, Mohammad Anisur, Xu Qi, and Mohammad Shahfayet Jinnah. 2016. "Factors Affecting the Adoption of HRIS by the Bangladeshi Banking and Financial Sector." *Cogent Business and Management* 3 (1): 1–11. https://doi.org/10.1080/23311975.2016.1262107.

Ruël, H., T. Bondarouk, and J. K. Looise. 2014. "Innovation or Irritation: An Explorative Empirical Study in Five Large Companies on Web-Based HRM." *Management Review* 15 (3): 364–80.

Sekaran, Uma, and Roger Bougie. 2010. *Research Methods for Business: A Skill Building Approach*. 5th ed. John Wiley & Sons Inc.

Siam, M.R.A., and S.M. Alhaderi. 2019. "The Scope of E-HRM and Its Effectiveness." *Polish Journal of Management Studies* 19 (2): 353–62. https://doi.org/10.17512/pjms.2019.19.2.30.

Strohmeier, S. 2020. "Smart HRM – A Delphi Study on the Application and Consequences of the Internet of Things in Human Resource Management." *International Journal of Human Resource Management* 31 (18): 2289–2318. https://doi.org/10.1080/09585192.2018.1443963.

Strohmeier, S., and F. Piazza. 2015. "Domain-Driven Design for HR Management Information Systems." In *Research on E-Transformation and Human Resources Management Technologies:Organizational Outcomes and Challenges*, 7–97. IGI Global.

Tarhini, Ali, Mazen El-Masri, Maged Ali, and Alan Serrano. 2016. "Extending the UTAUT Model to Understand the Customers' Acceptance and Use of Internet Banking in Lebanon A Structural Equation Modeling Approach." *Information Technology & People* 29 (4): 830–49. https://doi.org/10.1108/ITP-02-2014-0034.

Taylor, S., and P. Todd. 1995. "Decomposition and Crossover Effects in the Theory of Planned Behaviour: A Study of Consumer Adoption Intentions." *International Journal of Research in Marketing* 12 (2): 137–55.

Tukiran, Martinus, Widodo Sunaryo, Dian Wulandari, and Herfina. 2022. "Optimizing Education Processes During the COVID-19 Pandemic Using the Technology Acceptance Model." *Frontiers in Education* 7:1–7.

Venkatesh, V., and X. Zhang. 2010. "Unified Theory of Acceptance and Use of Technology: U.S. vs. China." *Journal of Global Information Technology Management* 13 (1): 5–27. https://doi.org/10.1080/1097198X.2010.108 56507.

Venkatesh, Viswanath. 2022. "Adoption and Use of AI Tools: A Research Agenda Grounded in UTAUT." *Annals of Operations Research* 308 (1–2): 641–52. https://doi.org/10.1007/s10479-020-03918-9.

Venkatesh, Viswanath, and Hillol Bala. 2008. "Technology Acceptance Model 3 and a Research Agenda on Interventions; Decision Sciences." *Decision Sciences Institute* 39 (2): 273–315.

Venkatesh, Viswanath, Michael G. Morris, Gordon B. Davis, Fred D. Davis, and A Dillon. 2003. "User Acceptance of Information Technology: Toward a Unified View." *MIS Quarterly* 27 (3): 425–78. https://doi.org/https://doi.org/10.2307/30036540.

Venkatesh, Viswanath, and Xiaojun Zhang. 2010. "Unified Theory of Acceptance and Use of Technology: U.S. vs. China." *Journal of Global Information Technology Management* 13 (1): 5–27. https://doi.org/10.1080/1097198X.2010.10856507.

Waheed, Abdul, Miao Xiaoming, Salma Waheed, Naveed Ahmad, and Shang Tian-Tian. 2020. "E-HRM Implementation, Adoption and Its Predictors: A Case of Small and Medium Enterprises of Pakistan." *International Journal of Information Technology and Management* 19 (2/3): 162–80. https://doi.org/10.1504/IJITM.2020.106217.

MSW MANAGEMENT -Multidisciplinary, Scientific Work and Management Journal
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Wang, Yi-Shun, and Ying-Wei Shih. 2009. "Why Do People Use Information Kiosk? A Validation of the Unified Theory of Acceptance and Use of Technology." *Government Information Quarterly* 26:158–165.

Yong, Jing Yi, M.-Y. Yusliza, and Olawole Olanre Fawehinmi. 2019. "Green Human Resource Management: A Systematic Literature Review From 2007 to 2019." *Benchmarking: An International Journal*. https://doi.org/10.1108/BIJ-12-2018-0438.

Yu, Shu, I-Ju Chen, Kuei-Feng Yang, Tze-Fang Wang, and Lee-Lan Yen. 2007. "A Feasibility Study on the Adoption of E- Learning for Public Health Nurse Continuing Education in Taiwan." *Nurse Education Today* 27 (7): 755–61. https://doi.org/10.1016/j.nedt.2006.10.016.

APPENDIX A

Past Literature on e-HRM/IS/IT adoption which Employed UTAUT

Study	Reference	Technology	Context	Sector	Significant Relationships	Insignificant Relationships
1	Fraij (2022)	e-HRM	Jordan	Telecommunication sector	PE→BI SI→BI FC→BI	EE→BI
2	Priyashantha & Chandradasa (2021)	e-HRM	Sri Lanka	Banking sector	PE→BI SI→BI FC→BI	EE→BI
3	Al-Ajlouni et al. (2019)	e-HRM	Jordan	Private universities	PE→BI, FC→BI, BI→Actual use	EE→BI, SI→BI
4	Al-Harazneh & Sila, (2021)	e-HRM	Jordan	Telecommunication sector	PE→BI FC→BI	EE→BI
5	Noutsa Fobang et al. (2019)	HRIS	Cameron	SMEs	PE→BI SI→BI FC→BI	EE→BI
6	Alkhwaldi et al., (2023)	HRIS	Jordan	Public sector	PE→BI SI→BI FC→BI	EE→BI
7	Hawash et al., (2020)	Electronic records	Yemen	Oil and gas	EE→BI PE→BI SI→BI FC→BI	
8	Putro et al., (2022)	e-learning	Indonesia	Universities	PE→BI SI→BI FC→BI	EE→BI
9	Chao, (2019)	Mobile learning	Taiwan	Universities	PE→BI EE→BI	EE→BI

Source: Authors