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RESEARCH PAPER

Enhancement of work engagement through HRIS adoption mediated by workplace well-being

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ABSTRACT

Goal: The purpose of this paper is to find out the Role of HRIS adoption in enhancing work engagement by considering the mediating effect of workplace well-being.

Design/Methodology/Approach: Applying AMOS software, the (CFA) method is used to construct the actual SEM model. A well-structured questionnaire was framed and collected a maximum of 300 data points using a 5-point Likert scale in a non-probability convenience sample in several organizations.

Results: SEM modeling has various constraints to evaluate the original and modification indices. It is found that there is a mediating effect on workplace well-being between the human resource information system and work engagement. The model establishes the significant impact of workplace well-being in organizations.

Limitations of the investigation: Future research should address that HRIS adoption is necessary for every organization for better decision-making, but they will face challenges in adopting the HRIS

Practical Implications: Receiving innovation in the working environment and recommending how it should be swiftly involved and transformed into a standard method of practice.

Originality/ Value: The study demonstrates the originality and significance of the current model in developing the human resource information system, which helps to ensure employees' workplace well-being towards the organization.

Keywords: Human Resource Information System, Work Engagement, Workplace Well-being.

1. INTRODUCTION

As technology advances and globalization accelerates, human resource information systems are being used by organizations all over the world. The term HRIS stands for Human Resource Information System, and is used to collect and store data on an organization's employees, including names, ages, addresses, salaries, benefits, time and attendance, and performance reviews. Human resource information systems are mostly used by human resources departments. The HR department and organization can benefit from a wide variety of computerized applications. This frequently incorporates an applicant tracking system (ATS), payroll, training, performance management, employee self-service, and so on. HRIS plays a very important role in engaging employees in work engagement and workplace well-being.

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This helps the employees to work in a positive way, increasing their knowledge and developing their skills to perform better and attain the objectives. Employees support the organization by being connected to work engagement and having a comfortable work environment. This information is essential for data-driven HR decision-making.

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2. VALUATION OF HRIS

Human Resource Management uses more strategic values and is collectively known as Strategic Human Resource Management. Human Resources and Information Technology assist in working together through a Human Resource Information System. HRIS is mostly used in developed countries like the USA, Canada, and other European countries. Now the trend is changing and HRIS is used in developing countries too. HRIS is used by many firms to run information technology (Teo, T. S. H. et al., 2001) provides employees with information, selection, helpfulness, and interaction with individual employees and receives innovation (Anupa, M. 2021) increasing information quality to improve, capability and convenience of HRIS satisfaction (Kumari, K. T. D., and Dayarathna, N. W. K. D. K. 2019) motivates and competence the workforce IS and adopts the retention and migration (Udekwe, E. et al., 2021) social influence and performance expectancy will be floating positive effects (Kamdjoug, J. R. K. et al., 2017) design performance, human resource, financial performance and literature review measures the performance in product development process (Cazeri, G. T. et al., 2019) People management policies and practises of work engagement, career development, and teamwork (Pathirage, U. K., and Weerasinghe, T. D. 2020) design science of research strategy and research development management of performance measurement system (de Oliveira, A. R., and Proença, A. 2019) selection of people, process and product on support armed forces, work processes and needs (Noor, M. M., and Razali, R. 2011) employee involvement and training support to develop the policies and strategies of decision (Quaosar, G. A. A., and Rahman, M. S. 2021) funding, infrastructural funding and trained manpower helps to reduce the Brain drain maladministration for teams and results (Iwu, C. G. et al., 2021) HRIS relieves occupational stress, technological behavior, and psychological reactions (Divakar, P. 2021) employee retention and time-saving in technological, organizational and environmental (Hussain, G. et al., 2018) Vendor support is essential to reduce costs and bridge gaps (Troshani, I. et al., 2011) The greatest barriers to insufficient financial support are rapid response and accessibility to information (Ngai, E. W. T., and Wat, F. K. T. 2006) HRIS Application and adoption to progress organizational performance will lead to understandable, authentic, applicable, influential, usable, and reliable outcomes (ElNakib, D. M. et al., 2021) HRIS applications aims valid data about foremost barricades to adopt HRIS, designates knowledge acquisition and scope of HRIS decision for extension (Quaosar, G. A. A., and Rahman, M. S. 2021)

3. OVERVIEW OF WORKPLACE WELL-BEING

Workplace well-being is purely well-defined as employee satisfaction and work-related activities in an organization; the implementation of training and providing practices to enhance the workplace well-being of those in the work environment, such as employees, customers, suppliers, and others; and the claim that workplace well-being affects work stress and job satisfaction. A worker's well-being incorporates rewards and recognition, growth and projection, a sense of work, interpersonal relationships, accomplished activities, physical work environment, and mental health (Carvajal-Arango, D. et al., 2021) Employees who are well-maintained work in a structured, managed, and experienced environment to protect and promote safety, health, and well-being (Sorensen, G. et al., 2021). The positive impact of employees on High-Performance

Work Systems (HPWS) was investigated (Chillakuri, B., and Vanka, S. 2020). Social media (SM) is linked to employee well-being and advocacy (Sakka, G., and Ahammad, M. F. 2020), occupational commitment to job resources and job demand connected with workers' well-being (Collie, R. J. et al., 2020) Leadership and organizational control to maintain clinician well-being and cognitive load (Ripp, J. 2021) The proactive and reactive aspects of an employee's well-being indicate the helping behaviour (Duan, J. et al., 2018). association among employee perceptions of job demands, work-to-life conflict, and workplace well-being (Chambel, M. J. et al., 2017); workplace conflict and employee outcome in well-being (Kuriakose, V. et al., 2019); employees' perceived ability to bridge the gap between self-efficacy and workplace well-being in a pleasant manner (Jena, L. K. et al., 2018) reduces stress, improves productivity, and improves workplace well-being (Souter-Brown, G. et al., 2021).

4. OUTLINE OF WORK ENGAGEMENT

Employees' work engagement is now recognized as a crucial factor in an organization's success. Positive workplace well-being engages employees in their work by implementing successful strategies to achieve goals. Work engagement is defined as "an optimistic, satisfying, work-related state of mind categorized by vigor, dedication, and absorption." Assist with the supervisor's sustenance to progress employee well-being in the work engagement to advance the satisfaction level of self-determination needs (Heyns, M. M. et al., 2022) The connection between workplace friendship and work engagement is completely related, but the role ambiguity partly facilitates the relationship (Yan, C. H. et al., 2021) Job satisfaction and work engagement are important factors in the relationship between servant leadership behaviour and employee in-and-out-of-the-office performance (Ozturk, A. et al., 2021). Constructive relationship with obsessive passion on job embeddedness in work engagement (Teng, H. Y. et al., 2021) related to productivity by measuring physiological constraints and human brain actions in a changing lightning situation (Deng, M. et al., 2021).direct and indirect effect on authentic leadership on work engagement with psychological capital in a positive manner respectively (Niswaty, R. et al., 2021) Structural empowerment and work engagement relate positively with management practice (Amor, A. M. et al., 2021) an ethical uniqueness of work-related deviant behaviour stretches indirect positive effect on work engagement (Fan, J. et al., 2021) measures the work engagement and Burn-out for corona virus (Poelmann, F. B. et al., 2021) social exchange theory, employee engagement and, organisational culture influence organisational trust such as co-worker trust, supervisor trust, and organisational trust (Mohanty, S. K., and Arunprasad, P. 2020) social, structural, and infrastructure of organizational constraints are associated with employee work engagement (Coo Calcagni, C. et al., 2021) an escalation of anxiety and social media fatigue of work from home employees during COVID-19 gives result in a lower level of work engagement (Khan, A. N. 2021) strong corporate culture in people management policies and practices to develop the work engagement and HRIS (Pathirage, U. K., and Weerasinghe, T. D. 2020) HRIS and work engagement have a positive relationship with workers and leaders (Miller, L., and Miller, A. F. 2020) although previous research has actively explored the impact of certain work engagement factors on workplace well-being and human resource information systems (e.g.), this study will focus on the relationship between work engagement on HRIS and workplace well-being. A new model is proposed based on our findings to explain workplace well-being in HRIS adoption that contributes to work engagement.

4.1 The objectives of this study are:

To understand the role of HRIS adoption on workplace well-being and work engagement
To analyze the relationship between HRIS adoption and Work Engagement
To examine the mediation effect of the workplace well-being between HRIS adoption and Work Engagement

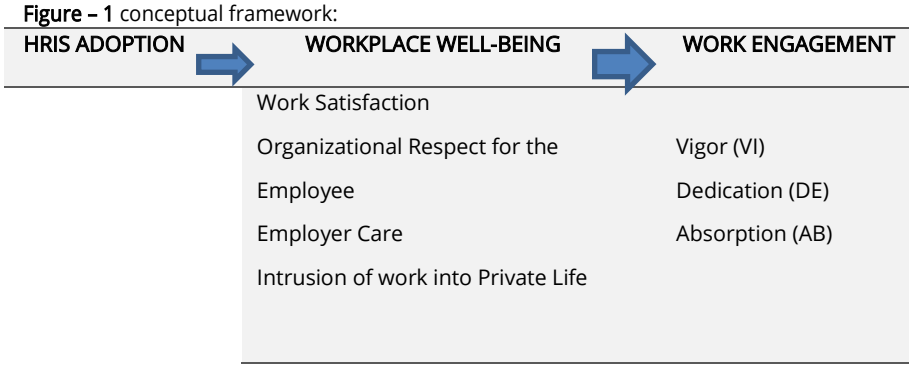
5. RATIONALE OF THE STUDY

Regulates the existing literature study by providing empirical analysis for workplace well-being having mediated an effect on a human resource information system in the predictive research domain of work engagement. SEM (Structural Equation Modelling) analysis was used to investigate the reliability of all the constructs, the correlation between employee workplace well-being and work engagement, the influence of the human resource information system on work engagement, and the mediating statistics of workplace well-being between work engagement and the human resource information system. There is a significant factor in the correlation between

constructs. Factor analysis of each item, KMO, and Bartlett's test. There is a mediating effect on workplace well-being between the human resource information system and work engagement. The organisation fully supports the employees to work better in the organisation for future benefits; aids to fulfil the individual performance of the employees; benefits for easy and quick decision-making; and the process of attaining organisational goals in a competitive world. The human resource information system has a significant impact on workplace happiness, and researchers have discovered several features of SEM using mean, standard deviation, and the sequential procedure of structural equation modelling for broadcasting outcomes, impending commands, and training limits.

6. RESEARCH MODEL

Figure – 1 conceptual framework:



Source: Ngai, E. W. T., and Wat, F. K. T. (2006), "Human resource information systems: a review and empirical analysis", Personnel review, doi 10.1108/00483480610656702.
Parker, G. B., and Hyett, M. P. (2011), "Measurement of well-being in the workplace, The development of the Work Well-Being Questionnaire", The Journal of nervous and mental disease, Vol. 199, No. 6, pp. 394-397, doi: 10.1097/NMD.0b013e31821cd3b9.
Schaufeli, W. B., Salanova, M., González-Romá, V., and Bakker, A. B. (2002), "The measurement of engagement and burnout, A two sample confirmatory factor analytic approach", Journal of Happiness studies, Vol. 3, No. 1, pp. 71-92.

The conceptual framework is made up of three major groupings of variables. There are 12 elements that comprise the independent variable (HRIS adoption) as measured by (Ngai, E. W. T., and Wat, F. K. T. 2006). (Parker, G. B., and Hyett, M. P. 2011) measured the mediating variable (Workplace well-being-Work Satisfaction, Organizational Respect for the Employee, Employer Care, Intrusion of work into Private Life-My work gives, My organization, and My boss) 18 items and the dependent variable (Work Engagement-Vigor, Dedication, and Absorption) as presented 16 items and measured by (Schaufeli, W. B. et al., 2002). A new conceptual framework was developed to assess the impact of HRIS adoption on work engagement influenced by workplace well-being. To determine whether workplace well-being mediates the relationship between HRIS adoption and work engagement.

The following assumptions are made based on this conceptual framework:

H1: There is a significant relationship between HRIS adoption on work engagement and work place well-being.

H2: There is a significant relationship between HRIS adoption and work engagement.

H3: Workplace well-being significantly mediates the relationship between HRIS adoption and work engagement.

7. METHODOLOGY

We examine the workplace wellbeing and work engagement across the set of individuals who is working under the HRIS adoption in different sectors (Information Technology (IT) company employees, HR employees, Public Banks, Private Banks, Private Colleges, Logistics business). HRIS is identified as-access to get the information in a quick response; streamlining HR operations; improving data control; reducing paperwork and personnel; measures tracking and control; aids in making better decisions; improves customer service; and boosts competitiveness (Ngai, E. W. T., and Wat, F. K. T. 2006). Workplace well-being are recognized using four criteria: about the employee's work satisfied, respecting the employees working in an organization, provides employer care, and an intrusion of work into personal life. My work provides, My Organization, and My Boss (Parker, G. B., and Hyett, M.

P. 2011), and work engagement is acknowledged and examined using three items: Vigor (VI), Dedication (DE), and Absorption (AB) (Schaufeli, W. B. et al., 2002). We have adopted a descriptive research design to analyse the workplace well-being of work engagement on HRIS adoption. Data collection was done through the non-probability convenience sampling of 300 respondents.

The primary data collection was done amid the respondents operating the structured questionnaire in a closed-ended style. The first part covers the demographic profile of basic information of the respondents, and the second part covers the secondary questionnaire of HRIS adoption—workplace well-being and work engagement. In this study, reliability was measured for 12 items in the human resource information system at .853, for workplace well-being, it was measured for 18 items at .832, and work engagement was measured for 16 items at .832, and the overall reliability was measured at.923, hence the items are proved to be reliable. SPSS 20 and Amos were used for the analysis. The tools used for the analysis are the statistical analysis of reliability, construct validity, convergent validity, discriminant validity. The latent variable of the convergent validity of average variance extracted and the square root of the average variance extracted of the latent variable in discriminant validity (CFA), path analysis, The mediation effect of workplace well-being is placed between human resource information system and work engagement, the latent variable of the convergent validity of average variance extracted and the square root of the average variance extracted of the latent variable in discriminant validity (CFA). We have adopted a 5-point Likert scale to estimate and measure each item. We have evaluated our construct using a reliability test and factor analysis. The total number of items is 46, classified under each construct as HRIS adoption (12 items), workplace well-being (18 items), and work engagement (16 items).

8. RELIABILITY ANALYSIS

Cronbach Alpha is used for internal consistency reliability of observed variables like human resource information system (HRIS), workplace well-being, and work engagement. Observed variable using the same scale measure using the Cronbach alpha.

Cronbach alpha values are more than 0.7 are considered good, less than that internal consistency of variables is not connected. Our Cronbach alpha values are more than 0.8 and it's pretty good to proceed.

Table-1 reliability for all the variables

Factors	Items	Cronbach Alpha
Human Resource Information System	12	.853
Workplace Well-being	18	.832
Work Engagement	16	.832
Overall Reliability	**46**	**.923**

Source: (Conners, C. K. et al., 1998).

From above table 1: the reliability statistics were carried out with the aid of Cronbach's alpha. In this study the reliability score for Human resource information systems is .853 was measured for 12 items, Workplace well-being is .832 was measured for 18 items and work engagement is .832 was measured for 16 items. Overall reliability is .923 was measured for all the 46 items of HRIS adoption.

9. CONSTRUCT VALIDITY

Determine intercorrelations amongst constructs to strengthen Bartlett's sphericity test, Kaiser Meyer Olkin, Exploratory Factor Analysis to generate data appropriate for CFA

(Pallant, J. F., and Bailey, C. M. 2005); (Ikediashi, D. I. et al., 2013); (Singh, C. D., and Khamba, J. S. 2015); (Wong, C. H. et al.,2015).

Table-2 KMO and bartlett's sphericity test

KMO and Bartlett's Test for Human Resource Information System Adoption, Workplace well-being, and Work Engagement			
Variables	Kaiser Meyer Olkin Measure	Bartlett test of Sphericity	
		Chi-Square value	P-value

Human Resource Information System Adoption (HRIS)	.889	1020.649	.000
Workplace Well-being (WPWB)	.844	1161.790	.000
Work Engagement (WE)	.844	1161.790	.000

Source: (Tabachnick, B. G. et al., 2007).

The significant p-value is <0.05 is suitable for Bartlett's test, and the KMO value must lie amid 0 to 1 for the lowest value of CFA 0.5 (Tabachnick, B. G. et al., 2007). The outcomes of the KMO test (>0.844), Human Resource Information System- Independent variable (0.889), Workplace well-being- Mediating variable (0.844), and Work Engagement- Dependent variable (0.844). The findings of Bartlett's sphericity test (significant p values 0.000) for all variables indicates that the data is well-matched to sustain the CFA technique.

10. CONVERGENT VALIDITY

Convergent validity is used to find out how close the indicators are to the latent variables. Finding out all the indicators of latent variables are close to the latent constructs.

Table-3 convergent validity

Latent Variables	AVE
Human resource information system	0.73339
Workplace well-being	0.627034
Work engagement	0.641768

Source: (Kørner, A. et al., 2006).

Here the results show, the average variance extracted must be more than > 0.5, and the values of latent variables are >0.5. So, the Latent variable has convergent validity.

11. DISCRIMINANT VALIDITY

Table-4 discriminant validity

Latent Variables	HRIS	Workplace well-being	Work Engagement
HRIS	0.8577684		
Workplace well-being	0.778	0.8476481	
Work Engagement	0.721	0.823	0.8491699

Source: (Farrell, A. M. 2010).

The square root of the average variance extracted must be more than correlation values. The correlation of workplace well-being and HRIS is 0.778, Correlation of work engagement and HRIS is 0.721 is compared to be more than the square root of the average variance extracted. The square root of AVE is more than correlation of the latent variable 0.8577684 here the latent variable of discriminant validity is existing. The correlation of workplace well-being and HRIS is 0.778, work engagement and workplace well-being are 0.823 are compared to be more than the square root of AVE. The square root of the average variance extracted is 0.8476481 then the latent variable of discriminant validity is existing. Work engagement and HRIS have a correlation of 0.721, while work engagement and workplace well-being have a correlation of 0.823, which is greater than the square root of the average variance extracted. The square root of AVE is 0.8491699 then the latent variable of discriminant validity is existing. When the square root of the average variance extracted is more than the connection of latent variable then discriminant rationality is existing.

12. DATA ANALYSIS

Data analysis is the methodical usage of analytical and statistical techniques to define, demonstrate, and evaluate the assessed data to support decision-making and conclusions. Data analysis focused on statistical tools to discover the percentage analysis, descriptive

results, correlations, confirmatory factor analysis (CFA), path analysis, and find out the mediation effect. Convergent validity discovers the latent variables are close to the latent constructs and the latent variable of discriminant validity determines the correlation values. Data analysis plays a very significant role in taking decisions more scientific and effectively.

13. PROFILE OF THE RESPONDENTS

Respondents of the study are collected from the employee who is already using HRIS applications in the various sector. Demographic profile of their Age, Gender, Marital status, Educational Qualification, Overall Experience, Organization Adopted in HRIS, how many years of HRIS Adoption in an Organization? Totally 300 structured questionnaires were framed and collected the data from Information Technology (IT) employees, non-IT employees, HR employees, Public Banks, Private Banks, Government sector Logistics business and Education sector. Totally 300 sample data were collected from online google forms and used for this analysis.

Table-5 Summary of Respondents Profile

Demographic Characteristic	Frequency(n=300)	Percentage (%)
Gender		
Male	154	51.3
Female	146	48.7
Age		
21 yrs-30 yrs	74	24.7
31 yrs-40 yrs	117	39.0
41 yrs-50 yrs	75	25.0
Above 50 yrs	34	11.3
Marital Status		
Single	69	23.0
Married	231	77.0
Educational Qualification		
Bachelors	97	32.3
Masters	173	57.7
Doctorate	30	10.0
Over all Experience		
Below 5 yrs	77	25.7
5 yrs-10 yrs	93	31.0
10 yrs- 15 yrs	66	22.0
Above 15 yrs	64	21.3
Organization Adopted HRIS		
Not at all	6	2.0
Partly Adopted	142	47.3
Fully Adopted	152	50.7
How many years Adopting HRIS		
Less than one year	27	9.0
1yrs-4yrs	89	29.7
5yrs-9yrs	65	21.7
More than 9 yrs	119	39.7
Total	300	100

Source: (Al-Dmour, A. H. et al., 2018).

Table 5 shows the respondents of demographic profile frequency and percentage. Amid the respondents 51.3% in (154) were Male and, 48.7% in 146 were Female. The age of respondents from 21 yrs - 30 yrs 24.7% in (74), 31 yrs – 40 yrs 39.0% in (117),41 yrs – 50 yrs

25.0% in (75), and Above 50 yrs 11.3% in (34). Marital status of the respondents were single employees and married employees working in the organization, 23.0% in (69) of single employees and 77.0% in (231) of married employees. Compare to single employees, married employees are working more in the organization. Educational qualification of the respondents in Bachelors 32.3% in (97), Masters 57.7% in (173), and Doctorate10.0% in (30). Among this study, the respondents of employees are higher in the master degree compare to bachelors and doctorate. Over all experience of the employees working under the HRIS Adoption applications- below 5 yrs of experienced employees are 25.7% in (77), 5 yrs – 10 yrs of experienced employees 31.0% in (93), 10 yrs – 15 yrs of experienced employees 22.0% in (66), Above 15 yrs of experienced senior employees are 21.3 % in (64) and the highest percentage is 31.0% in 5 yrs – 10 yrs. Organizations already partly adopted HRIS are 47.3 % in (142), organizations fully adopted HRIS in 50.7 % in (152) and organization not at all adopted HRIS are 2.0 % in (6). So HRIS fully adopted in organization is higher in our study and also partly HRIS adopted is near to the fully HRIS adopted, so nowadays most of the organization is using the HRIS adoption in developing country. HRIS adoption is mostly used in the developed countries like USA, CANADA etc., but, now the trend is changing from developed country to developing country- Adopting the HRIS application in the organization is enhanced. How many years of adopting the HRIS application? Among the respondents less than one year of adopting the HRIS application is 9.0% in (27), 1 yrs – 4 yrs of adopting the HRIS applications are 29.7 % in (89), 5 yrs – 9 yrs of adopting the HRIS applications are 21.7 % in (65), more than 9 yrs of adopting the HRIS applications are 39.7 % in (119). In this study, we found out the adoption of the HRIS application is more likely to be used in the organization for the collection of data, selection, effectiveness, communication of the employees in an early stage to receive information from the top management and for the betterment of decision making in present and future.

Table-6 descriptive statistics

Descriptive Statistics analysis of Skewness and Kurtosis for HRIS Adoption and Work Engagement									
	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
H1	300	1	5	4.55	.690	-1.829	.141	4.259	.281
H2	300	2	5	4.47	.661	-1.158	.141	1.314	.281
H3	300	2	5	4.41	.733	-1.122	.141	.847	.281
H4	300	2	5	4.39	.703	-.955	.141	.508	.281
H5	300	1	5	4.30	.778	-1.008	.141	.890	.281
H6	300	1	5	4.41	.715	-1.296	.141	2.240	.281
H7	300	2	5	4.35	.776	-1.079	.141	.714	.281
H8	300	2	5	4.30	.724	-.837	.141	.475	.281
H9	300	2	5	4.40	.708	-1.082	.141	1.062	.281
H10	300	1	5	4.42	.734	-1.407	.141	2.468	.281
H11	300	1	5	4.44	.659	-1.188	.141	2.386	.281
H12	300	2	5	4.45	.618	-.835	.141	.553	.281
WE1	300	1	5	4.21	.775	-1.076	.141	1.784	.281
WE2	300	1	5	4.20	.807	-.848	.141	.464	.281
WE3	300	1	5	4.10	.890	-.970	.141	.788	.281
WE4	300	1	5	4.15	.822	-.938	.141	.986	.281
WE5	300	1	5	4.16	.865	-1.058	.141	1.296	.281
WE6	300	2	5	4.24	.773	-.749	.141	-.013	.281
WE7	300	1	5	4.15	.799	-.916	.141	1.321	.281
WE8	300	1	5	4.13	.863	-.952	.141	.890	.281
WE9	300	2	5	4.19	.800	-.783	.141	.151	.281
WE10	300	1	5	4.20	.794	-.904	.141	.976	.281
WE11	300	1	5	4.21	.851	-1.014	.141	.831	.281
WE12	300	1	5	4.28	.736	-.843	.141	.773	.281
WE13	300	1	5	4.24	.794	-1.061	.141	1.625	.281
WE14	300	1	5	4.26	.810	-1.200	.141	2.085	.281
WE15	300	1	5	4.31	.853	-1.479	.141	2.677	.281
WE16	300	1	5	4.41	.729	-1.336	.141	2.542	.281
Valid N (listwise)	300								

Source: (Currie, C. R. et al., 1999).

Descriptive statistics analysis of HRIS Adoption variables and Work Engagement variables of the SEM model, acted to find the skewness and kurtosis to find the normality of the samples, according to (Currie, C. R. et al., 1999), the appropriate values of Skewness are less than 2 and Kurtosis is less than 7 in range. The results of SEM analysis control the significant variables, which projected the hypotheses healthier than indicated that workplace well-being has appropriate interactions with work engagement.

14. CORRELATION

14.1 The Problem:

Examine the correlation between HRIS adoption and workplace well-being.

H1: There is a significant relationship between HRIS Adoption on Work Engagement and Workplace Well-being.

Table-7 correlation analysis

	HRIS Adoption	WPWB	WE
HRIS Adoption	1		
WPWB		.645**	1
WE	.587**	.661**	1

Source: (Godfrey, K. R. 1980)

****. At the 0.01 level, correlation is significant. (2-tailed).**

14.2 Reporting Pearson correlation:

The correlation effect of HRIS Adoption and Workplace Well-being was found to be meditatively positive and statistically significant (r=.645, p<.001). Hence, H1was supported. This shows that an increase in HRIS Adoption would lead to Workplace Well-being.

15. ANALYSIS AND FORMULATION-SEM MODEL

The facts collected from several organizations adopted a human resource information system (Information Technology (IT) company, HR employees in organization, Public Banks, Private Banks, Private Colleges, Logistics businesses) through a structured questionnaire. 'Confirmatory Factor Analysis aids to find the weight of regression, 'Cronbach Alpha' estimate data reliability. Processing of data analysis measured by SPSS-AMOS software to evaluate the correlation among the variables in SEM model.

16. SEM CHARACTERISTICS

SEM is used for both experimental and non-experimental studies to find out the cross-sectional analysis and longitudinal data collection. The popular studies of (Mueller, R. O., and Hancock, G. R. 2018), (Ullman, J. B., and Bentler, P. M. 2003) are in flexibility and generality. SEM is usually used for statistical analysis of research for the results used in empirical analysis. It gives accurate results for reliability, correlation, model fit, modification indices, factor analysis, usually it demands a minimum of 200 sample data. There will be observed variables and unobserved variables and give the error values too.

In this study, we used two models in SEM

Measurement model

Path analysis.

The measurement of the unobserved variables is numerous and generated from the indicators, while the observable variables are measured directly and calculated first. The measurement model is tested using CFA (Confirmatory Factor Analysis), and each latent variable is evaluated using an observed variable (Hair Jr, J. F. et al., 2020) and (Hayes, A. F. et al., 2017). The model fit must be estimated for CFA to approve the measurement. After the model fit is complete, path models among the latent variables are evaluated.

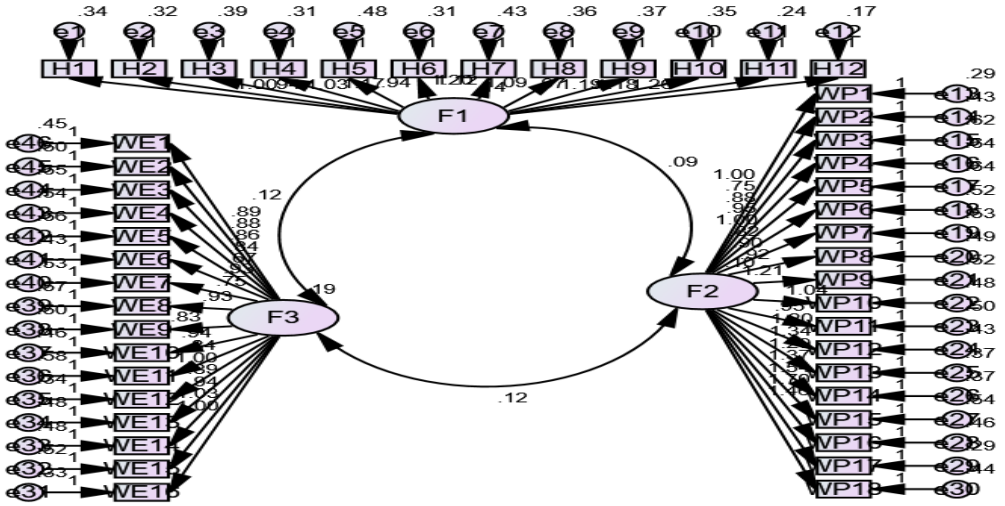


Figure – 2 confirmatory factor analysis (cfa)

Table-8 measurement model

Indices	values	suggested value
Chi-square/df	1.710	<5.00 (Hair, E. et al., 1998)
p-value	0.696	>0.05 (Hair, E. et al., 1998)
GFI	0.913	>0.90 (Hu, L. T., and Bentler, P. M. (1999)
AGFI	0.935	>0.90 (Hair, E. et al., 2006)
NFI	0.937	>0.90 (Hu, L. T., and Bentler, P. M. (1999)
CFI	0.956	>0.90 (de Beaucoudrey, L. et al., 2008)
RMSEA	0.049	<0.08 (Hair, E. et al., 2006)

Source: (McIver, J., and Carmines, E. G. 1981), (Anwar, M. et al., 2018); (Hu, L. T., and Bentler, P. M. 1999).

The report shows that the model was acceptable for further analysis. The results indicate that the Chi-square/df = 1.710<5 (McIver, J., and Carmines, E. G. 1981), (Anwar, M. et al., 2018), and also other indices GFI = 0.913, AGFI-0.935, NFI = 0.937, CFI = 0.956, RMSEA= 0.049, and P-value-0.696 met the essential level, all pointers attain the minimum level. These results designated that the absolute fit index for the constructs meets the required level, which indicates the achievement of model fit indices.

17. PATH ANALYSIS

Path analysis is used to calculate the mediation, moderation and interaction relationship between the constructs for the multiple regression model assessed simultaneously. The indicators are correlated to the latent variable, which is recognized by the observable variables. The latent variable and the indicators variables have a relationship. Finding the construct validity of the measurement model amongst the latent constructs and indicators. Converging the indicators into latent variables to find out how close among them. Once CFA has created measurement models for latent components, the path can be causal or covariance-based. (Hair Jr, J. F. et al., 2017); (Mukherjee, A., and Malhotra, N. 2006); (Mueller, R. O., and Hancock, G. R. 2018)

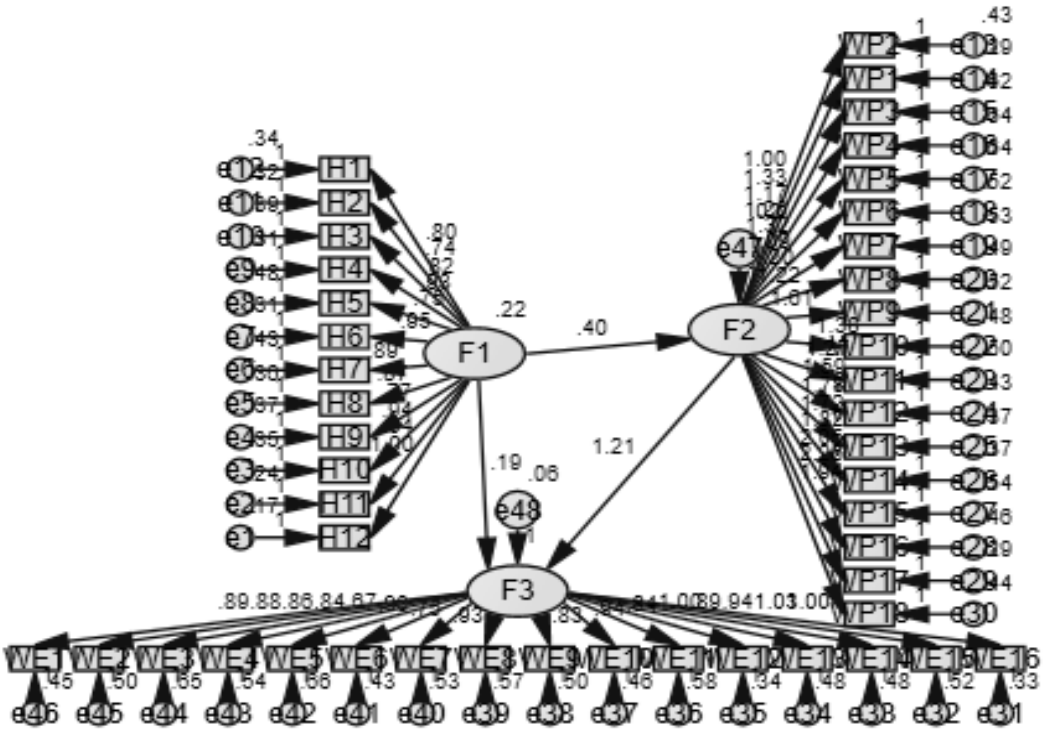


Figure – 3

Table 9 - model fit

Indices	Values	Suggested Value
Chi-square/df	1.890	<5.00 (Hair, E. et al., 1998)
p-value	0.064	>0.05 (Hair, E. et al., 1998)
GFI	0.915	>0.90 (Hu, L. T., and Bentler, P. M. (1999) AGFI
0.934	>0.90 (Hair, E. et al., 2006)	
NFI	0.957	>0.90 (Hu, L. T., and Bentler, P. M. (1999)
CFI	0.946	>0.90 (de Beaucoudrey, L. et al., 2008)
RMSEA	0.053	<0.08 (Hair, E. et al., 2006)

Source: (McIver, J., and Carmines, E. G. 1981), (Anwar, M. et al., 2018).

The report shows that the model is fit and acceptable for further analysis. The results indicate that the Chi-square/df = 1.890<5 (McIver, J., and Carmines, E. G. 1981), (Anwar, M. et al., 2018), and also the other indices GFI = 0.915, AGFI-0.934, NFI = 0.957, CFI = 0.946, RMSEA= 0.053, and P-value-0.064 met the essential level, all pointers attain the minimum level. These results designated that the absolute fit index for the constructs meets the required level, which indicates the achievement of model fit indices.

18. ANALYSIS OF MEDIATION EFFECT USING SPSS AMOS

The mediation role of mediating variables on the connection between independent and dependent variables was investigated using mediation analysis. The total effect of the independent variable in standardized estimate value on the dependent variable was significant, according to the Sobel test (Sobel, M. E. 1982). The independent variable's direct effect on the dependent variable was found to have a significant mediating effect. Because of the mediating variable, the independent variable's indirect influence on the dependent variable was considerable. The independent variable and dependent variable have a mediation effect, and the p-value is significant.

H3: Workplace well-being significantly mediates the relationship between HRIS adoption and work engagement.

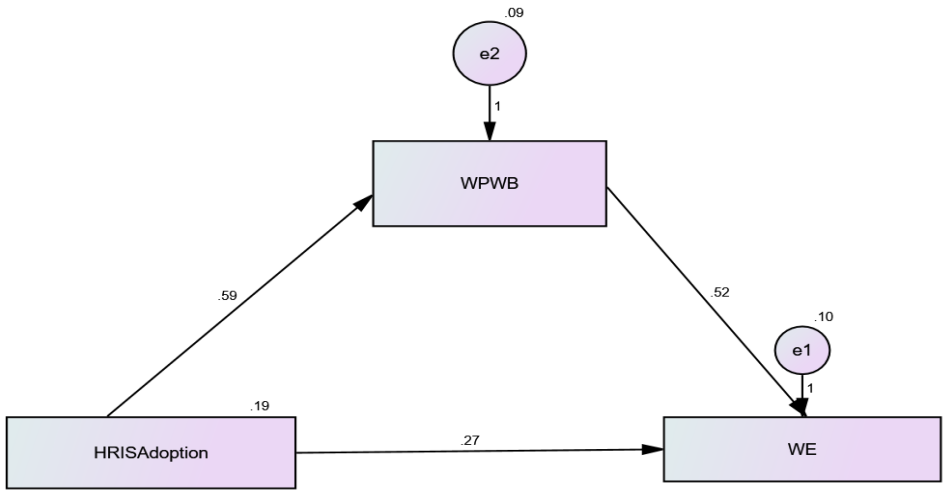


Figure – 4

Table-10 result of mediation model

	Standardized Estimation	P-value	Result
Total Effect	.587	0.013	Significant Impact
Direct Effect	.275	0.005	Significant Impact
Indirect Effect	.312	0.005	Significant Impact

Source: (Sobel, M. E. (1982).

The impact of the direct effect between HRIS Adoption and Work Engagement is .587, the impact on the indirect effect between HRIS Adoption and Workplace well-being is .275, and the Workplace well-being is mediating between Human resource information system and Work Engagement is .312. This shows that the relationship between an independent variable human resource information system and a dependent variable work engagement is fully mediated by mediating the variable workplace well-being.

19. FINDINGS

Evaluating the process of employees' engaging their work in an organisation for the betterment of their performance. This research reveals that workplace well-being is best suited for the organisation to perform well and coordinate with the employees. Adoption of the human resource information system in the organisation to develop their employees' work, reducing the HR job, easy access to the employee, gaining all the information in a system, and cost and time savings for an employee. The working environment will receive the innovation of new technology and recommends the method of practise be involved and transformed swiftly. Here, we find that the reliability value is good for individual variables as well as the overall constructs in the model. The SEM (structural equation model) was used to find out the various constraints and evaluate the original model fit and modification indices. Workplace well-being is best suited for work engagement and the human resource information system, and the mediation effect is well organised with constructs to fit the model (HRIS). Employees' well-being will be more important in the organisation because all the work will be done by the employees to attain the goals. If they are not well-being in the organization, the employee's performance will go down. Encouraging the employees' good well-being will promote the inner satisfaction of the employees and make them work better. This demonstrates that work engagement and the human resource information system fully mediate workplace well-being. The model establishes the significant impact of workplace well-being in organizations.

The SEM (structural equation modelling) is crucial to finding the analysis of CFA, path analysis, the mediation effect of the variables, construct validity, convergent validity, and discriminant validity. The validity of SEM has two models – the measurement model and the structure model. The measurement model measured connections amid latent constructs

and indicator variables. The structural model is used to find out the relationship between one latent variable and other latent variables. The construct validity of SEM is used to find out the convergent validity and discriminant validity. Convergent validity will help to find out how close the indicator variables are to latent variables. Does discriminant validity define how far they are discriminant? How much are they different from other latent variables? Impending research should show that HRIS adoption is essential to every organisation for healthier decision-making. The significance of the study will support the workplace employee well-being to adopt a human resource information system in the organisation to support work engagement and attain future supportable development.

20. RESULTS AND DISCUSSION

Reliability was measured and found to be reliable for all the constructs, including the parameters of mean, standard deviation, skewness, and kurtosis. There is a significant relationship between HRIS adoption and workplace well-being. According to Kaiser Meyer Olkin's and Bartlett's Test of Sphericity, human resource information system adoption is 0.889, workplace wellbeing is 0.884, work engagement value is 0.884, and the p-values are significant for all constructs. Confirmatory factor analysis finds the results of the comparative fit index are 0.956. The value is higher than the recommended value of 0.90 (Hooper, D.et al., 2008); the goodness-of-fit-index is 0.913, which is higher than 0.90, suggesting the model is fit and the Normed Fit Index is 0.937, higher than 0.90 (Hu, L. T., and Bentler, P. M. (1999). Adjusted Goodness-of-Fit Index of 0.935, which is higher than 0.90 (Hair, E. et al., 2006). The RMSEA value is 0.049, which is lower than the 0.08 recommended by (Hair, E. et al., 2006) and p-close fit measurements. The results of the Path analysis comparative fit index are 0.946, which is higher than 0.90 (Hooper, D.et al., 2008); the Goodness-of-Fit Index is 0.915 higher, suggesting a good enough fit to adopt the model; and the Normed Fit Index is 0.957 higher than 0.90 (Hu, L. T., and Bentler, P. M. (1999). One of the most prominent measurements is the AGFI (Adjusted Goodness-of-Fit) of 0.934, which is higher than 0.90 (Hair, E. et al., 2006) and the RMSEA, considering the sample size and subjectivity are in the root mean square error of approximation (RMSEA). The result of the RMSEA value is 0.053, which is less than the 0.08 recommended (Hair, E. et al., 2006) and p-close fit measurements.

It turns out there is a mediation effect between human resource information systems and work engagement through workplace well-being (Sobel, M. E. (1982); direct effect value is 0.275, indirect effect value is 0.312, and the total effect value is 0.587. These are assessed in Amos; the p-value is strongly impacted by the mediation effect. The convergent validity of the average variance extracted must be more than 0.5 (Kørner, A. et al., 2006). The latent variable of the human resource information system is 0.73339, the workplace well-being value is 0.627034, and the work engagement value is 0.641768. So, the results show the latent variable of convergent validity is greater than 0.5 and the value is assessed. The square root of the average variance extracted should be more than the correlation values, and the latent variable of discriminant validity is enduring. The results of latent variables are met; the standard values of human resource information systems are 0.8577684, workplace well-being is 0.8476481, and work engagement is 0.8491699. The correlation values of HRIS are 0.778, workplace well-being is 0.823, and work engagement is 0.721. This shows the average variance extracted is greater than the correlation values. The discriminant validity is presented.

21. CONCLUSION

Considering the current industrial scenario, adoption of HRIS plays a very crucial role for the organization. Our study highlights the importance of the relationship between HRIS adoption on work engagement and workplace well-being to an organization. The results show that there is a significant relationship between HRIS adoption and workplace well-being. There is a mediation effect (workplace well-being) between the human resource information system and work engagement. Providing HRIS training to the employees at the workplace helps improve their HRIS knowledge and is helpful for the workers to save their time on their particular work and benefits.

Further, HRIS supports the improvement of employees' well-being and work engagement in an organisation for future development. Extensive literature was conducted for the HRIS adoption and it is highly associated with work engagement. It is manifest from the outcomes that most of the productions are well-organized with workplace well-being for their organisation in the survey. There are no past studies that verified the same grouping of paradigms organised with entire variables positioned. In the future, researchers can

commence with supplementary constructs incipient with adoption in human resource information systems in developing countries with different sectors.

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APPENDIX – A HRIS Adoption Items

S.No.	Statements
1	Quick response and access to information
2	Improves data control
3	Reduces data entry
4	Streamlines HR processes
5	Allows fewer errors
6	Standardizes programmes and procedures
7	Reduces paperwork
8	Reduces manpower
9	Measures tracking and controlling
10	Helps to make more informed decisions
11	Improves customer services
12	Enhances competitiveness

APPENDIX B - Workplace Well-being Items

S.No.	Statements
	My work gives
1	Fulfillment
2	Sense of direction and meaning
3	Sense of satisfaction
4	Sense of self-worth
5	Sense of job strengths
6	Sense of flourishment
	My organizations
7	Trusts the senior people
8	Believes in Principles
9	Treats the employees fairly
10	Respects the staff
11	Satisfies the value system
	My Boss
12	Is lending an ear
13	Is caring
14	Is empathic and understanding
15	Enables positive transactions with my boss
16	My work is not eating into private life
17	I don't feel stressed to meet demands
18	I don't feel pressured to meet targets

APPENDIX – C Work Engagement Items.

S.No.	Statements
	Vigor (VI)
1	HRIS makes me to feel like going to work.
2	HRIS aids to feel bursting with energy.
3	HRIS supports to persevere, even when things do not go well.
4	HRIS enhances to continue working for very long periods at time.
5	HRIS assists very resilient, mentally.
6	HRIS eases to feel strong and vigorous.
	Dedication (DE)
7	HRIS progresses my job as challenging.
8	HRIS develops my job and inspires me.
9	HRIS makes me enthusiastic about my job.
10	HRIS drives me proud on the work that I do.
11	HRIS improves my work meaning and purpose.
	Absorption (AB)
12	HRIS supports my work
13	HRIS comforts my work
14	HRIS creates trust
15	HRIS aids to immerse in my work.
16	HRIS eases me to work intensely.

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