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High-performance Work Systems and Recovery Experiences: An Empirical Study

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Abstract

High-performance work systems practices increase employee performance, but can they also help employees recover from work-related stress and improve their well-being and productivity? In order to foster resilient workers, stress and anxiety must be reduced whenever feasible. This important but minimally discussed problem is the subject of the current study. Purposive sampling was the method used in this investigation. Participants in the study were software engineers from high-performing IT firms. The period of data collection was September 2023–March 2024. A total of 390 employees provided data, and 338 of the surveys were deemed acceptable for use. Software like Microsoft Excel, SPSS 25, Smart PLS 3.3 and Wondershare EdrawMax contributed to the analysis and presentation of the data. The findings showed that motivation-enhancing HPWS practices have a strong and favourable relationship with employees' psychological detachment and level of relaxation. Managers and organisations can foster motivation-enhancing practices to counterbalance the workload that comes from other HR practices. The study derives significant research gaps that must be explored in the future.

Keywords: High-performance work systems; Recovery experiences; Motivation-enhancing practices; Psychological detachment; Relaxation

1. Introduction

High-performance work systems (HPWS) are referred to as complementary bundles of HRP that allow the organisation to create and configure human capital, impact employee motivations and behaviours, and offer opportunities in ways that produce both horizontal (i.e., synergy among various practices) and vertical fit (i.e., support for strategic objectives) (Jiang et al. [1]). The idea that HPWS improves performance, employee well-being, and other outcomes has been substantiated by research (Han et al. [2]; Jiang & Messersmith [3]; Kehoe & Wright [4]; Li et al. [5]). However, there is a large research vacuum that the current study aims to fill: that is, the discussion of how HPWS, with its ability, motivation, and opportunity-enhancing practices, influences the employees' stress recovery system for better outcomes and overall well-being.

Employees have increasing workloads, job insecurity, ongoing organisational transformation initiatives, and high cognitive and emotional demands (American Psychological Association, 2013; Eurofond, 2012). An energy-depleting process is triggered when a person constantly feels overwhelmed with demands. This process leads to increased adversity in health and well-being over time (Demerouti et al. [6]). It is not sufficient for employees to be highly competent, knowledgeable and motivated to achieve these obligations and maintain their health (Polyhart & Moliterno [7]). To sustain high levels of energy, focus, and engagement over time, they also need to be in optimal physical and psychological states (Bakker [8]; Sonnentag & Fritz [9]). Following a stressful event, recovery is the psycho-physiological resurrection process through which a person reaches his or her pre-stressor level (Meijman & Mulder [10]). Sonnentag and Fritz [11] refer to the mechanisms facilitating healing as recovery experiences.

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The present paper is a crucial attempt to investigate the influence of high-performance work systems on employees' recovery experiences, aiming to enhance the well-being of high-performing employees. Although there has been much research on the effects of high-performance work systems on worker performance or organisational productivity, to the best of my knowledge, this study is the first to report the impact of High-performance work systems on recovery experiences. Stress is considered the "Health Epidemic of the 21st Century" by the World Health Organisation. Mentally strong employees can easily cope with job stress and adverse situations. The study is a crucial effort to address the issue of employees detaching from work or work-related tasks after office hours and relaxing and regaining energy. The research provides several contributions to the literature. First, given the relative scarcity of available research in the related field, this paper discloses the high-performing practices capable of bringing high performance from employees without compromising their health by discussing the role of HPWS on the recovery experiences of employees. Second, this research will discuss the theoretical contribution and practical implications. Lastly, this study also presented research gaps for further analysis.

2. Literature Review

2.1. High-performance work systems

Combs et al. [12] and Jiang et al. [1] define HPWSs as groups of distinct but linked HR practices that enhance workers' capacity, drive, and opportunity to contribute to and sustain a company's long-term competitive advantage. Bailey first put forth the AMO framework for HPWSs [13]. According to Bailey, to guarantee that an employee's discretionary effort was met, three things had to happen: employers had to provide employees with the opportunity to participate (Appelbaum et al. [14]) or opportunity-enhancing practices (participation and clear job descriptions) or employees needed to have the necessary skills (selective staffing, extensive training, internal mobility, employment security, results-oriented appraisals).

HPWSs have been found to be favourably correlated with employees' work pressure and negatively correlated with job satisfaction and affective commitment (Young et al. [15]; Heffernan & Dundon [16]). Chillakuri and Vanka's [17,18] research demonstrated that HPWSs cause health harm. According to Kroon et al. [19], HPWSs increase job demands and positively correlate with emotional exhaustion. According to Kim et al. [20], HPWSs are connected to both worse mental health due to increasing work-role overload and better mental health in employees through increased psychological empowerment. According to Hauff, Felfe et al. [21] findings, job satisfaction and engagement mediate between HPWSs and employees' health. Workload and working hours of HPWS can result in either increased or decreased job satisfaction, as Macky and Boxall [22] demonstrated. According to Boxall and Macky's [23] research, workers with more autonomy, improved communication, performance-based rewards, and access to training opportunities felt more content. Work-life balance is harmed by higher work intensity since it causes more tiredness and stress.

2.2. Recovery experiences

Recovery is essential for an individual's health and well-being because continuous or frequent exposure to high workloads with insufficient recovery may lead to cumulative health deterioration (McEwen, [24]). The mechanisms that help recovery are called recovery experiences, as described by Sonnentag and Fritz [11]. Recovery experiences consist of psychological detachment from work, relaxation, mastery (mastery-related off-job activities that offer individual challenges or opportunities to learn new skills), and control (the ability to choose which activity to pursue during leisure time and when and how to pursue this activity). The first two experiences have their roots in the Effort-Recovery Model, and the last two in the Conservation of Resources Theory. According to the Effort-Recovery Model, psychological detachment and relaxation may be helpful because they imply that no further demands are placed on the functional systems called upon during work. Mastery-oriented strategies, such as mastery and control, may aid recovery because they build up new and restore threatened internal resources. Empirical evidence suggests that psychological detachment helps recover from job strain. Diary studies (Sonnentag & Bayer [25]) suggest that psychological detachment from work during leisure time is associated with positive mood and low fatigue in the evening at bedtime and the next morning. In the study by Sonnentag and Fritz [11], relaxation had negative effects on health problems, emotional exhaustion, need for recovery, and sleep problems. The mastery experience refers to pursuing mastery-related off-job activities (e.g. taking a language class or learning new sports) that offer individual challenges or opportunities to learn new skills (Fritz & Sonnentag [26]; Sonnentag & Fritz [11]). However, mastery should challenge the individual without overtaxing his or her capabilities. Although mastery may put extra demands on the individual, these experiences are expected to enhance recovery because they help to build up new internal resources, such as skills, competencies, self-efficacy, and positive mood (Sonnentag & Fritz [11]). The empirical evidence available so far suggests that mastery is related to recovery. Fritz and Sonnentag (2006) demonstrated that higher levels of mastery during

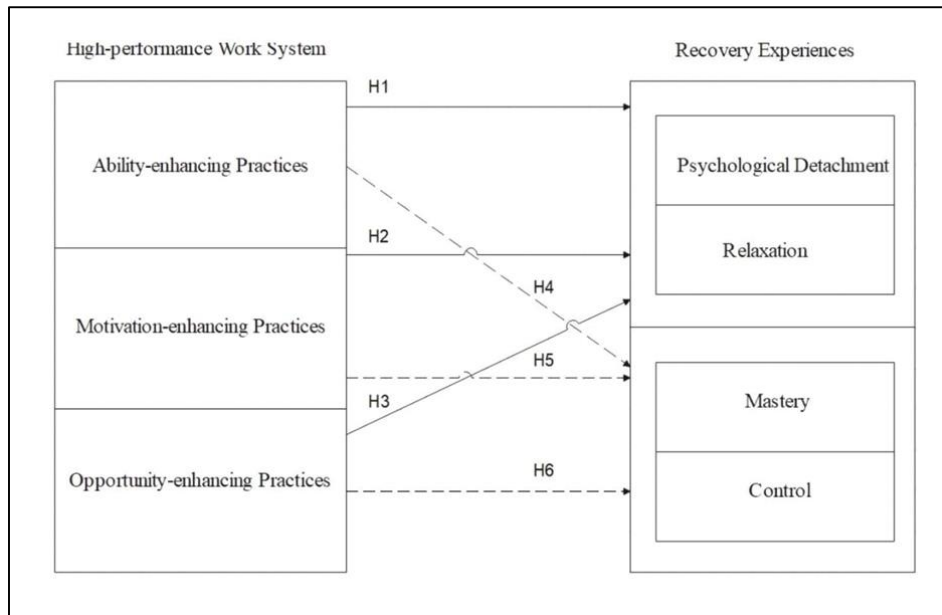
vacation were related to lower levels of exhaustion on the employee's return to work. Sonnentag and Fritz [11] propose that the perception of control derived from leisure activities could potentially boost self-efficacy and emotions of competence. As such, it could serve as an external support system for recovering from job-related stress.

Leader psychological detachment was found to be indirectly associated with low subordinate fatigue and low subordinate demand for recovery (Sonnentag & Schiffner [27]). The results of this study suggest that leaders can affect subordinate strain symptoms through their professional leadership style and personal detachment mechanisms in recreational activities. In another research, Eichberger et al. [28] found that employees who engaged in more TASW (technology-assisted supplemental work) in the evenings were less likely to detach from work-related issues and experienced increased negative mood at bedtime. The majority of research has been conducted on psychological detachment in the literature (Fritz et al. [29]; Demsky et al. [30]; Buchler et al. [31]; Cangiano et al. [32]; Eichberger et al. [28]).

2.3. Conceptual Research Model and Hypotheses

HPWS is examined with 16 items of ability, motivation, and opportunity-enhancing practices and 13 items of recovery experiences (psychological detachment, relaxation, mastery, and control). Ability, motivation, and opportunity all have comparable effects on job demands (role conflict, role ambiguity, and work pressure). However, they have distinct effects on well-being, according to Kloutsiniotis et al. [33]. While decreased role ambiguity has a non-significant beneficial influence on vigour and decreases dedication, lower role conflict increases vigour and dedication. Reduced work pressure makes people more energetic but less committed. According to research by Rana and Javed [34], each of the three bundles can raise job satisfaction. The ability and motivation bundles negatively correlated with job demands, whereas the opportunity bundle showed a favourable correlation. Recovery experiences consist of psychological detachment from work, relaxation, mastery and control. The first two experiences have their roots in the Effort-Recovery Model, and the last two in the Conservation of Resources. In the present study, recovery experiences are studied, considering the psychological detachment and relation in one group and mastery and control in the second group, which can be seen in Figure 1. Based on the literature following hypotheses are formulated.

- H1: Ability-enhancing practices of HPWSs have a significant positive impact on recovery experiences (psychological detachment and relaxation).
- H2: Motivation-enhancing practices of HPWSs have a significant positive impact on recovery experiences (psychological detachment and relaxation).
- H3: Opportunity-enhancing practices of HPWSs have a significant positive impact on recovery experiences (psychological detachment and relaxation).
- H4: Ability-enhancing practices of HPWSs have a significant positive impact on recovery experiences (mastery and control).
- H5: Motivation-enhancing practices of HPWSs have a significant positive impact on recovery experiences (mastery and control).
- H6: Opportunity-enhancing practices of HPWS have a significant positive impact on recovery experiences (mastery and control).



Note(s): The Arrow line indicated H1, H2 and H3, i.e. the effect of HPWS practices on recovery experiences (psychological detachment and relation). The dashed arrow line indicated H4, H5, H6, i.e. the impact of HPWS practices on recovery experiences (mastery and control).

Figure 1 The Conceptual Model

3. Research Methodology

Data was collected on a five-point Likert scale, and the study applied the Partial Least Square Equation Modelling (PLS-SEM) technique using Smart PLS-3. PLS-SEM represents a well-sustained method for estimating complex cause-effect relationship models in management research (Gudergan et al., 2008, [35]).

The study followed a purposive sampling technique. The study comprised software engineers from high-performing IT companies. Data was collected between September 2023 and March 2024. Data was collected from 390 employees, and 338 of them were considered usable.

In the first part of the questionnaire, demographic questions were asked, including gender, age group, work experience, and responsibility sharing level.

The sample's demographic characteristics, 281 males (83.1%) and 57 females (16.9%) contributed to the research. 314 (92.9%) employees had 1-10 years of experience, 22 (6.5%) had 11-20 years of experience, and 2 (0.6%) were having 21-30 years of experience. Top-level employees were 38 (11.2%), 233 (68.9%) middle level and 67(19.8%) belonged to the bottom level. 270 (79.9%) employees were between the age of 21-30, 58 (17.2%) were between 31-40, and 10 (3.3%) were between the age of 41-50, shown in Table 1.

In the second part of the questionnaire, HPWS with 16 items (Beltrán-Martín et al. [36]; Bonias et al. [37]; Combs et al. [12]; Guerrero & Barraud-Didier [38]; Ichniowski et al. [39]), the three dimensions of the AMO model (Appelbaum et al. [14]) and Ogbonnaya et al. [40] were included in the research (Shown in Table 2).

RE with 13 items measured based on the scale developed by Shimazu et al. [41] (Shown in Table 2).

Table 1 Sample demographics

Variable	Categories	f	%
Gender	Male	281	83.10%
	Female	57	16.90%
Age Group	21-30	270	79.90%
	31-40	58	17.20%
	41-50	10	3.00%
Work Experience (Years)	1-10	314	92.90%
	11-20	22	6.50%
	21-30	2	0.60%
Level	Top-level	38	11.20%
	Middle-Level	233	68.90%
	Bottom-Level	67	19.80%

Notes: f= Frequency; %= Percentage

Table 2 Scale Items

High-performance work systems	
In our organisation...	
HPWS1	Training is continuous.
HPWS2	Training programs are comprehensive.
HPWS3	Training programs strive to develop firm-specific skills and knowledge.
HPWS4	The training programs emphasise on-the-job experiences.
HPWS5	Employees are encouraged by their superiors to participate in decision-making.
HPWS6	I can decide how to do my work.
HPWS7	I can decide my work speed.
HPWS8	Job-sharing arrangements are available to the employees.
HPWS9	Performance is based on objective, quantifiable results.
HPWS10	Employees are provided performance-based feedback and counselling after the appraisal.
HPWS11	The appraisal system gives me an accurate assessment of my strengths and weaknesses.
HPWS12	The appraisal data is used to make decisions about job rotation, promotion, training, and compensation.
HPWS13	The findings from employee surveys are communicated to the employees.
HPWS14	Employees are regularly informed of the criteria that will be included in their performance evaluation.
HPWS15	Employees are regularly informed of future plans of the company and corporate projects (e.g., major investments, projects, new technologies)
HPWS16	A provision for flexitime, working compressed hours and work from home is available.
Recovery Experiences	
During office hours...	
RE1	I learn new things.

RE2	I decide my own schedule.
RE3	I take care of things the way that I want them done.
RE4	I do something to broaden my horizons.
During the break...	
RE5	I don't think about work at all.
RE6	I use the time to relax and do relaxing things.
RE7	I get a break from the demands of work.
RE8	I take time to leisure.
After office hours...	
RE9	I do something to broaden my horizons.
RE10	I don't think about work at all.
RE11	I use the time to relax and do relaxing things.
RE12	I get a break from the demands of work.
RE13	I take time to leisure.

4. Data Analysis and Results

4.1. The Structural equation model

The structural equation model has two parts. The first measurement model helps assess the constructs' reliability and validity. It is referred to as the outer model. The second structural model assesses the relationship between variables. It is referred to as the Inner model. It can be evaluated after assessing the measurement model.

4.1.1. The Measurement Model

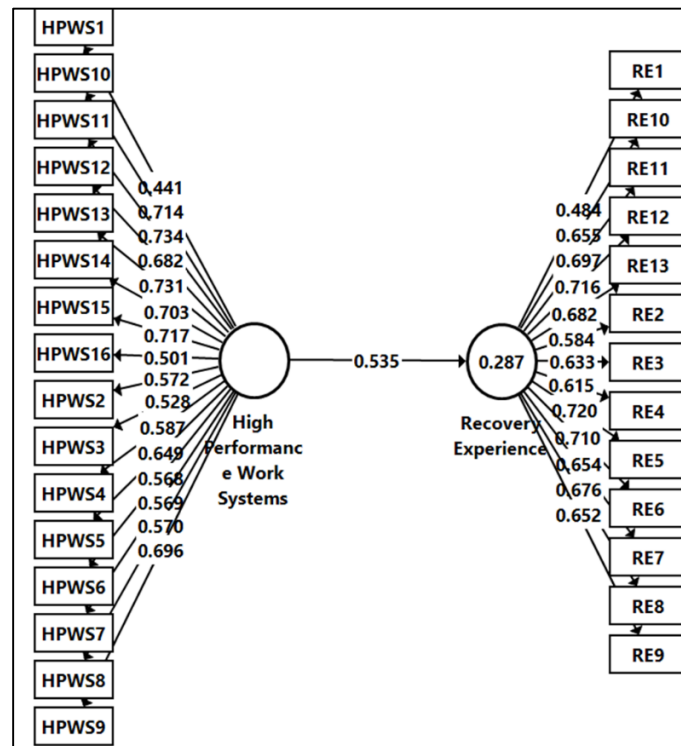


Figure 2 The Structural Model with path coefficients

The measurement comprises two latent variables: High-performance work systems with 16 and Recovery experiences with 13 manifest variables (observed variables). The model considered for hypotheses testing can be seen in Figure 2.

Factor loading/ Item reliability test

Factor loading refers to the “extent to which each item in the correlation matrix correlates with the given principal component. Factor loadings can range from -1.0 to +1.0, with the higher absolute value indicating a higher correlation of the item with the underlying factor” (Pett et al. [42]). Factors loadings above 0.708 are recommended. So, the loading was less than 0.70 removed, as their removal improved the composite reliability and Average variance extracted values. The final model can be seen in Figure 3. Ability-enhancing items are from HPWS 1-4, motivation-enhancing practices are from HPWS 9-15, and opportunity-enhancing practices are from HPWS 5-8 and HPWS 16.

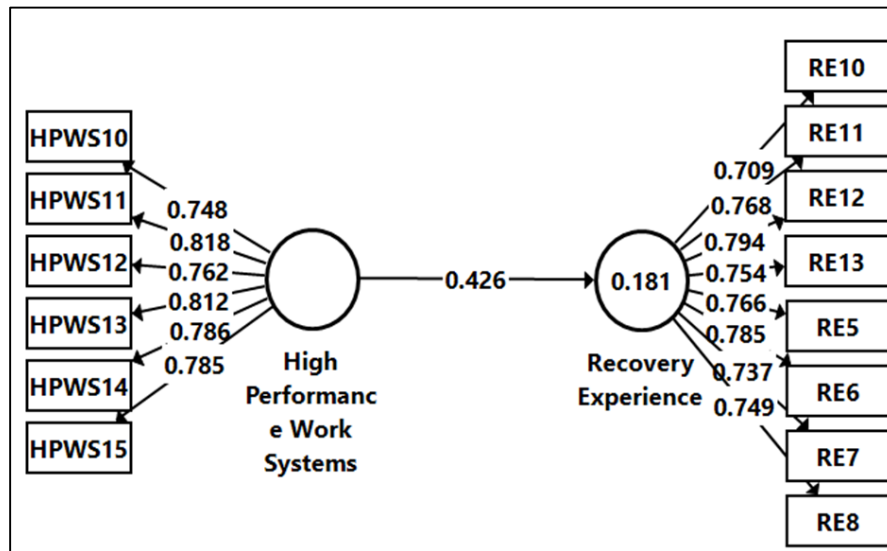


Figure 3 The Final model

In the present research, the impact of motivation-enhancing practices on the recovery experiences of employees can be further analysed (HPWS10-15). However, only items of motivation-enhancing practices fulfilled the item reliability test. In the case of recovery experiences, four items of psychological detachment (RE 5,7,10, 12) and four items of relaxation (RE 6,8,11,13) established the item reliability test and items of mastery (RE1, 4,9) and control (RE 2-3) are removed. Table 3 shows hypotheses that cannot be tested.

Table 3 List of Hypotheses which cannot be tested

Hypotheses	Decision
H1: Ability-enhancing practices of HPWS have a significant positive impact on recovery experiences (psychological detachment and relaxation).	Testing not possible
H3: Opportunity-enhancing practices of HPWS have a significant positive impact on recovery experiences (psychological detachment and relaxation).	Testing not possible
H4: Ability-enhancing practices of HPWSs have a significant positive impact on recovery experiences (mastery and control).	Testing not possible
H5: Motivation-enhancing practices of HPWSs have a significant positive impact on recovery experiences (mastery and control).	Testing not possible
H6: Opportunity-enhancing practices of HPWSs have a significant positive impact on recovery experiences (mastery and control).	Testing not possible

Internal consistency reliability

The internal consistency reliability values are displayed in Table 4 with Alpha, rho_A and composite reliability values. For every construct, the Cronbach alpha and composite reliability (CR) fell between the designated ranges of 0.70 and 0.95, and rho_A values are between them (Hair et al. [43]), depicting the internal consistency reliability.

Table 4 Loading, Reliability and Validity

Constructs	Items	Loadings	VIF	Alpha	rho_A	CR	AVE
HPWS	HPWS10	0.748	1.717	0.876	0.886	0.906	0.617
	HPWS11	0.818	2.179				
	HPWS12	0.762	1.969				
	HPWS13	0.812	2.036				
	HPWS14	0.786	2.068				
	HPWS15	0.785	2.202				
RE	RE10	0.709	1.754	0.895	0.899	0.915	0.575
	RE11	0.768	2.311				
	RE12	0.794	2.19				
	RE13	0.754	2.282				
	RE5	0.766	2.223				
	RE6	0.785	2.345				
	RE7	0.737	2.117				
	RE8	0.749	2.045				

Convergent validity

The average variance extracted (AVE) was used to measure convergent validity, and according to Hair et al. [44], it should be larger than 0.50 for all constructs (Shown in Table 4).

Multi-collinearity was also assessed, with each indicator’s variance inflation factor (VIF) value to determine whether or not the variables had a collinearity problem. The results indicated no collinearity because every value was less than 3, Hair et al. [44] (Shown in Table 4).

Discriminant validity

Discriminant validity was assessed using the Fornell–Larcker criterion and Heterotrait–Monotrait (HTMT) ratio.

Table 5 Fornell–Larcker criterion

Constructs	High-Performance Work Systems	Recovery Experiences
High-Performance Work Systems	<i>0.786</i>	
Recovery Experience	0.426	<i>0.758</i>

Note: Diagonal and Italicized elements are the square roots of the AVE. Below the diagonal elements are the correlations between the constructs.

Table 5 displays that the diagonal values of each construct in each column should be higher than other correlational values in Fornell–Larcker criterion (Hair et al. [43]).

Table 6, shows that using cross-loadings on each factor, the Heterotrait-Monotrait (HTMT) Ratio was used to evaluate the discriminant validity. Given that the values are less than 0.85, it appears that discriminant validity is present and that each construct is unique (Henseler et al. [45]).

Table 6 Heterotrait-Monotrait (HTMT) ratio

Constructs	High-Performance Work Systems	Recovery Experiences
High-Performance Work Systems		
Recovery Experience	0.465	

4.1.2. The Structural Model

The structural model was proposed to examine the structural relationship among the variables, including standard assessment criteria: the coefficient of determination (R²), the blindfolding-based cross-validated redundancy measure (Q²), and the statistical significance and relevance of the path coefficients. The prediction power of the model was also assessed using PLSpredict (Hair et al. [43]).

In Smart PLS, the structural model can be assessed with the help of bootstrapping. Bootstrapping amplifies the existing data. The findings revealed H2, HPWS (motivation-enhancing practices) → RE (psychological detachment and relaxation). ($\beta=0.426$, $t=8.881$, $p<0.001$) is accepted as β value $> .20$, t value >1.96 and p -value <0.001). The structural model reflects the paths hypothesised in the research framework. A structural model is assessed based on the R², Q² and significance of paths. The coefficient of determination (R²) value indicates the amount of variance in dependent variables explained by the independent variables. Here, motivation-enhancing practices of HPWS can account for a 32.6% change in psychological and relation recovery experiences. Path coefficient (β) can be interpreted as a standardised beta coefficient calculated in ordinary least squares regression. The bootstrapping technique is used to determine the significance of the path coefficient with t-statistics. Table 7 presents the path coefficient, t-statistics and significance level. Q² establishes the predictive relevance of the endogenous constructs. A Q² > 0 shows that the model has predictive relevance. The results show that the prediction of the constructs is significant (see Table 7). Furthermore, the model fit was assessed using SRMR. The value of SRMR was 0.071, below the required value of .10, indicating an acceptable model fit (Hair et al. [46]).

Table 7 Relationship between HPWS and RE (Hypothesis 2)

Relationship	β	T-Stat	P Value	Decision
HPWS (motivation) -> RE	0.426	8.881	0.000	Supported
Construct	R ²	Q ²	SRMR	
RE	0.326	0.10	0.071	

4.2. Predictive power analysis

Table 8 Linear Model (LM) Prediction Summary

Items	PLS_MAE	LM_MAE	Q ² _predict	D (PLS_MAE- LM_MAE)
RE6	0.729	0.723	0.092	0.006
RE5	0.924	0.921	0.114	0.003
RE7	0.796	0.805	0.058	-0.009
RE8	0.755	0.75	0.077	0.005
RE12	0.725	0.712	0.143	0.013
RE11	0.615	0.614	0.094	0.001
RE13	0.6	0.599	0.095	0.001
RE10	0.901	0.886	0.097	0.015

Table 8 displays the findings of the Linear Model (LM) prediction summary for the recovery experiences indicators (dependent variables in the model). The residual errors' normality was then examined, and the results indicated that the scores appeared to be concentrated towards one area, which may indicate a non-normal distribution of residual

errors. Consequently, Mean Absolute Error (MAE) was considered for both the PLS and Linear Model (LM), and the outcomes were compared. By deducting the LM-MAE findings from the PLS-MAE results, the Difference (D) was computed. The PLS-MAE value is less for only one indicator, which indicates that the model has low predictive power (Shmueli et al., 2019 [47]). Q2 values for most of the indicators range between 5% to 15%, suggesting a weak to moderate predictive ability (Hair et al. [48]).

4.3. Importance-Performance Map Analysis (IPMA)

HPWS is in Quadrant 1 (Q1). This quadrant represents high importance and high performance. HPWS (motivation-enhancing abilities) has a high total effect (around .45) on the x-axis, indicating that they strongly influence recovery experiences. It is suggested that a one-point increase in HPWS will increase RE by .45 points. HPWS show high performance (above 60 on the 100-point scale) on the y-axis. So, HPWS (motivation-enhancing abilities) are crucial for RE. Although there is some space for improvement, managers should continue concentrating on HPWS (motivation-enhancing practices) to help employees recover from stress (Not 100 on the y-axis can be seen in Figure 4). This analysis suggests that High-Performance Work Systems (motivation-enhancing practices) are vital in promoting Recovery Experiences. Employee recovery not only encourages their well-being but also the high productivity of the organisations and the country's progress.

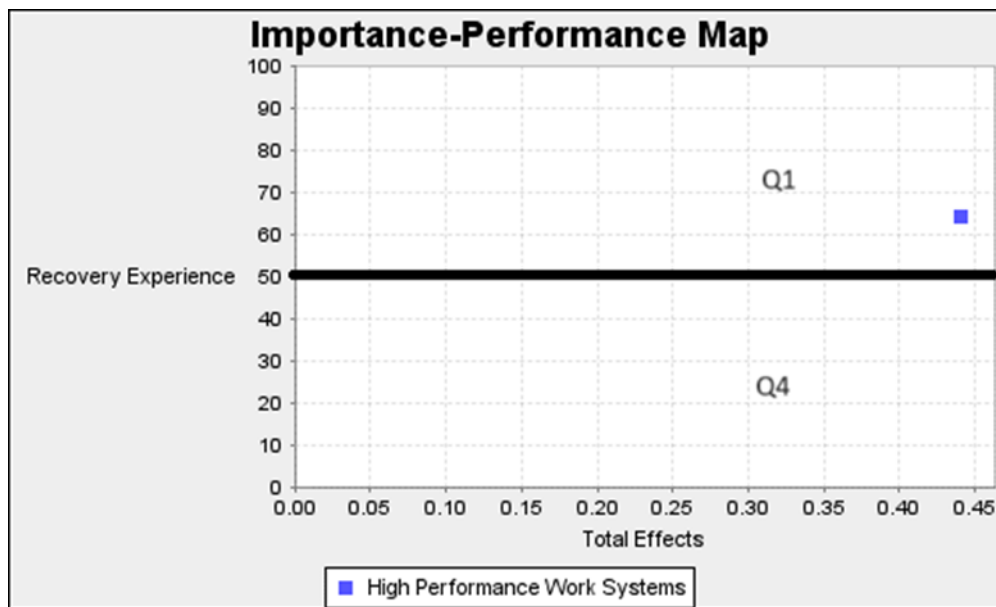


Figure 4 Importance-Performance Map Analysis (IPMA)

5. Discussion

The study examined the role of ability, motivation and opportunity-enhancing practices on the recovery experiences of employees with the PLS-SEM technique through Smart PLS 3.3. Firstly, the measurement model can be established with the criteria fulfilment of the construct reliability and construct validity. In establishing construct reliability, the factor loadings or item reliability of all the factors of HPWS and RE was noted. Factor loading signifies how a particular item represents a latent construct. The higher the value, the higher the construct represents a latent construct. We started to remove the factors that had loading between 0.40 and 0.708. Indicator loadings above 0.708 are recommended since they indicate that the constructs explain more than 50% of the indicator's variance, thus providing acceptable indicator reliability. If the Average variance extracted and composite reliability are found adequate after removal of items less than 0.40, then items with loading between 0.40 and 0.70 may not be removed (Hair et al. [43]). Accordingly, we came up with all the loading, fulfilling the criteria of item reliability. In the final model, we left with six items of HPWS. All the ability and opportunity-enhancing abilities were removed. In motivation-enhancing abilities, two dimensions are developmental performance appraisal and Information sharing with the employees. HPWS10-12 are the items of developmental performance appraisal, and HPWS 13-15 are the items of information sharing with the employees. RE was finally evaluated with eight items: four items of psychological detachment (RE 5,7,10, 12) and four items of relaxation (RE 6,8,11,13) established the item reliability test and items of mastery (RE1, 4,9) and control (RE 2-3) are removed.

To further evaluate construct reliability, we tested the internal consistency of the items with Cronbach alpha, rho_A and composite reliability. Cronbach alpha and composite reliability values were more than 0.70, and rho_A values were between the values of alpha and CR. Established construct reliability. Multi-collinearity was also assessed, with each indicator's variance inflation factor (VIF) value, and the results indicated no collinearity because every value was less than 3. Construct validity was assessed by evaluating convergent and discriminant validity. Convergent validity was measured by average variance extracted values (AVE). Values should be more than 0.50. Convergent validity was also established for all the constructs. Discriminant validity was assessed using the Fornell-Lacker criterion and the heterotrait-monotrait (HTMT) ratio. Both methods depicted that discriminant validity was also established.

Then, the structural model was evaluated, and findings revealed that H2 is accepted. H2 evaluates that motivation-enhancing practices of HPWSs positively affect recovery experiences. The result indicated that motivation-enhancing HPWS practices have a significant and positive relation with psychological detachment and the relaxation of the employees ($\beta=0.426$, $t=8.881$, $p<0.001$).

5.1. Implications

As far as the theoretical contributions of this paper are concerned, the study contributes to our understanding that in the organisational setting, motivation-enhancing practices contribute to the recovery experiences of the employees. The concept has not been explored in-depth in previous literature related to this field. Employee recovery is vital for the employees' well-being, organisational productivity, healthy society, work-life balance and the country's progress. Stress is considered the "Health Epidemic of the 21st Century" by the World Health Organisation. Timely detachment from work stress after work and relaxation is pivotal to preserving our talented workaholic employees.

Concerning managerial implications, it is evident that motivation-enhancing practices support psychological detachment and relaxation of employees. Managers and organisations can encourage these practices to balance the workload generated by other HR practices. Motivation-enhancing practices can serve as a stress reliever in an organizational environment; organizations should smartly implement these practices to achieve their maximum utilisation.

5.2. Limitations and Future lines of research

The study has several limitations. Firstly, this research was conducted on the software employees of high-performing IT organisations. Similar research can be performed on other sectors like banking, tourism, event management, etc. Secondly, our study explored only motivation-enhancing practices. Other studies must come forward with the efforts to discuss all three bundles, i.e. ability, motivation and opportunity-enhancing practices, with some alterations either considering more dimensions in each bundle or more sample size. Lastly, we evaluated the role of HPWS practices in the recovery experiences of the employees; more research must be conducted to discuss other factors that can contribute to enhancing the recovery of the employees from job stress, like the leadership approach and physical environment.

6. Conclusion

The study is an effort to contribute to the recovery of employees from work stress to improve their productivity without compromising their health. The study's outcome revealed that motivation-enhancing practices of high-performance work systems are vital for the recovery and better health of the employees. Organisations must implement more motivation-enhancing practices not only to intensify employees' motivation but also to nullify the adverse effect of HPWS practices on employees' health with work overload. The study aims to disclose that adequate employee recovery can eradicate the health epidemic (stress) in the working environment. This research opens up several opportunities for future exploration in the related field, as the work cannot be reduced; coping strategies must be further explored.

Compliance with ethical standards

Disclosure of conflict of interest

No conflict of interest is to be disclosed.

References

- [1] Jiang, K., Lepak, D. P., Hu, J., & Baer, J. C. (2012). How does human resource management influence organizational outcomes? A meta-analytic investigation of mediating mechanisms. *Academy of Management Journal*, 55(6), 1264-1294.
- [2] Han, J. H., Kang, S., Oh, I. S., Kehoe, R. R., & Lepak, D. P. (2019). The Goldilocks effect of strategic human resource management? Optimising the benefits of a high-performance work system through the dual alignment of vertical and horizontal fit. *Academy of Management Journal*, 62(5), 1388-1412.
- [3] Jiang, K., & Messersmith, J. (2018). On the shoulders of giants: A meta-review of strategic human resource management. *The International Journal of Human Resource Management*, 29(1), 6-33.
- [4] Kehoe, R. R., & Wright, P. M. (2013). The impact of high-performance human resource practices on employees' attitudes and behaviors. *Journal of Management*, 39(2), 366-391.
- [5] Li, H., Chen, T., & Cao, G. (2017). How high-commitment work systems enhance employee creativity: A mediated moderation model. *Social Behavior and Personality: an international journal*, 45(9), 1437-1450.
- [6] Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands-resources model of burnout. *Journal of Applied Psychology*, 86(3), 499.
- [7] Ployhart, R. E., & Moliterno, T. P. (2011). Emergence of the human capital resource: A multilevel model. *Academy of Management Review*, 36(1), 127–50.
- [8] Bakker, A. B. (2011). An evidence-based model of work engagement. *Current Directions in Psychological Science*, 20, 265–269.
- [9] Sonnentag, S., & Fritz, C. (2015). Recovery from job stress: The stressor-detachment model as an integrative framework. *Journal of Organizational Behavior*, 36(S1), S72-S103.
- [10] Meijman, T. F., & Mulder, G. (1998). Psychological aspects of workload. In P. J. D. Drenth, & C. J. de Wolff (Eds.), *Handbook of work and organizational psychology: Volume 2: Work psychology* (pp. 5–33). Hove, England: Psychology Press.
- [11] Sonnentag, S., & Fritz, C. (2007). The Recovery Experience Questionnaire: development and validation of a measure for assessing recuperation and unwinding from work. *Journal of Occupational Health Psychology*, 12(3), 204.
- [12] Combs, J., Liu, Y., Hall, A., & Ketchen, D. (2006). How much do high-performance work practices matter? A meta-analysis of their effects on organizational performance. *Personnel Psychology*, 59(3), 501-528.
- [13] Bailey T. (1993). Discretionary effort and the organization of work: Employee participation and work reform since Hawthorne. Unpublished manuscript, Teacher College, Columbia University, New York
- [14] Appelbaum, E., Bailey, T., Berg, P., & Kalleberg, A. L. 2000. *Manufacturing advantage: Why high-performance work systems pay off*. Ithaca, NY: Cornell University Press.
- [15] Young, S., Bartram, T., Stanton, P., & Leggat, S. G. (2010). High-performance work systems and employee well-being: A two-stage study of a rural Australian hospital. *Journal of Health Organization and Management*, 24(2), 182-199.
- [16] Heffernan, M., & Dundon, T. (2016). Cross-level effects of high-performance work systems (HPWS) and employee well-being: the mediating effect of organisational justice. *Human Resource Management Journal*, 26(2), 211-231.
- [17] Chillakuri, B., & Vanka, S. (2021). Examining the effects of workplace well-being and HPWSs on health harm: a Sustainable HRM perspective. *Society and Business Review*, 16(1), 71-93.
- [18] Chillakuri, B., & Vanka, S. (2022). Understanding the effects of perceived organizational support and HPWSs on health harm through sustainable HRM lens: A moderated mediated examination. *Employee Relations: The International Journal*, 44(3), 629-649.
- [19] Kroon, B., Van de Voorde, K., & Van Veldhoven, M. J. P. M. (2009). Cross-level effects of high-performance work practices on burnout: Two counteracting mediating mechanisms compared. *Personnel Review*, 38(5), 509-525.
- [20] Kim, K. Y., Messersmith, J. G., Pieper, J. R., Baik, K., & Fu, S. (2023). High-performance work systems and employee mental health: The roles of psychological empowerment, work role overload, and organizational identification. *Human Resource Management*, 62(6), 791-810.

- [21] Hauff, S., Felfe, J., & Klug, K. (2022). High-performance work practices, employee well-being, and supportive leadership: spillover mechanisms and boundary conditions between HRM and leadership behavior. *The International Journal of Human Resource Management*, 33(10), 2109-2137.
- [22] Macky, K., & Boxall, P. (2008). High-involvement work processes, work intensification and employee well-being: A study of New Zealand worker experiences. *Asia Pacific Journal of Human Resources*, 46(1), 38-55.
- [23] Boxall, P., & Macky, K. (2014). High-involvement work processes, work intensification and employee well-being. *Work, employment and society*, 28(6), 963-984.
- [24] McEwen, B. S. (1998). Stress, adaptation, and disease: Allostasis and allostatic load. *Annals of the New York academy of sciences*, 840(1), 33-44.
- [25] Sonnentag, S., & Bayer, U. V. (2005). Switching off mentally: predictors and consequences of psychological detachment from work during off-job time. *Journal of Occupational Health Psychology*, 10(4), 393.
- [26] Fritz, C., & Sonnentag, S. (2006). Recovery, well-being, and performance-related outcomes: the role of workload and vacation experiences. *Journal of Applied Psychology*, 91(4), 936.
- [27] Sonnentag, S., & Schiffner, C. (2019). Psychological detachment from work during nonwork time and employee well-being: The role of leader's detachment. *The Spanish journal of psychology*, 22, E3.
- [28] Eichberger, C., Derks, D., & Zacher, H. (2021). Technology-assisted supplemental work, psychological detachment, and employee well-being: A daily diary study. *German Journal of Human Resource Management*, 35(2), 199-223.
- [29] Fritz, C., Yankelevich, M., Zarubin, A., & Barger, P. (2010). Happy, healthy, and productive: the role of detachment from work during nonwork time. *Journal of Applied Psychology*, 95(5), 977.
- [30] Demsky, C. A., Ellis, A. M., & Fritz, C. (2014). Shrugging it off: Does psychological detachment from work mediate the relationship between workplace aggression and work-family conflict?. *Journal of occupational health psychology*, 19(2), 195.
- [31] Büchler, N., ter Hoeven, C. L., & van Zoonen, W. (2020). Understanding constant connectivity to work: How and for whom is constant connectivity related to employee well-being?. *Information and Organization*, 30(3), 100302.
- [32] Cangiano, F., Parker, S. K., & Ouyang, K. (2021). Too proactive to switch off: When taking charge drains resources and impairs detachment. *Journal of Occupational Health Psychology*, 26(2), 142.
- [33] Kloutsiniotis, P. V., Katou, A. A., & Mihail, D. M. (2021). Examining the “dark-side” of high-performance work systems in the Greek manufacturing sector. *Employee Relations: The International Journal*, 43(5), 1104-1129.
- [34] Rana, F. A., & Javed, U. (2017). High-performance work systems, job demands, and employee well-being in Pakistan's insurance industry. *Global Business and Organizational Excellence*, 37(1), 48-58.
- [35] Gudergan, S. P., Ringle, C. M., Wende, S., & Will, A. (2008). Confirmatory tetrad analysis in PLS path modelling. *Journal of Business Research*, 61(12), 1238-1249.
- [36] Beltrán-Martín, I., Roca-Puig, V., Escrig-Tena, A., & Bou-Lluisar, J. C. (2008). Human resource flexibility as a mediating variable between high-performance work systems and performance. *Journal of Management*, 34(5), 1009-1044.
- [37] Bonias, D., Bartram, T., Leggat, S. G., & Stanton, P. (2010). Does psychological empowerment mediate the relationship between high-performance work systems and patient care quality in hospitals?. *Asia Pacific Journal of Human Resources*, 48(3), 319-337.
- [38] Guerrero, S., & Barraud-Didier, V. (2004). High-involvement practices and performance of French firms. *The International Journal of Human Resource Management*, 15(8), 1408-1423.
- [39] Ichniowski, Casey; Shaw, Kathryn & Prensushi, Giovanna. “The Effects of Human Resource Management Practices on Productivity: A Study of Steel Finishing Lines.” *American Economic Review*, June 1997, 87(3), pp. 291–313.
- [40] Ogbonnaya, C., Daniels, K., Connolly, S., & van Veldhoven, M. (2017). Integrated and isolated impact of high-performance work practices on employee health and well-being: A comparative study. *Journal of Occupational Health Psychology*, 22(1), 98.
- [41] Shimazu, A., Sonnentag, S., Kubota, K., & Kawakami, N. (2012). Validation of the Japanese version of the recovery experience questionnaire. *Journal of Occupational Health*, 54(3), 196-205.

- [42] Pett, M. A., Lackey, N. R., & Sullivan, J. J. (2003). *Making sense of factor analysis: The use of factor analysis for instrument development in health care research*. sage.
- [43] Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, 31(1), 2-24.
- [44] Hair Jr, J. F., Sarstedt, M., Hopkins, L., & G. Kuppelwieser, V. (2014). Partial least squares structural equation modelling (PLS-SEM) An emerging tool in business research. *European Business Review*, 26(2), 106-121.
- [45] Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modelling. *Journal of the academy of marketing science*, 43, 115-135.
- [46] Hair, Jr, J. F., Sarstedt, M., Matthews, L. M., & Ringle, C. M. (2016). Identifying and treating unobserved heterogeneity with FIMIX-PLS: part I–method. *European Business Review*, 28(1), 63-76.
- [47] Shmueli, G., Sarstedt, M., Hair, J. F., Cheah, J. H., Ting, H., Vaithilingam, S., & Ringle, C. M. (2019). Predictive model assessment in PLS-SEM: guidelines for using PLSpredict. *European journal of marketing*, 53(11), 2322-2347.
- [48] Hair, J. F., Ringle, C. M., & Sarstedt, M. (2013). Partial least squares structural equation modelling: Rigorous applications, better results and higher acceptance. *Long range planning*, 46(1-2), 1-12.