



Balancing Job Satisfaction in High-Performance Work Systems: The Dual Role of Job Control and Work Overload

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Abstract

This study examines the differential impact of High-Performance Work Systems (HPWS), workload, and job control on job satisfaction among IT personnel. HPWS, a set of human resource practices to enhance employee and organizational effectiveness, can have unintended negative consequences, such as work overload. Using a sample of 173 experienced IT professionals from various organizations in Rawalpindi and Islamabad, this research investigates the complex relationships between HPWS, job satisfaction, work overload, and job control. Linear regression analysis reveals a positive relationship between HPWS and job satisfaction; however, work overload fully mediates this relationship, highlighting the potential drawbacks of HPWS implementation. Crucially, job control emerges as a critical moderator, mitigating the negative consequences of work overload and enhancing the positive effects of HPWS on job satisfaction. The findings provide valuable insights for top management seeking to design jobs that promote productivity, commitment, and job satisfaction while minimizing workload. By understanding the dual role of job control and work overload in HPWS, organizations can optimize their human resource strategies to foster a more balanced and fulfilling work environment. This study contributes to the existing literature on HPWS and job satisfaction, emphasizing the importance of considering the interplay between HPWS, workload, and job control in enhancing employee outcomes. The results significantly impact organizational policy and practice, particularly in the IT sector. In the future, researchers should aim to highlight the impact of HPWS on turnover intention or organizational commitment and examine the moderating effect of job control on turnover intention.

Keywords: High-Performance Work System, Work Overload, Job Control, Job Satisfaction

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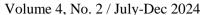


Introduction

High-Performance Work System (HPWS) is a collection of distinct and consistent HR practices aimed at increasing employee effectiveness. HPWS includes selection, appraisal, performance training, and compensation practices. By implementing these HR practices, employees are expected to exhibit higher motivation, enhanced skills, and more opportunities for personal and professional growth (Boxall, 2012; Kaur, Pani, Singh, & Jha, 2021). HPWS has a positive impact on job satisfaction, although this is sometimes influenced by work overload. This relationship may change and can potentially be mitigated by providing employees with greater job control. In the IT industry, many employees experience overload, making job control essential to counteract the negative consequences of role overload (Bazillai, 2021).

Previous research has explored the consequences of HPWS on employee-related outcomes, such as job satisfaction, which, in turn, is strongly linked to performance (Dorta-Afonso, Gonzalez-de-la-Rosa, Garcia-Rodriguez, & Romero-Dominguez, 2021). However, mixed findings have been reported regarding the association between job satisfaction and HPWS. While some studies reveal a consistent positive association between HPWS and job satisfaction (Behravesh, Tanova, & Abubakar, 2020; Boxall & Macky, 2007), others suggest that organizations with high investments in HPWS report lower job satisfaction and commitment due to the perception of increased pressure on employees compared to organizations with low or medium investments in HPWS (Heffernan & Dundon, 2016; Mohr & Zoghi, 2008). In today's competitive and challenging environment, a committed and loyal workforce holds significant importance. Competition among organizations and within the workforce is increasingly intense (Turner, 2019). The acquisition and effective management of human resources are critical for organizations to achieve a competitive advantage. This is why managing human resources effectively has become a key organizational task (Mahapatro, 2021).

To survive in the global market and sustain their business functions, many organizations particularly in the IT (Information Technology) industry rely heavily on projects (Naradda-Gamage, Ekanayake, Abeyrathne, Prasanna, Jayasundara, & Rajapakshe, 2020). In project-based organizations, most business activities are directly linked to projects, defining these organizations as project-based (Bhatti, Zakariya, Vrontis, Santoro, & Christofi, 2021; Boxall, 2012). In such organizations, services and projects are time-bound, requiring the hiring of highly skilled employees. These organizations leverage their employees' skills, knowledge, and abilities as





valuable resources to compete in the global economy. As a result, organizations today focus on implementing high-performance work practices to enhance organizational effectiveness (Bilan, Mishchuk, Roshchkyk, & Joshi, 2020). Organizations invest substantial resources in training their employees, aiming to transform them into valuable assets. While such investments in workforce capability and development can enhance job satisfaction, they may also lead to negative consequences, such as employees experiencing work overload due to the demanding nature of their roles (Greer, 2021). Researchers are investigating whether job control within the IT sector, particularly in project-based IT organizations, can mitigate the negative impact of work overload on job satisfaction.

Objectives

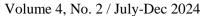
- 1. To examine the effect of High-Performance Work Systems (HPWS) on job satisfaction through the mediating role of work overload and intensification.
- 2. To explore the buffering role of job control in the relationship between work overload and job satisfaction by using the Job Demands-Resources (JDR) theory

Significance of the Study

Most previous research has primarily focused on HPWS within the manufacturing sector. In contrast, the present study will focus on the IT sector, where most professionals face significant work overload. Notably, the IT industry largely comprises project-based organizations. Unlike traditional sectors that rely on infrastructure, heavy machinery, and complex tools to complete projects, IT organizations are heavily dependent on their skilled and diverse workforce.

Literature Review

There is no universal definition of HPWS (Boxall & Purcell, 2003). HPWS refers to a precise bundle of HR practices, processes, and work structures designed to enhance employee skills, knowledge, flexibility, and commitment. It can also be defined as "a bundle of HR practices designed to make employees more committed, increase their abilities, skills, and productivity, and provide a competitive advantage over other organizations" (Alolayyan, Alyahya, & Omari, 2021). High-performance work systems also include recruitment, selection, intensive training, development, mentoring, performance management, and incentives (Gittell, Seidner, & Wimbush, 2010; Katou, 2022). Although certain HR practices tend to be included in HPWS, it

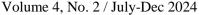




is crucial not to overly focus on individual practices. The core concept of HPWS consists of interconnected parts that complement each other to achieve organizational goals (Rehmani, Yasir, Afshan, Hussain, & Raza, 2021). HPWS represents reliable and coherent HR management practices, emphasizing problem-solving during the operation and implementation of competitive strategies (Becket & Huselid, 1998). To gain a competitive advantage, managing people effectively is key (Boxall, 2003; Mateescu, 2020).

HPWS motivates employees, enhances their performance and effectiveness, and contributes to organizational success (Combs, Liu, Hall, & Ketchen, 2006; Nduati & Wanyoike, 2022). It integrates social aspects with technical work and includes a bundle of HR practices aimed at enhancing organizational effectiveness (Lepak & Shaw, 2008; Wang, Cao, Xi, & Chen., 2021). The conceptualization and measurement of HPWS vary across studies, but researchers generally agree on three major HR practices: increasing worker abilities, enhancing motivation, and enabling empowerment (Shih, Nguyen, & Chiang, 2021; Wright & Boswell, 2002). Implementing HPWS involves four essential steps: exchanging information, developing knowledge, offering performance-based bonuses, and fostering equality and opportunity among employees. Information exchange is critical for empowering employees and ensuring their participation in organizational success (Wang, Cao, Xi, & Chen, 2021).

Historically, employees were often unaware of organizational information and were hired solely for task execution. In contrast, HPWS emphasizes that employees familiar with their work can identify and resolve problems. Involving employees in performance management, providing timely information, and allowing participation in decision-making increases their commitment and ability to contribute to organizational improvement. The demand for knowledge- and skill-intensive jobs has grown rapidly in recent years (Βουλγαράκη, 2021). Modern organizations invest significantly in employee development, selecting the best candidates from the market and providing them with opportunities to enhance their talents (Akdere & Egan, 2020). HPWS aligns organizational goals with employee performance, ensuring proper rewards based on merit. It reduces the need for constant supervision, fosters active participation, and promotes equality in the workplace. By minimizing power imbalances and encouraging collaboration, HPWS enhances employee performance (Park & Ryu, 2023). High cooperation and teamwork are essential for achieving





business objectives and improving organizational productivity (Boxall & McKee, 2007).

However, no single set of HR practices guarantees desired organizational outcomes (Nosike & Okerekeoti, 2022). Research involving 393 employees from 86 Dutch organizations indicates that while HPWS enhances procedural justice, it can also lead to negative outcomes, such as job burnou (Jensen, Patel, & Messersmith, 2013; Jiandong, Fan, & Haitian, 2022). Another study on government employees in Wales highlights the relationship between HPWS, role overload, and turnover intentions. While HPWS aims to create competitive advantages, it can have adverse effects on employees, such as anxiety and burnout. These effects may be mitigated through proper labor controls and employee empowerment (Kim, Messersmith, Pieper, Baik, & Fu, 2023).

Organizations face significant challenges in adopting global business practices, embracing technology, managing customer relations, and developing intellectual capital (Malik, Cao, Mughal, Kundi, Mughal, & Ramayah, 2020). Managing a diverse workforce and balancing employees' work and family demands are vital concerns. Leading organizations not only address these demands but also create environments that maximize employee potential while meeting organizational goals. To compete in the global market, organizations must view employees as valuable resources and invest in their growth, education, and development (Saks, 2022). Sustained physical and mental effort, along with adequate resources such as feedback and strong relationships, enhances employee commitment and performance, especially when tackling challenging tasks (Arief, Pattiasina, & Remus, 2021; Van-Iddekinge, Arnold, Aguinis, Lang, & Lievens, 2023).

Hypotheses

H1: High-performance work system is positively related to job satisfaction, & work overload

H2: There is a negative relationship between work overload and job satisfaction

H3: work overload mediates the relationship between HPWS and job satisfaction

H4: Job control moderates the relationship between work overload and job satisfaction



Research Methodology

The quantitative method approach was used to analyze the hypothetical relationship between HPWS and Job satisfaction and discusses the role of job control as a moderating variable and work intensification as a mediating variable among IT employees in IT-based organizations. Firstly, examine the direct relationship between the independent variable high-performance work systems and the dependent variable Job satisfaction. Then examine the association among the independent variable (HPWS), mediating variables (Work overload) and mediating variables to the dependent job satisfaction. Finally, this study investigates the relationship between independent and moderating variable (Job Control) and between moderating to dependent variable. Then examine the correlation between different variable therefore hypothesis testing is utilized. The objective of the research is hypothesis testing to find the true relation among independent, mediating, moderating and dependent variables. To conduct this research, self-administered questionnaire survey method was utilized as primary data collection. Research Questionnaire based on standardized measurement instruments and to be filled through personal visit to the organization and online. Further, different variables measure at the same time and only once because of time horizon. Most of the IT organizations implement a bundle of HR practices to enhance employee effectiveness but the work overload among IT professionals is high as compared to other professions and industry.

Measurement of Study Variables

To collect data for this research a self-administered questionnaire technique was used. Nominal or ordinal scale was used to measure the basic information about the respondent and organization. This study adapts the instrument developed by (Datta, Guthrie, & Wright, 2005; Parent-Lamarche, Dextras-Gauthier, & Julien, 2023) for HPWS. For job control adapted instrument was developed by (Spreitzer, 1995; Bantha & Nayak, 2021). To measure work overload the instrument developed by (Lee, & McCAIG, 2004; MacKay*, Cousins, Kelly, Nielsen, Axtell, & Taylor, 2021) is adopted. To measure organizational commitment (Allen & Meyer, 1990; Hadi & Tentama, 2020) scale will be used. To measure job satisfaction, Aryee, Luk, and Fields (1999), and Davis (2020) scale will be used.



Conceptual Framework

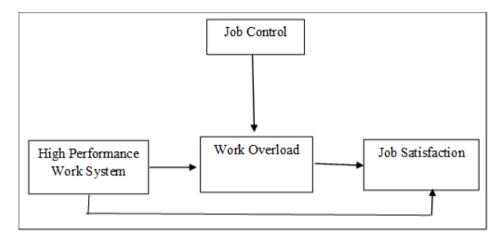


Figure 1. Research model

Population

The present research aims to find out the true association between HPWS and job satisfaction in the presence of mediating variables of work overload among IT professionals, and also find the relationship between independent and dependent variables introducing job control as a moderating variable. So, the present study targets the based on projected organizations in Rawalpindi/Islamabad.

Sample

To save time and easy approach Rawalpindi and Islamabad region were selected for sampling. A random sampling technique was used to collect data. The researcher randomly selected the project base organizations situated in sampling region organizations was prepared and then randomly selected the organization for data collection.

Response Rate

A total of 250 questionnaires were distributed, and it was expected to get five to ten responses from a single organization and expected to get 220 questionnaires. But in the end, received only 173 filled questionnaires. The total response rate was 70%.



Results and Discussions

The respondents (N = 173) included 152 males (87.9 %) and 21 females (29.3 %).

Table1. Demographic Detail

Categorical Variables	Responses	Frequency	Percent (%)
Gender	Male	152	87.9
	Female	21	12.1
Age	18-25 years	21	12.1
Age	26-35 years	116	67.1
	36-39 years	28	16.2
	40-49 years	8	4.6
	50-Above years	0	0.0
Academic Qualification	Bachelors	147	21.5
	Master	26	74.6
	PhD	0	0
	Other	4	2.2
Job Position	Technical	99	57.2
	Managerial	49	28.3
	Senior Managerial	25	14.5
	Qualification		
Experience	1-10 years	150	86.7
Experience	10-20 years	23	13.3
Tenure With Current	1-3 years	26	15
Organization	3-6 years	99	57.2
	6-15 years	48	27.7
Salary (Rupees)	20,000-29,999	51	29.5
	30,000-39,999	96	55.5
	Over 50,000	26	15

Central Tendencies Measurement of Constructs

Table 2. Statistics of Constructs

Variables	Mean	Std. Deviation	
High-Performance Work System	4.16	1.531	
Work Overload	3.63	1.7	
Job Control	3.83	1.73	
Job satisfaction	4.17	1.75	



Reliability of Constructs

The following table shows the constructs' reliability in tapping the High-Performance work system (independent variable), Work Overload (mediating variable), Job Control (Moderating Variable) and Job Satisfaction (dependent variable).

 Table 3. Construct's Reliability

Variable's Constructs	No. Of Items	CRONBACH ALPHA (A)
High-Performance Work System	15	0.984
Work Overload	8	0.905
JobControl	6	0.959
Job satisfaction	6	0.992

To measure four variables, 35 items were used. 15 items were to measure a high-performance work system, to measure Work overload 8 items, 6 items were used to measure Job Control, and for job satisfaction 6 items were used to measure. The value of Cronbach alpha (α) for the performance Work System was observed at 0.963, Work Overload at 0.934, job Control at 0.929, and Job Satisfaction noted at 0.922. Internal consistency between the items of High-Performance Work System, job control, work overload, and job satisfaction was outstanding (α >0.9). The variable's reliability falls within the defined limits and is acceptable for this study.

Correlation Analysis

Table 4. Correlation Analysis

Variables	HPWS	Work Overload	Job control	Job satisfaction
High-Performance	1			
Work System	1			
Work Overload	0.321**	1		
Job Control	0.661^{**}	-0.389**	1	
Job Satisfaction	0.718^{**}	-0.338**	0.881^{**}	1
S.D	.9249	.9284	.8106	

^{*}SIGNIFICANT AT 0.05 LEVEL (2-TAILED)

• A moderate positive significant relationship was found between the independent variable "high-performance work system" and mediating Variable "work overload" (r=.321, p<0.01) (Chillakuri & Vanka, 2022).

^{**}Significant at 0.01 level (2-tailed)



- A highly positive significant relationship was found between the independent variable "High-Performance work System" and the Moderating variable "Job Control"
 - (r = 0.661, P<0.01) (Ijigu, Alemu, & Kuhil, 2023).
- The relationship between the mediating variable "work Overload" and the dependent variable "Job satisfaction" showed a significant and moderately negative relationship among them (r=-0.338, p<0.01) (Rasool, Warraich, & Arshad, 2024).
- The relationship between the independent variable "high-performance work system" and the dependent variable "job satisfaction" has a significant highly positive relationship among them (r=0.718, p<0.01) (Rosyadi, Hayati, & Mardiana, 2023).
- A moderately negative significant relationship was found between the mediating variable "work overload" and the dependent variable "job satisfaction" (r=-0.389, p<0.01) (Jayasri & Annisa, 2023).
- A highly positive significant relationship was found between moderating variable "Job Control" and the dependent variable "job satisfaction" (r=0.881, p<0.01) (Rostami, Babaei-Pouya, Teimori-Boghsani, Jahangirimehr, Mehri, & Feiz-Arefi, 2021).

Direct Path Analysis

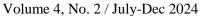
Table 5. Direct Path Regression Analysis

Variables	Work overload	Job Control	Job satisfaction	
	В	β	В	
HPWS	0.321**	0.611**	0.718	
Work overload		-0.389**	-0.338	
Job Control			0.898	
\mathbb{R}^2	0.103	0.37	0.807	
R ² Change	0S.321	0.611	0.807	

^{*}Significant at 0.05 level (2-tailed), **Significant at 0.01 level (2-tailed)

Table 5 shows the direct regression analysis conducted using High-performance Work System as the independent variable and Job Satisfaction as the dependent variable.

In the direct path analysis, the direct analysis is performed between the variables as given below.





- (i) Regression analysis shows a significant strong positive effect between the independent variable (High Performance Work System) and the dependent variable (Job satisfaction) (β =.718**; R²=0.515; p<0.01). Value of R² shows the goodness of model and variability due to independent variable HPWS in dependent variable is 51.1%, value of β shows that with an increase of 1 unit in High Performance Work System then Job Satisfaction will also rise by 0.718 units (Cizrelioğulları & Babayiğit, 2022).
- (ii) Work overload is considered an independent variable and regressed on Job satisfaction. The analysis reveals a negative relationship between work-overload and job satisfaction. The relationship between Work Overload and Job Satisfaction is found to be moderate (β =-0.338**; R²=-0.114; p<0.01). The value of R² shows fitness of the model is good and variability due to the independent variable work overload in the dependent variable (job satisfaction) is 11.4% value of β shows that with an increase of 1 unit in work overload then Job Satisfaction decreases by 0.338 units (Hakro, Jhatial, & Chandio, 2022).
- (iii) In analysis a moderate positive significant relationship was found between High Performance Work Systems and Work overload. (β =0.321**; R²=0.103; p<0.01). The fitness of the model is good and variability due to the independent variable HPWS in the dependent variable (work overload) is 10.3% value of β shows that with an increase of 1 unit in HPWS then work overload increases by 0.321 units (Kloutsiniotis & Mihail, 2020).
- Job control is considered an independent variable and regressed on Job satisfaction. The analysis reveals a positive relationship between job control and job satisfaction. A strong indirect relation exists between Job Control and Job Satisfaction (β=-0.898**; R²=0.807; p<0.01). Here R² shows that model fit is good variability due to the independent variable job control in the dependent variable (job satisfaction) is 80.7%, value of β shows that with an increase of 1 unit in job control then Job Satisfaction increases by 0.898 units (Rostami, Babaei-Pouya, Teimori-Boghsani, Jahangirimehr, Mehri, & Feiz-Arefi, 2021).



- (iv) Work overload is considered an independent variable and regressed on Job control. In analysis, a moderate positive significant relationship is identified among work overload and job control (β =-0.389**; R²=-0.152; p<0.01). Here R² shows that model is well fitted and variability due to the independent variable work overload in the dependent variable (job control) is 15.2, the value of β shows that with an increase of 1 unit in work overload then Job control will decrease by 0.389 units (Anasi, 2020).
- (v) A highly positive significant relationship is identified between High-Performance Work Systems and Job control (β =0.661**; R²=0.374; p<0.01). Here R² shows that the model is well fitted and variability due to the independent variable (HPWS) in the dependent variable (job control) is 37.4%, the value of β shows that with an increase of 1 unit in HPWS then Job control will increase by 0.661 units (Miao, Bozionelos, Zhou, & Newman, 2022).

In-Direct Path Analysis

Table 6. In-Direct Path Analysis for Mediating Variable

Variables	Step 1	Step 2	Step 3	Step 4
(Constant)	2.234**	24.7 **	42.73**	25.73**
HPWS	0.718^{**}	0.321**		0.921**
Work overload			-0.338**	-0.633**
\mathbb{R}^2	0.515	0.103	0.114	0.875

^{*}significant at 0.05 level (2-tailed)

Table 5 shows the results of Baron & Kenny (1986) method used for mediated regression. High-performance work system has an indirect relationship with Job satisfaction (β =- 0.718, p < 0.01) (Haider, De-Pablos-Heredero, De-Pablos-Heredero, 2020). In Step 2, HPWS has a direct relationship with work overload (β = 0.321 p < 0.01) (Jiandong & Haitian, 2020). In Step 3, a negative relationship exists between work overload and Job satisfaction (β = -0.338, p < 0.01) (Alves, Limao, & Lourenco, 2024). In the last, step 4 of Baron and Kenny method, Work overload has been used as a control variable. Results show that High-performance Work system (β = -0.663, p < 0.01) affects Job satisfaction, and the value of β shows that if High-performance Work system increase by one unit, then Job satisfaction will decrease by 0.663 units.

^{**}Significant at 0.01 level (2-tailed)



This shows that work overload fully mediates the relationship between Highperformance work system and job satisfaction (Tsironis, 2021).

Sobel Test

Table 7. SOBEL Test

Sobel Value (z)	p- Value	Percentage Of The Total
(work overload)		Effected That Is Mediated
-2.898941	0	.000 -28.27%

Independent Variable (HPWS), Dependent Variable (job satisfaction), Mediator (work overload)

To examine the effect of mediator on the HPWS and Job satisfaction Sobel test was used. The value of Sobel test shows that Work overload significantly mediate the relationship between HPWS and Job satisfaction (z = -2.898941). Total effect that is mediated by Work overload equals 28.27% (Kim, Messersmith, Pieper, Baik, & Fu, 2023).

In-Direct Path Analysis

 Table 8. In-Direct Path for Moderating Variable

Variables	Step 1	Step 2	Step 3	Step 4
(Constant)	0.252**	16.2 **	0.169**	25.73**
Work	0.704**	0.322**		0.492**
Overload				
Job control			0.787**	0.618**
\mathbb{R}^2	0.496	0.118	0.620	0.833

^{*}significant at 0.05 level (2-tailed)

Table 5 shows the results of Baron & Kenny (1986) method used for moderate regression. The result (Table 8-Step-1) shows that work overload has an indirect relationship with Job satisfaction (β =- 0.364, p < 0.01) (Dodanwala, Santoso, & Yukongdi, 2023). Step-2 confirms that work overload shows direct relationship with job control (β = 0.322 p < 0.01) (Abadi, Taban, Khanjani, Konjin, Khajehnasiri, & Samaei, 2021). Step-3 shows that positive relationship exists between job control and Job satisfaction (β = 0.787, p < 0.01) (Li, Zhang, Yan, Wen, & Zhang, 2020). In Step-4 of Baron & Kenny method, Job control has been used as a control variable. Result

^{*}Significant at 0.05 level (2-tailed)

^{**}Significant at 0.01 level (2-tailed)



shows that work overload (β = 0.618, p < 0.01) affects Job satisfaction, and the value of β shows that if work overload increases by one unit, then Job satisfaction will decrease by 0.618 unit. This shows that job control fully mediates the relationship between work overload and Job satisfaction. Thus, hypothesis 4 has been supported (Hussain, Iqbal, & Abdur-Rehman, 2023).

Hypothesis Summary

Table 9. Summary of Hypotheses Status

Hypotheses	Accepted	Rejected
High performance work system is positively related to job satisfaction, & work overload (Behravesh, Tanova, & Abubakar, 2020).	A	_
There is negative relationship between work overload and job satisfaction (Dodanwala, Santoso, & Yukongdi, 2023).	A	_
work overload mediate the relationship between HPWS, job satisfaction (Jiandong, Fan, & Haitian, 2022).	A	_
Job control moderate the relationship between work overload, job satisfaction (Abadi, Taban, Khanjani, Konjin, Khajehnasiri, & Samaei, 2021).	A	_

Conclusion

This research is designed to identify and test the association in four variables: High Performance Work System, Work Overload, Job control, and job satisfaction. Objective of this research is to find relationship between HPWS & JS and how much this relationship is affected by the job control and work overload. The people working in private organization is more satisfied with their job rather than the people in public sector organizations (Khossy & Kustiawan, 2024). Due to competitive environment private sector compete through their employee especially in IT based organizations where proper trainings were given to the employee to get quality work. These training and promotion make them motivated and satisfied and they show their honesty and full interest in their job (Agrasadya, Sunarto, & Apriansyah, 2024). Furthermore, people in the private sector organization getting more benefit; like medical facility, insurance, conveyance etc. Whereas people in public sector organization people never properly awarded for their work, they have limited salary no better medical facility and other benefits, this is the reason they are less satisfied with their job as compared to private sector organizations. Job satisfaction among employee also depend upon how much salary they got from the organization. Because people do jobs to fulfill their life's needs and always try to improve their living standard and if they are not



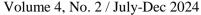


properly paid, they will try to find a new job. The age of the organization also has an impact on job satisfaction, older organizations effectively manage their operation and therefore they must satisfy their employee by motivating and giving them some incentives. An organization's age matters a lot in the satisfaction of employees. Previous studies prove that employee having more tenure with the organization are more satisfied and loyal to their organization (Fadillah & Firmansyah, 2024).

According to correlation, results show that HPWS is positively associated with Job satisfaction. High-performance work practices to employees increase then Job Satisfaction among them will also increase. According to regression analysis, performance work systems and job satisfaction are positively associated with each other (Dewi & Abadi, 2023). High-performance work systems are also moderately correlated with work overload. Because HPWS increases job satisfaction among employees but also increases negative consequences like work overload in employees. Correlation findings confirmed that HPWS is directly related to work overload. Organizations invest lots of their resources in their employee to get them trained and then they demand extra from the employee. Present research also reveals that work overload has a negative relation with job satisfaction. If IT professionals are work overloaded, then job satisfaction among employees also decreases. Job satisfaction and HPWS are positively correlated to job control, but job control is negatively correlated to work overload. Employees with high job control experience less work overload (Kloutsiniotis & Mihail, 2020).

The analysis reveals significant relationships among employee High Performance Work System, and job control on both job satisfaction and work overload. Employees with higher levels of job control along with the use of HPWS show a lower level of work overload and employees having low job control show a greater level of work overload. Further, work overload mediates the relationship between HPWS and JS. So results conclude that HPWS when applied with low level of job control then it will produce low level job satisfaction among employee along with work overload. Correlation and regression analysis shows that employees in IT Based organization with the absence of job control accompanying HPWS implementation that results in negative consequences for work overload, and less job satisfaction (Chen & Chen, 2023).

As per mediation analysis work overload behaves as mediator among HPWS and job satisfaction. According to direct path analysis work overload is attributable to HPWS, further HPWS had a positive relationship with work overload and job satisfaction, but





JS confirmed a negative association with work overload. When the researcher regressed HPWS on job satisfaction with work overload as controlled variable then the impact of the high-performance work system decreased and the goodness of the model also decreased as compared to direct analysis when high-performance work practice was regressed alone. The analysis concludes that work overload fully mediates the association between HPWS and job satisfaction (Rasool, Warraich, & Arshad, 2024).

Moderation analysis reveals that job control plays a moderator variable among work overload and JS. As stated above in direct path analysis job control is attributable to work overload, further work overload had a negative relationship with job control and a positive one with job satisfaction. When researchers regress work overload on job satisfaction with job control as a controlled variable the impact of work overload rise. Model goodness also increase as compared to work overload that was regressed alone. Analysis finally concludes that job control moderates the relationship between work overload and JS (Jayasri & Annisa, 2023).

HPWS is a planned mechanism for organizations to achieve job satisfaction among employees. It is very important organization must identify their employees are not role overload. Just implementation a bundle of HPWS practices without sufficient rise in job control among employees, simply may have bad impact on worker perception about work overload. Present study analysis suggests that negative consequences on job satisfaction of work overload cause by HPWS may be overcome by the increase in job control among employees (Ijigu, Alemu, & Kuhil, 2023).

Practical Implications

HPWS need a further discussion before utilizing by both individual and organization. Moreover, the results derived from this research conclude that a brief study should be carried out to consider the best way to combine employee views with the organizational benefits. It's also observed from this study the way high performance work practices are implementing have main impact on employee perception about HPWS in IT based organizations (Park & Ryu, 2023).

Furthermore, research reveal that professionals in IT organizations who have high job control and autonomy in their job felt lower level of work overload and are more satisfied than others having less job control, when high performance work practices are implemented. So present research reveals, job control mitigates the negative effect of work overload on job satisfaction by the implementation of HPWS. High



performance work practices must be applied with job control to the employees that will support the organization to mitigate the possible "dark side" of High-performance work practices. Finally, this research concludes that job control is a serious component for both High-performance work system effectiveness as well as top management in IT organizations that want to apply HPWS, better implementation of HPWS with job control will reduce work overload among employees and ultimately increase job satisfaction among employees (Septiany, Prapanca, & Sari, 2024).

Recommendations

Researchers concentrate not only on highlighting the positive impact of HPWS on job satisfaction but also on exploring new ways to mitigate the negative consequences by introducing a new variable job control. Next time researcher try to highlight the impact of HPWS on turnover intention or organizational commitment and also examine the moderating effect of job control on turnover intention. The present research was only limited to Rawalpindi/Islamabad and the data was collected from the IT professional in the future researcher will try to collect data from different organizations and departments. Longitudinal data technique can be used to understand the relation between cause and its effect (Alothmany, Jiang, & Manoharan, 2023).

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