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High performance work system, firm performance and employee outcomes: a review

Sistema de trabajo de alto rendimiento, rendimiento de la empresa y resultados de los empleados: una revisión

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ABSTRACT:

This review paper aims at understanding the concept of High Performance Work System (HPWS) by consolidating major studies on theory & practice of HPWS. The different trajectories of academic work on HPWS have been explored traversing from areas of labour economics to industrial relations, organisational behaviour and human resource management. These academic works are then categorised according to conceptual themes as well as methodological issues to lay out amidst diverse research bodies the possibilities of future research work.

Keywords: High Performance Work Systems; Firm Performance; Employee Outcome

RESUMEN:

Este documento de revisión tiene como objetivo comprender el concepto de Sistema de trabajo de alto rendimiento (HPWS) mediante la consolidación de importantes estudios sobre teoría y práctica de HPWS. Las diferentes trayectorias del trabajo académico en HPWS se han explorado desde áreas de economía laboral hasta relaciones industriales, comportamiento organizacional y gestión de recursos humanos. Estos trabajos académicos se clasifican de acuerdo con temas conceptuales, así como cuestiones metodológicas para exponer en medio de diversos organismos de investigación las posibilidades de futuros trabajos de investigación.

Palabras clave: Sistemas de trabajo de alto rendimiento; Resultados de la empresa; Resultado del empleado

1. Introduction

Is contribution of human recourse sufficient for increase in productivity? This is a subject undergoing intense study for existing and current discourse and literature in the field of human resource management. Plethora of academic research has focused on human resource practices and strategic human resource management to enhance performance of organization in a long run. High performance work system (HPWS) is one such concept of human resource management through which organisations enhance employee performance (Boxall, 2012). It is defined as interconnected human resource practices designed to enhance employees' skills and efforts to make a difference in employee performance and organisational productivity (Takeuchi *et al.*, 2007). It is the way production workers are managed in the firms especially manufacturing units.

However, it is the broader perspective of how human resource management improves by way of adopting HPWS practice in all kinds of organisation that concerns the researches on HPWS. HPWS is expected to be better than the traditional human resource practices since it entails novel and faster system of work to achieve competitiveness for the organisation. Through a series of mechanisms together called as HPWS, organizations can have the dynamism to improve employees' abilities and motivation to work. At the same time increased participation opportunities increase job satisfaction in employees and lead to greater organizational commitment (Huselid 1995; Jiang et al., 2012; Wright and McMahan 1992). Though previous studies have proved that there does a strong correlation exist between firm performance and HPWS (e.g. Arthur, 1994; Huselid 1995); there have been few other studies disapproving of the validity of such findings (Wright and Gardner, 2003; Motnihan and Allen 2005). Other researches on the field have argued that such a simplistic direct deduction is fallacious and have considered the relationship to be much more complicated than is displayed (Wall and Wood, 2005; Wright and Gardener, 2005). Though literature on the field have also proved influential positive relation existing between Human Resource (HR) functions and firm performance (Boxall and Macky 2007; Yasir et al., 2013), there is lot more complicated variables at play and need to be focused on (Purcell et al., 2009).

Table 1High Involvement Work System and key drivers of Workplace Performance

Direct Drivers of Workplace Performance	High Involvement Work System
Technology	Greater adoption of new technology in those industries or work processes where it is a significant performance enabler, including better Information Technology (IT)
Work re-organisation	More empowering styles of working in those jobs where job enrichment or greater worker involvement in problem solving and decision-making will make better use of human potential and thus improve work quality or customer satisfaction
Employee selection and skill	Careful selection of employees for job-match and for learning potential plus enhanced skill development to take advantage of new technology and/or work in a more empowered way
Performance and commitment incentives	Enhanced incentives to work smarter and to reduce employee turnover (e.g. financial incentives, stronger vocational or career development, family friendly employment practices)
Indirect Drivers of Workplace Performance	High Involvement Work System
Management planning and measurement	Improved systems to plan and measure workplace performance, including data gathering on employee attitudes, and ensuring the accounting system properly recognizes the investments in human resources that drive performance improvements
Management capability and support	Improved investments in management development at all levels and in support for the enabling role of front-line managers
More cooperative labour relations	A more consultative 'partnership' style of labour relations with unions and/or with employee representatives chosen by the workforce

Source: Boxall and Macky (2007), HPWS and Organizational Performance: Bridging Gap in Theory and Practice

This paper aims at understanding the concept of High Performance Work System by consolidating major studies on theory and practice of HPWS. The key significant concepts under the high

performance work system are improvement through workers, Commitment, involvement, culture etc.

2. Methodology

Twenty-seven papers concerned with High Involvement Work System were collected from different source like, Ebesco, Proquest, Google scholar and Google search. Researches from 1985 to 2019 were considered figured in this study. Those papers were arranged in four thematic segments, like terminology, High Performance Work System and Firm Performance, HPWS and Employee Outcomes and HPWS and Production Management Systems. The present investigation is developed in a systematic and thematic way.

3. Results and Discussion

3.1 Terminology

In terms of terminological significance the name that must come first is that of the Report of Commission on Skills of American Workforce submitted in 1990. The name of the report was "America's Choice: High Skills and Low Wages" (USA Commission on Skills, 1990). Cappelli and Neumark much later (2001) have termed this report as the first one ever to talk about a high performance work organization. With a critical and juxtaposite view of Taylorism and Fordism, the report advocated for investment in skills up-gradation and high performance work organization. Applebaum and Batt (1994) in their research found that a series of work system are significant in predicting the organisations' overall performance. In their influential book they called this series of work system as High Performance Work System. The term HPWS thus was coined by Appelbaum and Batt. However, Lawler (1986) had by then already coined the term High Involvement Work System or HIWS that predicted organizational performance to be a spinoff from a greater involvement and therefore empowerment of employees in decision making. Walton (1985) on similar lines had referred this as 'High Commitment Management'. High involvement model has been successful in Japanese manufacturing companies as 'lean manufacturing' principles (Sprigg et al., 2000). Despite these terminological struggles serious engagement of management studies with HPWS came only with the advent of Japanese high quality production system in the eighties devising new management tools as quality circles, flexibility of production system, 'Kaizen', 'Justin-Time' delivery etc. (Boxall and Purcell, 2003). The Fordist production system then was just taking an out turn to make way for 'lean production' in the Western automobile manufacturing companies. The new system of lean production meant a shift from Fordist production system (that is control oriented) to a production system of intensified involvement, improved and specialized skills and finally incentives (McDuffie, 1995).

Table 2Literature on Terminology of HPWS

Authors	Year	Area	Outcomes
Walton	1985	UK Industrial workplace survey	High Commitment Management
Lawler	1986	Japanese Manufacturing companies	High Involvement Work System (HIWS)
Applebaum and Batt	1994	Comparison of US manufacturing firms to German and Japanese firms	High Performance Work System as manufacturing advantage for the USA as 'lean production' for Japanese, 'diversifies quality' for German and 'flexible specialization' for Italy.
Mac Duffie <i>et al</i>	1995	International automotive assembly plant	'Bundling' work practices or combination work practices gaining greater firm performance
Cappelli and Neumark	2001	Reportof commission on skills of US	High performance work organization

3.2. High Performance Work System and Firm Performance

Majority of researches on high performance work system until now have focused on its relationship with organizational performance. HPWS is perceived increasingly to affect firm turnover positively and significantly (Huselid, 1995; Guthrie, 2001). Imran et al. (2015) comparing two schools of thought on HPWS brought into picture the existence of work on HPWS as either having a positive or a negative correlation with firm performance. While the work represented by Boxal and Macky (2007) support a strong and significant relationship between HPWS and organizational performance, the other school represented by Dany et al. (2008) refutes this on the basis of lack of moderators and mediators in the relationship. They concluded that there is a partial mediation effect of organizational commitment on HPWS and performance as well as that of citizenship behavior on performance and HPWS. This supports work done by Boxall and Macky (2007); Garderner et al., (2011) etc. The finding was in contrast with Mayer and Smith, 2000; Guy and Michel, 2007 etc. Though Imran's study has a geographical (only Pakistan) and sectoral (telecom) limitation, for practical and theoretical implications the study is valuable in authenticating the relationship between HPWS and performance of employees especially in developing countries in Asian context. Takuechi et al., (2007) studied HPWS and tested it empirically on Japanese organization with a resource based view. HPWS was linked to collective human capital and social exchange in Japanese organization. Taking 56-business establishments located in Japan ranging from manufacturing, services, transportation and retail the study was carried on 324-managers at supervisory level. The study proved through factor analysis (with single factor extraction) that HPWS in these Japanese companies was positively related to collective human capital, overall organizational performance and degree of social exchange. Organizational social exchange as a mediating variable was found to be positively related to HPWS and organizational performance were found to be positive. The research had the geographical limitations of being confined to Japan and also obtaining merely subjective measures of organizational performance. Na Fu et al (2015) focused on the relationship between organizational performance and HPWS with mediating role of innovation. The study was conducted in professional service firms by calculating the profit earned from each employee, new service and clients. They have used qualitative data method from 195-managing partners like HR personnel and experienced partners in 120-Irish accounting firm. Using regression analysis they found that organizational performance and HPWS are interlinked because of innovation as a mediating effect on this relationship. Evans and Davis (2005) studied the effect of HPWS on firm performance through the mediating role of internal social structure of organisation. In the realm of organizational social structure he took the variables as organizational citizenship behaviour, shared mental models, generalized norms of reciprocity etc. Through a theoretical framework construction they proved that the organizational network ties are bridged through HPWS by means of improved organizational social structure. Ultimately these influence the firm's financial performance.

Studies on firm performance have a range mediating and moderating variables that make this correlation possible. Yazid *et al.*, (2017) studied employee attitude as a mediating variable influencing organizational performance and HPWS with a resource based view. A survey conducted on 65-business school lecturers showed that positive relationship resists between employee involvement and empowerment as factor within HPWS.

It is also proved the mediating role of employee attitude in influencing HPWS to enhance organizational performance (Boselie, 2000; Macky and Boxall, 2007; Yazid *et al.*, 2017). A strong relationship is often established between organizational performance and HPWS.

Obeidat *et al.* (2017) conducted a study in Jordanian financial and manufacturing sector firms to investigate organizational performance and high performance human resource management (HPHRM) with mediating role of electronic human resource management (HRM) The study concluded that organizational performance is affected by electronic-human resource management (e-HRM) and HPHRM for the success of organizational objective and hence can be harnessed for the same. Altailat and Elrehail (2019) explored how strategic thinking affects performance of firm as well as the context of HPWS practices in developed countries. The study was conducted on Jordan commercial banks. Authors used cross sectional data for comparing different data from developed countries. It was concluded that every aspect is related to organizational performance of strategic thinking except system perspective. Garg (2017) examined the relationship between

HPWS and organizational performance which mediates the exploratory theory like job characteristics theory and psychological impact theory. Structural equation model was used for the investigation of mediating effect. It was found that exploratory theory has a partial effect on the relationship between HPWS and organizational performance. Seong (2011) focused on Korean medium and small firms examining the relationship of HPWS with firm performance, entrepreneurship and organizational culture. A survey method was used for collection of data from medium small firms located in Daegu. Pearson correlation coefficient determined correlation of HPWS with performance, mediating role of organizational culture, and between culture and entrepreneurship. The study found a positive impact of HPWS, entrepreneurship and organizational culture on performance of firm. By itself culture of firm is not significant to organizational performance as vital is the entrepreneurship factor in predicting organizational performance.

Jeong and Choi (2016) examined HPWS and firm performance taking a moderating effect of HR activities. Using workforce panel survey method, 569-performance data was derived from Korean labor institute. Logistic regression analysis showed that HR function can increase the efficiency of HPWS on firm performance. HPWS practice can be termed as a universal or best practice.

Table 3Research studies related HPWS to Organisational Performance

Authors	Year	Area	Outcomes
Wright & Gardner	2008	Methods and theory	HR and Work performance relationship, Human impact of modern work practices including HPWS.
Purcell and Hutchinson	2007	Frontline managers from 12-firms from	Theory, analysis and evidence of HR performance as causal chain in firm performance
Dany <i>et al</i> .	2008	Line managers from Cranet Survey	Relationship between HPWS and firm performance. Need for moderators.
Na Fu <i>et al</i>	2015	Irish accounting firm	organizational performance and HPWS with mediating role of innovation
Obeidat <i>et al</i>	2017	Financial and manufacturing firms in Jordan	Firm performance and high performance human resource management (HPHRM) with mediating role of electronic HRM
Seong	2011	Korean medium and small firms	Relationship between HPWS with firm performance, entrepreneurship and organizational culture
Jeong and Choi	2016	Korean Labour Institute	HPWS and firm performance taking a moderating effect of HR activities
Garg	2017	Indian Insurance companies	HPWS and organizational performance mediates the exploratory theory like job characteristics theory and psychological impact
Altailat <i>et al.</i>	2019	Jordan Commercial Banks	strategic thinking and organizational performance and the context of HPWS practices in developing countries
Evans and Davis	2005		Internal social structure of the organisation as a mediating role in the relationship between HPWS and firm performance
Zacharatos <i>et al</i>	2005	Manufacturing	Relation between HPWS and occupational safety with mediating role of perceived safety climate

Imran <i>et al</i>	2015	Telecom sector in Pakistan	Positive impact of OCB and commitment in relationship between HPWS and firm performance.
Takeuchi <i>et al</i>	2007	Service sector, Manufacturing, Retail	The mediating effects of organizational social exchange on relationship between HPWS and organizational performance.

3.3. HPWS and Employee Outcomes

The influence of HPWS on employee outcomes is truly positive and significant and most HPWS literature proves that fact. Employee outcomes typically constitute employee attitude or behavioural outcomes, job satisfaction, organizational citizenship behaviour, commitment and other such employee behavioral effect. It is proved by researchers that through a series of mechanisms together called as HPWS, organizations can have the dynamism to improve employees' abilities to work and motivation towards better performance. If given proper opportunities to participate, these employees demonstrate better job satisfaction and commitment towards the organization (Huselid 1995; Jiang et al., 2012; Wright and McMahan 1992). The studies in this aspect are diverse. Some studies show the significance of HPWS in improving employee motivation and team morale through developments in skills and financial rewards due to greater involvements and hence lead to greater job satisfaction and commitment (Huselid, 1995; Berg, 1999; Macky and Boxall, 2007; Vandenberg et al., 1999). Other line of studies run completely contrast to these studies and prove that due to work intensification there is a danger of burnout, lowering of employee motivation, decline in abilities complete exhaustion and high attrition. Many studies relating to employee outcomes also focus on perceived organizational outcomes as mediating variables. Mackie et al. (2001) studies employees at a human care residential facility and pointed out that management practices that are related to heightened employee involvement in organization lead to greater depression, work pressure and stress in care takers. Boselie (2010) empirically tested the relationship between organizational performance and HPWS with the mediating the role on commitment and organizational citizenship behavior. Three major perspectives through which HPWS can be achieved are:-Ability, Opportunity to develop, and Motivation to participate. The study carried out in Dutch general hospital concluded that employee development and employee involvement are the vital HR practices for sustain HPWS in medical organization. Boselie (2000) & Zachartos et al. (2005) conducted a series of two sequential research studies that explored the relationship of HPWS with occupational safety with a mediating role of perceived safety climate and trust in management. The first study was done across 138organizations where as the 2nd study was done in 189-organization. HPWS and safety performance was measured through instruments that collected data on safety compliance, motivation, knowledge and initiative as well as safety incidents. The studies proved that HPWS initiated by the organization is crucial in ensuring employee safety orientation. However, the study had the limitation of lack of instruments and research tools to measure HPWS in its complete form. In conclusion it can be said that HPWS is effective in practice when it assists employee in positive outcomes without adding to their stress and negative perception.

Table 4Research studies relating
HPWS to Employee Outcome

Author	Year	Area	Outcomes
Huselid, et al	1995	National Sample Survey of one thousand firms	Variables as employees' abilities and motivation affecting HPWS. Opportunities to participate as well as Job Satisfaction have positive influence on organizational commitment in employees.
Zacharatos et al	2005	Manufacturing	Relation between HPWS and occupational safety with mediating role of perceived safety climate
Berg	1999	American Steel Industry	Effects of HPWS on Job satisfaction and organizational performance

Macky and Boxall.	2007	National Population Sample in New Zealand	The relationship between HPWS and employee attitudes, HPWS and employee wellbeing
Vandenberg <i>et al.</i>	1999	Life insurance companies	Studied how organizational effectiveness is influenced positively by work processes that have high employee involvement.
Boselie	2010	Dutch General Hospital	organizational performance and HPWS with the mediating the role on commitment and organizational citizenship behavior
Yazid <i>et al.</i>	2017	Public Universities in Malaysia	studied the mediating role of employee attitude on relationship between organizational performance and HPWS with a resource based view

3.4. HPWS and Production Management Systems

Walton (1985) referred HPWS as 'High Commitment Management', High commitment model has been successful in Japanese manufacturing companies as lean principle. It is the Japanese high quality production orientation in the eighties which have led to a research on HPWS as a repercussion to kaizen or lean production or even fast delivery thrust. Sprigg et al., (2000) support this work of Japanese production system and focus on Lean manufacturing being the precursor to HPWS. His theoretical framework shows how the Japanese models of kaizen and just in time delivery have thrown Fordist production system to the backyard to make way for a new HR system. Boxall and Macky (2007) studied the researches done on HPWS and explored the significance of the concept itself. Redefining the concept as a way for HR to build a 'high road' and 'high skill' economy, they consider it as a reform process to increase employee involvement in work. Hence, they call it as High Involvement work system (HIWS). While recognizing the need for adopting specialized HIWS practices for each firm differently, they explain the wider managerial processes that are generic and are involved in such a work practice. The management intentions, management practices, HR performance, employee dispositions and organizational outcomes in terms of profitability and effectiveness all constitute links in this chain. Jyoti & Rani (2017) studied HPWS by using ability, motivation and opportunity model propounded by Jiang et al. (2013) and explored the influence of HPWS on firm performance with the mediating effect of knowledge management. Using structural equation method he found that HPWS influences firm performance positively by increasing employee involvement and commitment to organization. Knowledge management played a vital role of mediating variable between HPWS and organizational performance. The study has implications for ability enhancement, in motivating employees for performance enhancement; decentralized power in decision making etc.

Table 5Researches relating HPWS to Management
Types and Production System

Author	Year	Area	Outcomes
Sprigg et al.	2000	Japanese manufacturing companies	Success of High involvement model in Japanese manufacturing companies as 'lean manufacturing' principles
Boxall and Purcell	2003	Western and Japanese Production system	Production system in the eighties devising new management tools as quality circles, flexibility of production system, Management studies and HPWS
Jyoti & Rani	2017	Telecom firm Jammu and Kashmir	Relationship in between HPWS and knowledge management found to be effective in predicting firm performance.
Walton	1985		High Commitment Management

The results of the literature review are discussed in a thematic way in this section as described in the methodology. In total, four (4) categories of analysis are identified that are described below: The existing studies on HPWS has been thematically arranged to make way for not only the major variables under study but also the mediating variables as well as extraneous factors. The most interesting initial discourses on the topic concerns with the debate on terminology. Later on an elaborate discourse on the concept as a substitution to the Fordist production system has entered into the narratives. The practices and empirical evidences have concerned themselves mostly around pragmatic organizational outcomes. However, individual outcomes in terms of organizational citizenship behavior, commitment and employee pro-social behavior as a consequence of HPWS has also found to be significant in the literature.

4. Conclusions

The paper set out with the aim of developing an understanding of the concept of High Performance Work System by consolidating major studies on the topic and a making a thematic representation of the work done so far. It is found that in its existential nascent stage the literature on HPWS has already started making a deep impact on the theory and practice of Human Resource Management. It provides a fundamental defining system which can indicate the basic restructuring in the work system and production procedures than can be pragmatically applied for organizational outcomes. It also works as an indicator for employee outcomes as well as management practices that are beneficial for the firm. The understanding is further complicated by the fact that organizational outcome has multiple levels of analysis. Hence the existing literature is yet to carve out an elaborate theoretical framework that can encompass and explain all the dimensions of HPWS in its full capacity. While some explanations have focused on the definitional aspects and terminological battles, others have related the concept to associated domains. Yet others have explained the drivers under the concept that altercate the work system. Empirical practices and studies have proved that it is crucial in terms of organizational and employee outcomes. Multitude of social and cultural variables also seems to be affected by the work system. In the closing it may be deducted that further development of theory and better understanding through practice is needed. It is a combination of work practices that includes: increased incentives for high performance, skills enhancement, facilitation of employee involvement and engagement through work re-organisation. Also are important work process's re-engineering, work teams designing, industrial democracy and participatory practices, quality circles development, problem solving teams, joint steering groups, job enrichment, designing and rotation. Finally, great importance should be given to increasing employee intrinsic motivation and engagement towards the organisation. Assumptions in the absence of theoretical structures have the potential to misquide academic research as well as practice thereof.

Bibliographic references

Alatailat, M., Elrehail, H., and Emeagwali, O.L. (2019). High performance work practices, organizational performance and strategic thinking: A moderation perspective. International Journal of Organizational Analysis. https://doi.org/10.1108/IJOA-10-2017-1260

Appelbaum, E., & Batt, R. (1994). *The new American workplace: Transforming work systems in the United States*. Cornell University Press.

Berg, P. (1999). The effects of high performance work practices on job satisfaction in the United States steel industry. *Relations industrielles/Industrial relations*, 54(1), 111-135.

Boselie, P. (2010). High performance work practices in the health care sector: a Dutch case study. *International Journal of Manpower*, 31(1), 42-58.

Boxall, P. (2012). High-performance work systems: what, why, how and for whom?. *Asia Pacific Journal of Human Resources*, 50(2), 169-186.

Boxall, P., & Macky, K. (2007). High-performance work systems and organisational performance: Bridging theory and practice. *Asia Pacific Journal of Human Resources*, *45*(3), 261-270.

Dany, F., Guedri, Z., & Hatt, F. (2008). New insights into the link between HRM integration and organizational performance: the moderating role of influence distribution between HRM specialists and line managers. *The International Journal of Human Resource Management*, 19(11), 2095-2112.

Evans, W. R., & Davis, W. D. (2005). High-performance work systems and organizational performance: The mediating role of internal social structure. *Journal of management*, *31*(5), 758-775.

- Fu, N., Flood, P. C., Bosak, J., Morris, T., & O'Regan, P. (2015). How do high performance work systems influence organizational innovation in professional service firms?. *Employee Relations*, *37*(2), 209-231.
- Garg, N., & Punia, B. K. (2017). Developing high performance work system for Indian insurance industry. *International Journal of Productivity and Performance Management*, 66(3), 320-337.
- Huselid, M. A. (1995). The impact of human resource management practices on turnover, productivity, and corporate financial performance. *Academy of management journal*, *38*(3), 635-672.
- Jeong, D. Y., & Choi, M. (2016). The impact of high-performance work systems on firm performance: The moderating effects of the human resource function's influence. *Journal of Management & Organization*, 22(3), 328-348.
- Lawler III, E. E. (1986). *High-Involvement Management. Participative Strategies for Improving Organizational Performance*. Jossey-Bass Inc., Publishers, 350 Sansome Street, San Francisco, CA 94104.
- Lawler III, E. E. (2005). Creating high performance organizations. *Asia Pacific Journal of Human Resources*, 43(1), 10-17.
- MacDuffie, J. P. (1995). Human resource bundles and manufacturing performance: Organizational logic and flexible production systems in the world auto industry. *ILR Review*, 48(2), 197-221.
- Mackie, K. S., Holahan, C. K., & Gottlieb, N. H. (2001). Employee involvement management practices, work stress, and depression in employees of a human services residential care facility. *Human relations*, *54*(8), 1065-1092.
- Macky, K., & Boxall, P. (2007). The relationship between 'high-performance work practices' and employee attitudes: an investigation of additive and interaction effects. *The International Journal of Human Resource Management*, 18(4), 537-567.
- Obeidat, B. Y., Abdallah, A. B., Aqqad, N. O., Akhoershiedah, A. H. O. M., & Maqableh, M. (2017). The effect of intellectual capital on organizational performance: The mediating role of knowledge sharing. *Communications and Network*, *9*(1), 1-27.
- Park, H. J., Gardner, T. M., & Wright, P. M. (2004). HR practices or HR capabilities: Which matters? Insights from the Asia Pacific region. *Asia Pacific Journal of Human Resources*, 42(3), 260-273.
- Purcell, J., & Hutchinson, S. (2007). Front-line managers as agents in the HRM-performance causal chain: theory, analysis and evidence. *Human Resource management journal*, *17*(1), 3-20.
- Seong, J.Y. (2011). The Effects of High Performance Work Systems, Entrepreneurship and Organizational Culture on Organizational Performance. Seoul Journal of Business, Vol.17 (1), 3-36.
- Sprigg, C. A., Jackson, P. R., & Parker, S. K. (2000). Production teamworking: The importance of interdependence and autonomy for employee strain and satisfaction. *Human Relations*, *53*(11), 1519-1543.
- Vandenberg, R. J., Richardson, H. A., & Eastman, L. J. (1999). The impact of high involvement work processes on organizational effectiveness: A second-order latent variable approach. *Group & Organization Management*, 24(3), 300-339.
- Walton, R.E. (1985). From Control to Commitment in the Workplace. US Dept of Labour, Bureau of Labour-Management Relations and Cooperative Programs. *Harvard Business Review* 63(2): 77–84.
- Womack, J., D. Jones, and D. Roos. 1990. The Machine that Changed the World: The Triumph of Lean Production. New York: Rawson Macmillan.
- Wright, P. M., & Gardner, T. M. (2003). The human resource-firm performance relationship: methodological and theoretical challenges. *The new workplace: A guide to the human impact of modern working practices*, 311-328.
- Zacharatos, A., Barling, J., & Iverson, R. D. (2005). High-performance work systems and occupational safety. *Journal of applied psychology*, *90*(1), 77.
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