

## Impact of Employee Training and Empowerment on Employee Creativity Through Employee Engagement: Empirical Evidence from the Manufacturing Sector of Pakistan

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**Abstract:** Since last two decades, in response to changes in the competitive working world of business and management, organizational researchers have focused their attention towards high performance work practices that enhance the employee creativity through better engagement of employees in their work. In consistent with this stream of research, this study aims to find the impact of two High Performance Work Practices i.e. employee training and empowerment on employee creativity via employee engagement. Data was collected from 400 respondents from 110 organizations representing mainly textile, FMCG, cement, petroleum, fertilizers, pesticides, chemicals, electronics, pharmaceuticals and other sectors. SPSS 17 has been used for Factor analysis, cronbach's alpha, correlation and regression analysis. The findings show that employee engagement partially mediates the relationship between HR practices and employee creativity. Theoretical and managerial implications along with limitations and recommendations for future research have also been discussed in the paper.

**Key words:** HR practices • Training • Empowerment • Employee engagement • Employee creativity • Manufacturing sector • Empirical study

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### INTRODUCTION

Manufacturing sector is the third largest sector of Pakistan after service and agriculture. It is playing a vital role in the economy of Pakistan; the 18.7% GDP of Pakistan is contributed by manufacturing sector [1]. However, due to contemporary forces of globalization, technological changes and changing customer's demands for better quality, this important sector of Pakistan is now facing intense competition. To survive in this turbulent environment, organizations have to be creative and responsive to the changing environment [2, 3]. This creativity cannot be instituted without the involvement of employees [4]. Ottenbacher and Harrington [5] provided that employees of an organization play a key role in organizational creativity and innovation. These creative employees are a source of competitive advantage in the organization. The organizational researchers found that creative performance of employees is necessary for achieving competitive edge over competitors [6-8].

Creative employees provide important raw material in shape of novel and useful ideas which bring further development and improvement in the organization [9,10]. As a result, organizations can respond to opportunities in a better way to grow and compete dynamically [11, 12].

The social exchange theory (SET) provides theoretical foundation of creative behavior of employees. The social exchange theory (SET) is widely used and most accepted theory in the recent research on employee engagement [13]. According to SET when employees are given values by empowerment and training, the employees feel sense of consideration and they repay the organization by showing engaged behavior. This engaged behavior of employees motivates them to perform more than their duties and results into creativity and innovation in the organization [14]. Moreover, engaged employees are source of creative performance and attracts more talented people to the organization. On the other hand, disengaged employees cost an organization in shape of low productivity, high absenteeism and turnover [15].

Although, like social exchange theory, some researchers have provided theoretical frameworks of employee creativity; however, empirical evidence is limited [16,2]. Moreover, there is limited empirical evidence about the factors which lead towards creativity of employees [15]

Critical examination of numerous recent studies reveals the association between employee's personal characteristics and employee creativity [17-20], however, little of this research focused on human resource practices i.e. training and empowerment, which predicts employee creativity [21-23]. Moreover, the relationship between HR practices and employee performance is still ambiguous [24,25] and most of previous studies on Human Resource management focused on other dimensions of employee performance, but ignored the relationship between HR practices and employee creativity [26,27]. Finally, to the best knowledge of the authors of this study, the association between training, empowerment and employee creativity via employee engagement is still ambiguous and requires further empirical evidence particularly in the Pakistani context, this leads to the following research questions of this study:

- Do training and empowerment affect the level of employee creativity in the manufacturing sector of Pakistan?
- Do training and empowerment affect the level of employee engagement in the manufacturing sector of Pakistan?
- Does employee engagement mediate the relationship between training and empowerment and employee creativity in the manufacturing sector of Pakistan?

Therefore, this study aims to:

- Examine the impact of training and empowerment on employee creativity in the manufacturing sector of Pakistan.
- Analyze the effects of training and empowerment on employee engagement in the manufacturing sector of Pakistan.
- Observe the mediation effect of employee engagement between training, empowerment and employee creativity.

In the following discussion, this paper reviews the literature that leads to a number of research hypotheses.

This is immediately followed by a detailed specification of the research methodology. Thereafter, the empirical results are presented and discussed. The final part of the paper presents the discussions on the basis of the research findings, managerial implications, outlines some inherent limitations and offers some directions for future research.

### **Theory and Hypothesis**

**Relationship Between Empowerment, Training and Employee Creativity:** The social exchange theory (SET) states that when organization takes care of employees, there are social exchange relationships which promise to improve organizational performance [28]. Employees feel obliged to repay the organization when they receive socio-emotional and economic resources from the organization. Similarly, when employees are empowered and trained, they dedicate their physical, emotional and cognitive resources to perform their jobs well [15]. Many studies provide positive relationship between HR practices and employee performance [29,30, 31,31]. Moreover, empowered employees use their creative personal judgment more effectively and provide fair and quick services to customers. Considering this rule of reciprocity, organizations are improving their performance through managing the Human Resources efficiently and effectively. HRM focuses on better development and deployment of human resources [33]. Among the various HR practices, employee empowerment and training are most popular. The employee empowerment concept is grounded on the assumption that employees are the unexploited source of knowledge, initiative and creativity [34]. Empowerment refers to "the freedom and ability to make decisions and commitments" [35]. According to Honold [36], employee empowerment is related with job involvement i.e. higher the job involvement higher is the empowerment. The study of Cakar and Erturk [37] on SMEs found that employee empowerment is positively related with creativity and innovation in the SMEs. Similarly, concepts related to empowerment such as high job autonomy, freedom in deciding what to do, decentralization and sense of control over ones work lead towards creativity among employees [38].

Theoretical literature suggests the positive relationship between empowerment and training and creativity [6,39,40]. But the empirical evidence of this relationship is lacking [8]. Scott and Bruce [41] put forwarded that Employee empowerment is crucial for innovative behavior. Similarly, centralization impedes

employee empowerment and ultimately innovation [42, 43]. Moreover, empowered employees take initiatives which results into creativity [44] and empowered employees use their creative personnel judgment more effectively and provide fair and quick services to customers [45].

Researchers also found that empowerment without training does not produce intended results [15]. The employees should acquire technical skills, interpersonal skills and solid knowledge through training to perform their jobs efficiently and effectively [46]. The lack of ongoing training programs leads to lower performance of employees. This relationship is also supported by Combs, *et al.*, [47] who found that abilities, skills and knowledge of employees are enhanced through HR practices such as training and empowerment which result into creativity of the employees.

From the above discussion, the following hypotheses have been proposed:

**H1:** Employee empowerment leads significantly to employee creativity.

**H2:** Employee training leads significantly to employee creativity.

**Employee Engagement as Mediation:** The social exchange theory (SET) provides the theoretical foundation for mediation role of employee engagement between employee training, employee empowerment and employee creativity of performance [48]. According to SET employees show engaged behavior when they are given training and empowerment [28]. Schaufeli and Bakker [49] defined engagement as positive, fulfilling and work related state of mind that is characterized by dedication, vigor and absorption; hence engagement is related to putting effort in work and being persistence while facing difficulties. That is, employees dedicate their physical, cognitive and emotional resources to work roles by having high levels of energy, being enthusiastic about their work and being fully engrossed in their work. Karatepe [15] shows the mediation role of employee engagement between high-performance work practices (including training, empowerment and rewards) and employee performance, extra customer services or creative behavior of employees. Accordingly, it appears that when the organization takes care of employees through the simultaneous implementation of empowerment and training, employees show more engaged behavior to their

work, leading to better performance outcomes in the workplace. In other words, employees receiving various benefits and resources from the organization would be more likely to feel obliged to repay the organization through greater work engagement and in turn, display better attitude and behavior [15,14,50,51].

According to strategic human resource perspective, high performance work practices including empowerment and training influence the organizational and employee performance [52]. However, for better performance employees should be motivated from high performance work practices [53]. Employee motivation is enhanced through training and empowerment. This increased motivation level leads to better organizational performance through higher engaged behavior of employees [54, 55].

So, consistent with the precepts of social exchange theory and strategic human resource management perspective, this study finally proposes two further hypotheses:

**H3:** Employee engagement fully mediates the relationship between empowerment and employee creativity.

**H4:** Employee engagement fully mediates the relationship between training and employee creativity.

**Research Framework:** On the basis of the hypotheses, research framework has been shown in Figure 1.

#### **Data Collection and Methodology**

**Methodology:** Population of this study consists of employees of manufacturing sector of Pakistan. For data collection purpose, a sample of Karachi Stock Exchange Listed firms representing twelve manufacturing sectors is selected. Survey questionnaire, adopted from multiple studies, is used as a tool for data collection. It is consisted of total 33 items to measure perceptual constructs and along with some demographic information. Total 500 questionnaires were distributed to the employees of manufacturing sector; 420 were returned yielding a response rate of 84%. Twenty questionnaires were rejected due to incomplete information. Therefore actual response rate came to be 80%. This survey was applied to employees working in production, marketing, human resource, accounting and finance and R and D departments of 110 manufacturing firms. The firms represented the sample, varied in size (as measured by the number of employees, ranging from less than 250 to more

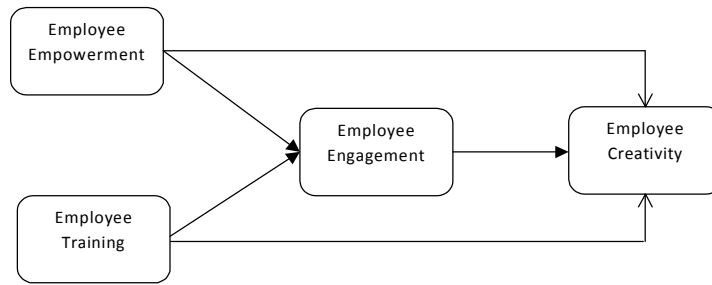


Fig. 1: Research Model

than 1,000 workers); assets (less than 50 to more than 500 Million Rupees) and industry type (Textile 26.25%; FMCG 5.25, Cement 12%, Petroleum 8.25%, Fertilizers 7.25%; Pesticides 2.5%; Chemicals 9.5%; Electronics 13.0%; Pharmaceuticals 5.0%; Others 11%). Category of “others” includes plastic, footwear, accessories etc.

SPSS 17 is used in this study to analyze the collected data from employees of manufacturing sector of Pakistan. Factor analysis (Principal Component Analysis) and reliability analysis (Chronbach’s alpha) are used to test the validity and reliability of the questionnaire measures. Similarly, correlation and regression analysis are run to test the proposed hypothetical relationship between the variables.

**Measurement:** Multiple items, adopted from different studies, have been used to measure the perceptual constructs, namely: employee training, empowerment, engagement and employee creativity. Specifically, training is operationalized through six items from the study of Boshoff and Allen [56] and empowerment is measured with five items followed from Hayes [57]. Similarly, by following the Karatepe [15], employee work engagement is operationalized by using the shortened version of the Utrecht Work Engagement Scale-nine items [58], subdivided in to three dimensions of Vigor-3items, dedication-3items and absorption-3items. The internal consistency reliability of these three measurement scales i.e. employee training, empowerment and engagement were assessed in Karatepe’s [15] study by using the cut-off value of .70. Similarly, thirteen items adopted from Tang and Chang [59] are used to measure employee creativity having Chronbach’s Alpha value of 0.94.

**Data Analysis**

**Factor Analysis**

**Factor Analysis of Independent Variables:** Table 1 shows two factor solutions of employee training (6 items) and

employee empowerment (5 items) which together explained 70.635% of total variance. Moreover, Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) is acceptable and significant (0.777, P<0.05).

**Factor Analysis of Mediating Variable:** Table 2 shows one factor solution of employee engagement in shape of 7 items (1 item each is excluded from vigor and dedication due to low loading), explained 73.322% of total variance. Employee engagement has a significant and acceptable KMO that is 0.842.

**Factor Analysis of Dependent Variable:** Table 3 shows one factor solution of employee creativity in shape of 8 items (5 items has been excluded because of low loading), explained 55.767% of total variance. Employee creativity has a significant and acceptable KMO that is 0.767.

**Correlation and Reliability Analysis:** As the purpose of this study is to find the relationship between two dimensions of Human Resource practices (training and employee empowerment), employee engagement and employee creativity, therefore correlation analysis is used to find the relationship among study variables. The results are shown in Table 4. The results show that independent variables (training, empowerment), mediating variable (employee engagement) and dependent variable (creativity) are significantly and positively correlated with each other. This significant positive correlation between the study variables initially confirmed all the proposed relationships. The mean, standard deviation (S.D) and value of Cronbach’s alpha are also given in the Table-4. The mean values of most of the variables are more than 4 showing that each study variable is highly rated. Moreover, all the perceptual variables having reliable and acceptable values of Cronbach’s alpha i.e. employee engagement ( $\alpha=.950$ ), training ( $\alpha=.881$ ), employee empowerment ( $\alpha=.935$ ), employee creativity ( $\alpha=.886$ ).

Table 1: Factor analysis of Independent Variables

	Component	
	1	2
KMO=0.777 and Variance explained=70.635		
Empowerment5	.925	
Empowerment 4	.896	
Empowerment 1	.884	
Empowerment 2	.877	
Empowerment 3	.868	
Training1		.865
Training5		.823
Training3		.805
Training2		.779
Training6		.767
Training4		.702

Table 2: Factor analysis of mediation variable

	Component
	1
KMO=0.842 and Variance explained=73.322	
Engagement4	.946
Engagement7	.932
Engagement9	.932
Engagement5	.905
Engagement3	.833
Engagement2	.802
Engagement8	.790

Table 3: Factor analysis of Dependent Variable

	Component
	1
KMO=0.767 and Variance explained=55.767	
Creativity11	.820
Creativity8	.801
Creativity5	.796
Creativity7	.741
Creativity10	.741
Creativity13	.718
Creativity3	.690
Creativity1	.650

Table 4: Correlation, mean and standard deviation

	S.D	Mean	Chronbach's Alpha	training	Empowerment	creativity	Engagement
Training	.6292	4.087	0.881	1	.093	.356**	.165**
Empowerment	.7144	4.001	0.935		1	.201**	.238**
Creativity	.6841	3.913	0.886			1	.560**
Engagement	.7263	4.007	0.950				1

**Regression Analysis:** Regression analysis has been carried out with the help of SPSS 17 to investigate the impact of two dimensions of Human Resource Practices, namely employee empowerment and training on employee engagement and employee creativity (Tables 5 and 6). Regression model in regression Table-5 and Table-6 confirms that in total all the two dimensions of human resource (training and empowerment) stimulates employee creativity ( $R^2=0.159$ ;  $F=36.403$ ;  $P<0.01$ ) and employee engagement ( $R^2=0.07$ ;  $F=16.584$ ;  $P<0.01$ ). In other words, employee empowerment and training altogether explained 15.9%, and 7% of total variance of employee engagement and employee creativity respectively. Moreover standardized coefficient  $\beta$  and T values also depict positive and significant impact of employee training on employee creativity ( $\beta=0.34$ ;  $t=7.33$ ); empowerment on creativity ( $\beta=0.17$ ;  $t=3.665$ ); empowerment on engagement ( $\beta=0.224$ ;  $t=4.643$ ) and training on employee engagement ( $\beta=0.144$ ;  $t=2.976$ ). Hence hypotheses, H1 and H2 are supported.

**Mediation Analysis:** Baron and Kenny [60] specified three conditions for mediation analysis: 1) Independent and mediating variable must be significantly correlated. 2) Independent and dependent variable must be significantly correlated. 3) Upon the introduction of mediating variable, the impact on dependent variable by independent variable will significantly decrease. To test these conditions, this study has also followed the three steps methods specified by Barrens and Kenny, 1986. As seen from Table-6, *in first step*, regression was performed between independent variables (employee training, empowerment) and mediator variable (employee engagement); results showed the significant impact of 1) training on engagement ( $\beta=0.144$ ;  $t=2.976$ ;  $p<0.01$ ) and 2) empowerment on engagement ( $\beta=0.224$ ;  $t=4.643$ ;  $p<0.01$ ). Similarly, as shown in Table-7(model-1), *in second step*, regression was performed between independent variables (employee training and empowerment) and dependent variable (employee creativity). Results showed the significant impact of 1) training on employee creativity ( $\beta=.340$ ;  $t=7.3330$ ;  $p<0.01$ ) and 2) empowerment on

Table 5: Regression Analysis between Training, Empowerment and Employee creativity

Dependent Variable Employee creativity			
	Model fit	Adj.R <sup>2</sup>	F
	0.15	36.403	
Independent Variables	Beta	T	Sig.
Employee Training	0.34	7.333	0.000
Employee empowerment	0.17	3.665	0.000

Table 6: Regression Analysis between Training, Empowerment and Employee Engagement

Dependent Variable Employee Engagement			
	Model fit	Adj. R <sup>2</sup>	F
	0.07	16.584	
Independent Variables	Beta	T	Sig.
Employee Training	0.144	2.976	0.000
Employee empowerment	0.224	4.634	0.000

Table 7: mediation analysis (dependent: creativity)

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	T	Sig.
1 Adj. R <sup>2</sup> (.151)	(Constant)	1.753	.261		6.714	.000
	Training	.369	.050	.340	7.333	.000
	Empowerment	.163	.044	.150	3.665	.000
2 Adj. R <sup>2</sup> (.171)	(Constant)	1.842	.283		6.508	.000
	Training	.273	.051	.245	5.371	.000
	Empowerment	.151	.046	.143	2.754	.000
	Engagement	.177	.045	.158	2.797	.003

employee creativity ( $\beta=.150$ ;  $t=3.665$ ;  $p<0.01$ ). Moreover, as shown in Table-7(model-2), in third step, regression was performed between independent variable (training and empowerment) and dependent variable (employee creativity) in the presence of mediator variable (employee engagement). Results still showed the significant impact of 1) training on employee creativity ( $\beta=.245$ ;  $t=5.371$ ;  $p<0.01$ ) and 2) empowerment on employee creativity ( $\beta=.143$ ;  $t=2.754$ ;  $p<0.01$ ); hence confirmed the partial mediation of employee engagement instead of full mediation with 15.1% and 17.1% variance in employee creativity is explained by training and empowerment directly and indirectly via employee engagement.

### DISCUSSION AND CONCLUSION

The present study has examined the relationships among HRM practices (training and empowerment), employee engagement and employee creativity. It has been seen by the results that positive and supportive link exists among two HR practices (training and empowerment), employee engagement and employee creativity. The findings prove the validity of social exchange theory in the manufacturing sector of Pakistan. The social exchange theory states that when an organization gives consideration to their employees, the performance of employees improves. This study also found that when employees are given training and

empowerment, they feel that the organization is more concerned about them. And the sense of consideration leads the employees towards employee engagement which ultimately results into the creativity of employees.

The results of this study are also consistent with strategic human resource perspective. According to strategic human resource perspective, high performance work practices including empowerment and training influence the organizational and employee performance [52]. The findings of this study show that employees act as source of creativity in the organization when they are engaged with their jobs. And this engaged behavior of employees can be achieved with human resource practices (training and empowerment). In other words, training and empowerment leads towards creativity among employees.

Employee role is vital in the growth and success of an organization. In order to remain competitive in today's competitive environment, employees of the organization must be engaged. In this regard, human resource practices (training, empowerment) are of great importance.

**Theoretical and Managerial Implications:** Most of the previous researches have been conducted to determine the effect of HR practices on employee satisfaction and performance, but little or no attention has been given to analyze the impact of HR practices on employee creativity especially in manufacturing sector of Pakistan, which is

crucial for attaining competitive edge in today's dynamic environment. Therefore, this study contributes to the literature by finding relationship between HR practices (training and empowerment) and employee creativity. Moreover, this study provides first empirical evidence from manufacturing sector of Pakistan that exhibits supportive and significant linkage between HR practices (training and empowerment) and employee creativity.

The present study also contributes practically by concluding that training and empowerment definitely provides a strong base for dynamic organizations to manage the creative culture that can promote their abilities and competency as well as other strategic priorities to gain competitive advantage. Findings of this study show that engaged behavior of employees is pivotal for creativity among employees. And managers should provide training and empowerment to the employees in order to increase the level of employee engagement.

#### **Limitations and Recommendations for Future Research:**

The limitations of this study would become focus for future research. It is a cross sectional study where all data were collected at a particular time, so variables and analysis is restricted to that particular time. Also, this study is limited to only manufacturing sector of Pakistan, further studies may focus on other sectors of Pakistan and other geographical locations. Another limitation of study is that this study did not consider the impact of size, there is need of comparative study on the basis of size (as proposed in the study of Kerr, Way and Thacker, [61]). Finally, this study considered only two HR practices (training and empowerment), the future studies may consider other dimensions of HR practices included teamwork, two-way communication, human development, selection and recruitment, employment security, internal career/promotion opportunities, single status and harmonization, quality/involvement, job design and financial flexibility as highlighted by Guest and Conway [62].

#### **REFERENCES**

1. Ministry of Finance, 2012. "Economic survey of Pakistan." Retrieved 05 June, 2013, from [http://www.finance.gov.pk/survey\\_1112.html](http://www.finance.gov.pk/survey_1112.html).
2. Jansen, J.J.P., F.A.J. Van Den Bosch and H.W. Volberda, 2006. Exploratory innovation, exploitative innovation and performance: Effects of organizational antecedents and environmental moderators. *Management Science*, 52(11): 1661-1674.
3. Roberts, P.W. and R. Amit, 2003. The dynamics of innovative activity and competitive advantage: The case of Australian retail banking, 1981 to 1995. *Organization Science*, 14(2): 107-122.
4. Liu, C.H., 2013. The processes of social capital and employee creativity: empirical evidence from intraorganizational networks. *The International Journal of Human Resource Management*, pp: 1-17.
5. Ottenbacher, M. and R.J. Harrington, 2007. The innovation development process of Michelin-starred chefs. *International Journal of Contemporary Hospitality Management*, 19: 444-460.
6. Amabile, T.M., 1988. A model of creativity and innovation in organizations. In B.M. Staw and L.L. Cummings (Eds.), *Research in organizational behavior*, 10: 123-167. Greenwich, CT: JAI Press.
7. Devanna, M.A. and N. Tichy, 1990. Creating the competitive organization of the 21<sup>st</sup> century: The boundaryless corporation. *Human Resource Management*, 29: 445-471.
8. Shalley, C.E., 1995. Effects of coaction, expected evaluation and goal setting on creativity and productivity. *Academy of Management Journal*, 38: 483-503.
9. Staw, B.M., 1990. An evolutionary approach to creativity and innovation. In M.A. West and J.L. Farr (Eds.), *Innovation and creativity at work*: 287-308. Chichester, UK: Wiley.
10. Woodman, R.W., J.E. Sawyer and R.W. Griffin, 1993. Toward a theory of organizational creativity. *Academy of Management Review*, 18: 293-321.
11. Kanter, R.M., 1983. *The change masters*. New York: Simon and Schuster.
12. Kanter, R.M., 1988. When a thousand flowers bloom: Structural, collective and social conditions for innovation in organizations. In B.M. Staw and L.L. Cummings (Eds.), *Research in organizational behavior*, 10: 169-211. Greenwich, CT: JAI Press.
13. Andrew, O.C. and S. Sofian, 2012. Individual Factors and Work Outcomes of Employee Engagement. *Procedia-Social and Behavioral Sciences*, 40: 498-508.
14. Saks, A.M., 2006. Antecedents and consequences of employee engagement. *Journal of Managerial Psychology*, 21(7): 600-619.
15. Karatepe, O.M., 2012. High-performance work practices and hotel employee performance: The mediation of work engagement. *International Journal of Hospitality Management*.
16. Afshari, M., S. Siraj, M.F.A. Ghani and M. Afshari, 2011. Leadership and Creativity. *Australian Journal of Basic and Applied Sciences*, 5(10): 1591-1594.

17. Adler, P.S. and C.X. Chen, 2011. Combining creativity and control: Understanding individual motivation in large-scale collaborative creativity. *Accounting, Organizations and society*, 36(2): 63-85.
18. Avey, J.B., F. Luthans, S.T. Hannah, D. Sweetman and C. Peterson, 2012. Impact of employees' character strengths of wisdom on stress and creative performance. *Human Resource Management Journal*, 22(2): 165-181.
19. Backes-Gellner, U. and S. Veen, 2013. Positive effects of ageing and age diversity in innovative companies-large-scale empirical evidence on company productivity. *Human Resource Management Journal*.
20. Chen, C.J., H.A. Shih and Y.C. Yeh, 2011. Individual initiative, skill variety and creativity: the moderating role of knowledge specificity and creative resources. *The International Journal of Human Resource Management*, 22(17): 3447-3461.
21. Bakker, A.B. and D. Xanthopoulou, 2013. Creativity and charisma among female leaders: the role of resources and work engagement. *The International Journal of Human Resource Management*, 24(14): 2760-2779.
22. Jiang, J., S. Wang and S. Zhao, 2012. Does HRM facilitate employee creativity and organizational innovation? A study of Chinese firms. *The International Journal of Human Resource Management*, 23(19): 4025-4047.
23. Thompson, M. and P. Heron, 2006. Relational quality and innovative performance in R and D based science and technology firms. *Human Resource Management Journal*, 16(1): 28-47.
24. Guest, D.E., 2011. Human resource management and performance: still searching for some answers. *Human Resource Management Journal*, 21(1): 3-13.
25. Thompson, P., 2011. The trouble with HRM. *Human Resource Management Journal*, 21(4): 355-367.
26. Knies, E. and P. Leisink, 2013. Linking people management and extra-role behaviour: results of a longitudinal study. *Human Resource Management Journal*.
27. Wright, P.M. and G.C. McMahan, 2011. Exploring human capital: putting 'human' back into strategic human resource management. *Human Resource Management Journal*, 21(2): 93-104.
28. Cropanzano, R. and M.S. Mitchell, 2005. Social exchange theory: an interdisciplinary review. *Journal of Management*, 31(6): 874-900.
29. Gong, Y., S. Chang and S.Y. Cheung, 2010. High performance work system and collective OCB: a collective social exchange perspective. *Human Resource Management Journal*, 20(2): 119-137.
30. Boxall, P., 2013. Mutuality in the management of human resources: assessing the quality of alignment in employment relationships. *Human Resource Management Journal*, 23(1): 3-17.
31. Monks, K., G. Kelly, E. Conway, P. Flood, K. Truss and E. Hannon, 2012. Understanding how HR systems work: the role of HR philosophy and HR processes. *Human Resource Management Journal*.
32. Glover, L. and P. Butler, 2012. High-performance work systems, partnership and the working lives of HR professionals. *Human Resource Management Journal*, 22(2): 199-215.
33. Kmiecik, R., A. Michna and A. Meczynska, 2012. Innovativeness, empowerment and IT capability: evidence from SMEs. *Industrial Management and Data Systems*, 112(5): 707-728.
34. Bratnicki, M., M. Kulikowska-Mrozek, I. Marzec and P. Zbierowski, 2007. Empowerment and entrepreneurship, conceptual issues and empirical tests, *Journal of Economics and Management*, 3: 35-54.
35. Forrester, R., 2000. Empowerment: rejuvenating a potent idea. *Academy of Management Executive*, 14(3): 67-80.
36. Honold, L., 1997. A review of the literature on employee empowerment. *Empowerment in Organizations*, 5(4): 202-12.
37. Çakar, N.D. and A. Ertürk, 2010. Comparing Innovation Capability of Small and Medium-Sized Enterprises: Examining the Effects of Organizational Culture and Empowerment. *Journal of Small Business Management*, 48(3): 325-359.
38. Ahmed, P.K., 1998. Culture and climate for innovation. *European Journal of Innovation Management*, 1(1): 30-43.
39. Gervais, S.J., A. Guinote, J. Allen and L. Slabu, 2012. Power increases situated creativity. *Social Influence*, pp: 1-18.
40. Spreitzer, G.M., S.C. Janasz and R.E. Quinn, 1999. Empowered to lead, the role of psychological empowerment in leadership. *Journal of Organizational Behavior*, 20(4): 511-26.
41. Scott, S.G. and R.A. Bruce, 1994. Determinants of innovative behavior, a path model of individual innovation in the workplace. *Academy of Management Journal*, 37(3): 580-607.



42. Menon, S.T., 1999. Psychological empowerment, definition, measurement and validation. *Canadian Journal of Behavioural Science*, 31(3): 161-4.
43. Prakash, Y. and M. Gupta, 2008. Exploring the relationship between organisation structure and perceived innovation in the manufacturing sector of India. *Singapore Management Review*, 30(1): 55-76.
44. Petter, J., P. Byrnes, D. Choi, F. Fergan and R. Miller, 2002. Dimensions and patterns in employee empowerment, assessing what matters to street level bureaucrats. *Journal of Public Administration Research and Theory*, 12(4): 377-401.
45. Guchait, P., M.G. Kim and K. Namasivayam, 2012. Error management at different organizational levels-frontline, manager and company. *International Journal of Hospitality Management*, 31(1): 12-22.
46. Eldridge, D. and T.M. Nisar, 2006. The significance of employee skill in flexible work organizations. *The International Journal of Human Resource Management*, 17(5): 918-937.
47. Combs, J., Y. Liu, A. Hall and D. Ketchen, 2006. How much do high-performance work practices matter? A meta-analysis of their effects on organizational performance. *Personnel Psychology*, 59(3): 501-528.
48. Takeuchi, R., D.P. Lepak, H. Wang and K. Takeuchi, 2007. An empirical examination of the mechanisms mediating between high-performance work systems and the performance of Japanese organizations. *Journal of Applied Psychology*, 92(4): 1069-1083.
49. Schaufeli, W.B. and A.B. Bakker, 2004. Job demands, job resources and their relationship with burnout and engagement: a multi-sample study. *Journal of Organizational Behavior*, 25: 293-315.
50. Truss, C., A. Shantz, E. Soane, K. Alfes and R. Delbridge, 2013. Employee engagement, organisational performance and individual well-being: exploring the evidence, developing the theory. *The International Journal of Human Resource Management*, 24(14): 2657-2669.
51. Brunetto, Y., S.T. Teo, K. Shacklock and R. Farr-Wharton, 2012. Emotional intelligence, job satisfaction, well-being and engagement: explaining organisational commitment and turnover intentions in policing. *Human Resource Management Journal*, 22(4): 428-441.
52. Huselid, M.A., S.E. Jackson and R.S. Schuler, 1997. Technical and strategic human resource management effectiveness as determinants of firm performance. *Academy of Management Journal*, 40(1): 171-188.
53. 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.
54. Babakus, E., U. Yavas, O.M. Karatepe and T. Avci, 2003. The effect of management commitment to service quality on employees' affective and performance outcomes. *Journal of the Academy of Marketing Science*, 31(3): 272-286.
55. Yavas, U., O.M. Karatepe and E. Babakus, 2010. Relative efficacy of organizational support and personality traits in predicting service recovery and job performances: a study of frontline employees in Turkey. *Tourism Review*, 65(3): 70-83.
56. Boshoff, C. and J. Allen, 2000. The influence of selected antecedents on frontline staff's perceptions of service recovery performance. *International Journal of Service Industry Management*, 11(1): 63-90.
57. Hayes, B.E., 1994. How to measure empowerment. *Quality Progress*, 27(February): 41-46.
58. Schaufeli, W.B., A.B. Bakker and M. Salanova, 2006. The measurement of work engagement with a short questionnaire: a cross-national study. *Educational and Psychological Measurement*, 66(4): 701-716.
59. Tang, Y.T. and C.H. Chang, 2010. Impact of role ambiguity and role conflict on employee creativity. *African Journal of Business Management*, 4(6): 869-881.
60. Barron, F.B. and D.M. Harrington, 1981. Creativity, intelligence and personality. *Annual Review of Psychology*, 32: 439-476.
61. Kerr, G., S.A. Way and J. Thacker, 2007. Performance, HR practices and the HR manager in small entrepreneurial firms. *Journal of Small Business and Entrepreneurship*, 20(1): 55-68.
62. Guest, D. and N. Conway, 2011. The impact of HR practices, HR effectiveness and a 'strong HR system' on organisational outcomes: a stakeholder perspective. *The International Journal of Human Resource Management*, 22(8): 1686-1702.