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 & 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 & 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

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 & 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].

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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 & 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 [29-32]. 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 & training and creativity [6, 39, 40]. But the empirical evidence of this relationship is lacking [8]. Scott & 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 & 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 & 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 [14, 15, 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.

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.
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 & finance and R&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 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 & 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
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 & 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 ($\alpha= .886$).

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 & 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% & 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 & 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 & Kenny, 1986. As seen from Table-6, in first step, regression was performed between independent variables (employee training, empowerment) and mediating 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 engagement); results showed the significant impact of 1) training on employee creativity ($\beta=0.340$; $t=7.3330$; $p<0.01$) and 2) empowerment on employee creativity ($\beta=0.150$; $t=3.665$; $p<0.01$). 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), explained 55.767% of total variance. Employee creativity has a significant and acceptable KMO that is 0.767.
TABLE 7: Mediation analysis (dependent: creativity)

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
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<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
</tr>
<tr>
<td>1 Adj. R² (.151)</td>
<td>(Constant)</td>
<td>1.753</td>
</tr>
<tr>
<td></td>
<td>Training</td>
<td>.369</td>
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<tr>
<td></td>
<td>Empowerment</td>
<td>.163</td>
</tr>
<tr>
<td>2 Adj. R² (.171)</td>
<td>(Constant)</td>
<td>1.842</td>
</tr>
<tr>
<td></td>
<td>Training</td>
<td>.273</td>
</tr>
<tr>
<td></td>
<td>Empowerment</td>
<td>.151</td>
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<tr>
<td></td>
<td>Engagement</td>
<td>.177</td>
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engagement). Results still showed the significant impact of 1) training on employee creativity ($\beta = .245$; $t = 5.371$; $p < .01$) and 2) empowerment on employee creativity ($\beta = .143$; $t = 2.754$; $p < .01$); 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 & 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 & empowerment) and employee creativity.

**CONCLUSION**

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 & 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


