The Mediating Role of Employee Engagement between Team and Co-worker Relation, Work Environment, Training and Development and Employee Performance

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Abstract---Employee performance has been the major issue now a day in the manufacturing organization of Indonesia. Management is giving more focus to obtain more performance through adopting new technologies but no avail. The current study discussed this issue how to enhance employees' performance. The main aim of this study is to examine the mediating role of employees' engagement between team and co-worker relations, training and development, work environment and lastly with employee's performance. This quantitative study used cross-sectional design. Population is selected from the Indonesian Manufacturing industry. Adapted questionnaire would be used to collect the response from the respondents. 300 questionnaires distributed to get the data. PLS (AMOS) 3.0 Version is used to do data analyze. The findings of the study show that employees' engagement has significant relation between TCR, TD and WE and EP. The conclusion of the study shown that manufacturing company especially the food industry can use to maintain the employee’s performance, by paying more attention to training and development, sustaining good relation with team and co-workers and work environment that the employees get, in order to achieve business objectives and then raise competitive advantages in Indonesian manufacturing industry.

Keywords---Team and Coworker Relationship, Training and development, Work environment, Employee engagement, Employees performance

I. Introduction

In an organizational setting employees are frequently assessed by their performance. Bateman and Snell (2007) argued that job performance as performance appraisal and management is a basic of HR management and it is a most searched for after formative mediation in HR portfolio. The term "employee performance" indicates person's work accomplishment in the wake of applying required input on job which is related to being indulge in meaningful work, connected with profile, and having supportive and cooperative relation with coworkers and supervisors (Karakas 2010). In order to get the effective benefit of HR to expand the organizational achievement, successful employees' performance is important for a business corporations. Gruman and Saks (2011) stated that management must connect the performance driven objectives with the organizational rules and procedures in order to shift the whole process...
from being event-driven to people-oriented perceptive. On a similar note, employees’ performance is the fruitful result by an individual or individuals, as set and valued by a manager or organization, to pre-characterized adequate measures while proficiently and successfully using accessible assets of the organization in the continuous changing environment (Armstrong and Murlis 2004). Employee’s performance therefore motivate to undertaking a lot of practices while going for the outcomes and despite the fact that performance assessment of the employees is the essential responsibility of the management, Kuipers and Giurge (2017) further argued that the performance of an individual or an organization depends intensely on organizational strategies, practices.

This integrative approach lead towards the strategic human resource management which claims the pattern of HR function which are quite different from single activity happens in the firm on daily basis are pretty much important to accomplish organizational goals (Kuipers and Giurge 2017). Management need to realize that an organization cannot be successful without effectively engaging the employees. Employees’ engagement is one of the key determinants cultivating superior levels of employees’ performance, as its considerably examined invarious studies (Anitha 2014).

Problem Statement and Background of the Study

Preamble Central Bureau of Statistic (BPS) Indonesia expressed that in Indonesia the production of manufacturing industry specifically in the food sector has rose it’s percent by 8.20 and significantly contributed in forming the Gross Domestic Product (GDP) of Indonesia from 2011 to till now (Purbasari and Septian 2017). The success of the manufacturing sector in Indonesia is mainly depend on the realization about how to sustain the performance of the organization that has really added value to the country and state (Purbasari and Septian 2017; Somjai & Jermsittiparsert, 2019). Another issue spotted by the organization's management is protecting the competitive edge that can be exhibited by the success of the organization to accomplish and sustain high level of performances, as only few food and beverage manufacturing companies in Indonesia succeed while going publicly and such companies are “PT Mayora Indah Tbk, PT Indofood CBP Sukses Makmur Tbk”.

Performance of the organization mainly depend on the employee performance (Devi 2017). Employee performance represents at what level employees are doing their best to yield greater outcomes and to what extent they are serious in making the efforts for the accomplishment of the goals. The issue of business organizations is how to ensure and sustain the high level performances of the employee to accomplish high organizational performance (Cesário and Chambel 2017). Management is mindful in doing the task of dealing with the organization in the correct manner. Knowing and examining human factors that clearly affect the performances of the employees is yet relevant and interesting to explore because the good performances of the employees ensure the work done productively and successfully. Moreover, human resource management need to know whether their employees are performing their jobs productively and effectively or is there any need for further improvement and development (Robbins and Coulter 2009). Within the context of the organization, quite a lot of studies has accessed the factors that can influence employee performance. For example, as illustrated in figure 1, quite a lot of factors in organization affect the employees performance and those factors are changing nature of work environment is the important predictor of employee’s performance, leadership style, and the opportunities for career and development can decrease and increase the level of employee’s performance (Purbasari and Septian 2017).
This study is to be important to discuss the factors that can affect the employee performance in the Indonesian manufacturing sector because each organization has its own distinguish factors in relation with the performance of the employees (Johari 2012). Based on the discussion, this study is aimed to determine the employee performance in relation with mediating role of employee’s engagement with work environment, Team and co-worker relationship and training and development in the Indonesian manufacturing company.

**Research Objectives**

- To observe the effect of TCR on EE
- To examine the relationship between work environment and employee’s engagement
- To scrutinize the effect of TD on EE
- To spot the effect of EE on the EP
- To verify the mediating consequence of employee’s engagement among the association between Team and co-worker relationship and employee’s performance
- To resolve the mediating effect of employee’s engagement among the association between work environment and employee’s performance
- To determine the mediating consequence of employee’s engagement among the association between training and development and employee’s performance
II. Literature Review

The study discussed in the literature review the mediating role of employee engagement, team and co-worker relation, work environment, training and development and employee performance.

Employees Performance

Performance of employee means the commitment of employee in terms of product creation or giving services for the clients of the organization. On the other hand, performance also signifies the level of work performed by an employee in a particular timeframe (Sharma and Sharma 2017). In addition, employee performance is considered as the accomplishment of regular working proficiency and utilization of the capacity to achieve the work requirements (Tahir, Yousaafzai et al. 2014). Furthermore, performance of employees guarantees the survival and improvement of the organization in a greatly volatile business environment (Ahmed, Ahmad et al. 2016). Employee performance is fundamentally the outcomes obtained by an employee at the working environment. In this point, performance observed as valuable outputs in the scenario of the production sector concerning the products or services (Swanson and Holton III 2009). Performance of employees, in fact, sustain the organizational planning regarding the anticipated results (Anitha 2014).

The accomplishment of organization’s objectives done through the performance of employees (Sharma and Sharma 2017). In this connectivity, employees are viewed as the most significant resource because of their considerable determinations in the organization as all the resources of the organizations have no use if employees are not giving their best performances (Islam, Ahmed et al. 2012). In addition, high level of the worker’s performances enable business tasks to be done steadily and smoothly (Anitha 2014). In this way, the management of the firm specially focused on the improvement of employees’ performance level so the organization can affirm its solid presence in the business world. Similarly, the performance of employees is impacted by the engagement level of employees with their work in the organizational setting. In addition, in the empirical investigation researchers found that employee engagement throw a direct and indirect positive effect on employees’ work performance (Karatepe 2013). Moreover, a comparative research on engaged and disengaged workers uncovers that the engaged workforce is tend to show the higher performance in comparison with the disengaged employees in the organization (Shuck, Reio Jr et al. 2011).

Employee Engagement

The conception of employee engagement encourage the workers to perform their work in such a manner that their physical and intellectual, attachment with their work can be acknowledged in the firms (Eldor and Vigoda-Gadot 2017; Ghani, Kaliappen, & Jermsittiparsert, 2019). Moreover, (Eldor and Vigoda-Gadot 2017) explained three psychological viewpoints, for example, security, meaningfulness and accessibility will generate a difference among engaged and disengaged workers at work environment. Meaningful predicts those work components that are basic for positive performance of the tasks; Safety signifies social components that incorporate management approach, process and organizational standards that protected employee from any negative results; lastly, Availability speaks to employees’ physical, mental and enthusiastic condition that comprehend of being engaged or disengaged. The employee engagement idea work as an intellectual, enthusiastic and social condition of the employees that guided them toward the anticipated results of the organization (Shuck and Wollard 2010). A connection that existed between engagement study and motivation theory (Shuck, Reio Jr et al. 2011). Along these lines, a few sociologists felt that Kahn's investigation was truly commanded by the motivational scholars (Shuck and Wollard 2010).
Employee engagement at some point has been interpreted with comparable importance of some different constructs. Thus, during the time of most recent two decades’ employee engagement idea hold enormous enthusiasm for the business literary because of huge consideration of HRM researchers in their ongoing examinations (Albrecht et(Bakker and Albrecht 2018). Eldor and Vigoda-Gadot (2017) expressed that employees’ engagement could be acquired through placing the employees at the right time and on the right position and working under the right leadership style. Employee engagement as the capacity of catching employees 'heads, hearts, and spirits to motivate the for excellence, along these lines, include an spiritual component that spreads subjective and passionate perspectives in employee engagement (Matters). In relation with this, worker feels engaged when he/she experience physically and psychologically the whole-hearted attachment with its job responsibilities(Thiagarajan and Renugadevi 2011).

Team and Co-worker Relationship

Team and co-worker relationship (TCR) means the relatedness that the people need to have and having a worthwhile interpersonal relational communications with their colleagues, (Chen, Tjosvold et al. 2010). As indicated by (Chen, Tjosvold et al. 2010), co-worker's connection look like fellowship, acknowledgment, and faithfulness formed among the individuals from a group members, which additionally raise the level of confidence, respect and trust, in their top management. Besides, if the top management successfully get the support, respect and trust from their employees, then the leaders’ ability to influence will be enormously improved in comparison with those leaders who are unsupportive for their subordinates (Farmer, Van Dyne et al. 2015). Group and colleague is an alternate stage which highlights the relational harmonization part of employees’ engagement. Liao, Yang et al. (2013) found that trusting in relationship, and having a strong supportive bond mainly indulge the employee in engaged state of mind. An open and supportive environment is imperative for workforce to feel secured in the work environment and make themselves engaged completely with their obligation.

Helpful environment enables people to attempt to endeavor new things and lessen their fear of being failed without understanding the outcomes (Oetomo 2011). Besides, Iqbal, Shabbir et al. (2017) found that the relationship in the work environment considerably influenced meaningfulness that consider as the components of engagement. A few examinations uncovered that group and colleague relationship impact employee engagement (Lee, Idris et al. 2017).Wang and Hsieh (2013) argued that employees trust and connections impacts the pace of engagement of workers. Bharathi (2009) described that faith in the leaders and collaborators improves the pace of employee engagement, while the certainty, respect and trust from the employees to the supervisors obviously originates from the engagement between the managers and the subordinates.

Work Environment

Nokes (2019) discussed that work environment as an essence which includes the whole of activities, power and other convincing components that affect the workers’ performance and activities. The Working environment (WE) is the sum of the interrelationship (Nokes 2019). WE entails the numerous activities of work like in what ways the job is being done and, including the tasks such as tasks activities, training, controlling on one’s work related happenings, a feeling of accomplishment from the job, range of tasks and feeling internally significant for an assignment (Sousa-Poza and Sousa-Poza 2000). Work environment can be termed as an environment that attracts people into organization, urges them to stay in the organization and empowers them to perform successfully. Leshabari,
Muhondwa et al. (2008) argued that work environments give conditions to workers for high and successful performance, utilizing their abilities, provide them accessible assets to get the top quality services. Work environment has been observed as the most significant variables that reflects upon the degree of engagement of an employee. An examination by Oetomo (2011) showed that employees’ engagement is the result of various aspects of the work environment. Nokes (2019) stated that management which builds up an empowering work environment typically shows concerns towards workers’ needs and considerations, offers useful criticism and urges employees to raise their opinions, train them to develop new abilities for handling new work related problems to enjoy the best performances of highly engaged employees. Subsequently, work environment that support employees for focused job responsibilities and relational understanding is expected to be a crucial factor of employee engagement.

**Training and Career Development**

Training and career developing is characterized as an managed learning experience planned to bring a long-term change in worker’s knowledge, frame of mind and aptitudes (Bertolino, Truxillo et al. 2011). Training and career developing is another critical factor which is to be viewed as with regards to the issue of employee engagement, since it causes the employees to be more engaged in their jobs. Paradise (2008) discussed that Administration precision is improved through attending the training and thus, impacts administration performance and employee engagement. Employees are progressively occupied with their job because of developed certainty that they achieve because of training and learning improvement programs, which further encourages them. On the same note, career development is equal to rewarding individuals, if an employee get an opportunity for development (Anthony and Weide 2015). Moreover, (Saks 2015) management needs to introduce more training and career development programs which will prompt to improvement in the performance of the employees. This naturally upgrades the process of engagement. In addition, opportunities for training and career development is a certain method for making workers engaged with the job to achieve high performance level (Asfaw, Argaw et al. 2015). Training improves services delivery, accuracy, and proficiency in the work environment. At that point worker perform good when they become pretty much trained, possess the capacity to adapt to job demands, and have excitement to improve their job performance. Similarly, (Murphy and DeNISI 2008) argued that theories of psychological condition where training is considered fundamental for developing employees with core assets, for example, aptitudes and learning to empower them to be completely occupied with their jobs to build performance.

**2.6 Research Hypothesis**

**H1:** Team and co-worker relationship is positively linked with employee’s engagement  
**H2:** Work Environment is positively associated with employee’s engagement  
**H3:** Training and development is positively associated employee’s engagement  
**H4:** EE is positively linked employee’s performance (EP)  
**H5:** Employee’s engagement plays a positive mediating role among the association between TCR and employee’s performance  
**H6:** EE plays a positive mediating role among the association between WE and employee’s performance  
**H7:** EE plays a positive mediating role among the association between training and development and employee’s performance
III. Research Methodology

Data were gathered through self-visit to the Indonesian manufacturing industry. Though, it may, the 5-point Likert scale was utilized to make review. Also, random sampling method was utilized to gather the information. It is one of the most appropriate methods when the population was known. Along these lines, to cover the entire region this sampling strategy is suitable. Applying the random sampling, respondents were chosen randomly to gather the information. In addition, the sample size was chosen by utilizing Mundfrom, Shaw et al. (2005) proposals. As per suggestions, "sample having under 50 members will take to be a weaker sample; sample size of 100 will be not good; 200 will be sufficient; sample of 300 will be considered as great; 500 generally excellent though 1000 will be amazing." Therefore, in current research sample size of 300 was chosen. Consequently, 300 questionnaires were circulated among the administrative staff of e-organizations in Pakistan. From these 300 questionnaires, 240 surveys were returned. Among these 240 polls, 13 were incomplete and excluded from the investigation. Subsequently, 227 questionnaires were utilized to analyze the information. The reaction rate after information section was 76% which is appropriate to continue the investigation. After that, Smart PLS 3 was utilized as a factual apparatus.

Data Analysis

![Figure 2]
The present study used the smart PLS 3 for data analysis. The smart PLS 3 is popular because it can be applicable of small data and a lot of studies used PLS for precise results in the context of Indonesia as well.

The current study, as far as the analysis is concerned was mainly focused on two parts. Measurement model was used to measure reliability and validity in the first part. Structural model was examined to measure the hypotheses applying SEM in the second.

Cronbach alpha, Factors loading, CR and AVE were tested in the measurement model assessment (F. Hair Jr, Sarstedt et al. 2014). Furthermore, discriminant validity was evaluated to measure the external consistency. So, factor loading should be > 0.5 (F. Hair Jr, Sarstedt et al. 2014). The AVE and convergent validity should be greater than or equal to 0.5. Also, the reliability should also be greater than 0.7. Further, the measurement model assessment in Fig. 2 and Table 1 show the results of this model. It exhibited that all the values of the factors are above the minimum standard level as well, the discriminant validity is in Table 4.1.

**Table 1: Discriminant Validity**

<table>
<thead>
<tr>
<th>Relationship</th>
<th>EE</th>
<th>EP</th>
<th>TCR</th>
<th>TD</th>
<th>WE</th>
</tr>
</thead>
<tbody>
<tr>
<td>EE</td>
<td>0.941</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EP</td>
<td>0.711</td>
<td>0.926</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TCR</td>
<td>0.637</td>
<td>0.531</td>
<td>0.888</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TD</td>
<td>0.694</td>
<td>0.575</td>
<td>0.579</td>
<td>0.814</td>
<td></td>
</tr>
<tr>
<td>WE</td>
<td>0.18</td>
<td>0.471</td>
<td>0.222</td>
<td>0.434</td>
<td>0.801</td>
</tr>
</tbody>
</table>
Structural model assessment was analyzed after the evaluation of measurement model. PLS bootstrapping was tested to inspect the direct as well as indirect mediation effects in this part of analysis. Finally, the worth of model was evaluated through Q2.

Minimum standard of t-value would be 1.96 to measure the hypotheses. The direct effect of independent variables (IVs) on dependent variable (DV) shown in Table 3. Further, the relationships are having t-value greater than 1.96 with positive β-value. Therefore, all the direct relationships of independent variables dependent variable (DV) are significant. So, H1, H2, H3 and H4 are accepted.

Moreover, it demonstrated that team and coworker relationship, training and development (TD) and work environment (WE) has positive with significant relationships with employees’ engagement (EE). Further, employee engagement also has positive and significant relationship with employees’ performance (EP).

### Table 2: Direct Relationship

| Relationship | Original Sample (O) | Standard Deviation (STDEV) | T Statistics (|O/STDEV|) | P Values |
|--------------|---------------------|-----------------------------|-----------------------------|----------|
| EE -> EP     | 0.711               | 0.076                       | 9.329                       | 0.000    |
| TCR -> EE    | 0.304               | 0.095                       | 3.182                       | 0.002    |
| TD -> EE     | 0.524               | 0.087                       | 6.048                       | 0.000    |
| WE -> EE     | 0.135               | 0.068                       | 3.988                       | 0.047    |

Table 4 shows mediation effect. In this model, all the hypotheses linked to mediation were measured. In mediation test Preacher and Hayes (2004) was followed of. The results show that all hypotheses have t-value greater 1.96, which confirm the mediation effect between IVs and DV. Thus, H-5, H-6 and are accepted.

Moreover, the mediating role of employees’ engagement between team and coworker relationship, training and development (TD) and work environment (WE) and employees’ performance is significant. Further, the β-value is positive of each mediating hypothesis. It means through employees’ engagement performance could be enhanced.

### Table 3: Indirect Relationship

| Relationship | Original Sample (O) | Standard Deviation (STDEV) | T Statistics (|O/STDEV|) | P Values |
|--------------|---------------------|-----------------------------|-----------------------------|----------|
| TCR -> EE -> EP | 0.216               | 0.077                       | 3.817                       | 0.005    |
| TD -> EE -> EP | 0.373               | 0.07                        | 5.303                       | 0.000    |
| WE -> EE -> EP | 0.102               | 0.05                        | 3.945                       | 0.035    |

### Table 4: Predictive Relevance (Q2)

<table>
<thead>
<tr>
<th></th>
<th>SSO</th>
<th>SSE</th>
<th>Q² (=1-SSE/SSO)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EE</td>
<td>476</td>
<td>245.856</td>
<td>0.483</td>
</tr>
</tbody>
</table>
Finally, Duarte and Raposo (2010) said the predictive relevance (Q2) in Table 4.4 which explains the quality of the model. Q2 is the additional evaluation of goodness-of-fit. (Chin 1998) argued that it should be greater than zero.

IV. Discussion of the study

This study examines the mediating effect of employees’ engagement between team and coworker relationship (TCR), training and development (TD) and work environment (WE) and employees’ performance.

It is found that team and coworker relationship (TCR), training and development (TD) and work environment (WE) with employees’ engagement (EE) t-value 3.182, 6.048 and 3.988, respectively. The positive β-values are 0.304, 0.524 and 0.135 were found for these direct relationships between team and coworker relationship, training and development (TD) and work environment (WE) with employees’ engagement (EE). The positive β-value shows a positive relationship between team and coworker relationship, training and development (TD) and work environment (WE) with employees’ performance (EP). Similarly, employees’ engagement (EE) has positive direct effect on employees’ performance t-value 9.329 and β-value is 0.711. It demonstrates that team and coworker relationship (TCR), training and development (TD) and work environment (WE) can play pivotal role to enhance employees’ engagement (EE). Further, the enhancement of employees’ engagement would enhance employees’ performance.

However, the mediating role of employees’ engagement between TCR and employees’ performance is significant t-value 3.817 with β-value 0.216 and p value 0.005. Similarly, the mediating role of employees’ engagement between training and development (TD) and employees’ performance with t-value 5.303, β-value 0.373 and p value 0.000 is significant. Likewise, the mediating role of employees’ engagement between work environment and employees’ performance with t-value 3.945, β-value 0.102 and p value 0.035 is significant. Thus, the employees’ engagement is a significant mediator and enhances the employees; performance through team and coworker relationship, training and development (TD) and work environment (WE).

V. Conclusion of the Study

This study explains the effect of team and co-worker relationship (TCR), WE and TD on employee’s performance (EP) with the mediating role of EE in a manufacturing company in Indonesia. Team and co-worker relationship (TCR), training and development and work environment have positively influenced on the employee performance. This research provides useful information for the manufacturing company especially on the food industry that can be used to maintain the employee’s performance, by paying more attention to training and development, sustaining good relation with team and co-workers and work environment that the employees get, in order to achieve business objectives and then raise competitive advantages in manufacturing food industry.

VI. Future Research

There is the constraints and recommendation for future researchers. This study only used small respondents as the sample, future researchers would do well to have a bigger number of samples, so that the result would be more
generalized to the population. Due to time and budget limitations, this study only done in a big manufacturing company in Indonesia and future researchers would do well to use more than one company and expand the area of observation outside Indonesia. There are only three independent variables that are analyzed for their influences to employee performance as the dependent variables: of team and co-worker relationship, work environment and training and development. Future researchers would do well to observe other variables that might affect employee performance.

References


