

A study on relationship between organizational justice and employee engagement among engineers

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ABSTRACT

Engineers are viewed as the backbone of modern society. An engineer is a person who designs, builds or maintains engines, machines or structure. The present study explores the relation between organizational justice and employee engagement among engineers and to compare the gender difference in these two variables under study. This is a quantitative study and is administered to 120 participants (60 males and 60 females). Convenient sampling technique was used to draw the samples from the population. Instruments such as organizational justice scale (Niehoff and Moorman, 1993) and employee engagement scale (Brad Shuck, 2014) were used for the collection of data. Karl Pearson correlation, independent t- test and Descriptive statistics were used for the analysis of data. The result showed a significant relationship between organizational justice and employee engagement and there was no significant gender difference in organizational justice and employee engagement among engineers.

Keywords: *Organizational justice, Employee engagement, Engineers.*

An engineer is a person who designs, builds, or maintains engines, machines, or structure (Oxford). Engineers are viewed as the backbone of modern society. The innovation and creativity that drives our society forward are inspired by the teachings of engineering, whether it is transporting on a bus or making a phone call, the work of an engineer is experienced. Engineers satisfy both themselves and humanity which is the reason for their passion for engineering.

The work load, their incentives, their salaries and appreciations make justice in engineers towards their organization which they have work. Greenberg in 1987 introduced the concept of organizational justice with regard to how an employee judges the behavior of the organization and the employee's resulting attitude and behavior.

Organizational justice, first postulated by Greenberg in 1987, refers to an employee's perception of their organization's behaviors, decisions and actions and how these influence the employees own attitudes and behaviors at work. Organizational justice is concerned with

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all matters of workplace behavior, from treatment by superiors to pay, access to training and gender equality. It is originally derived from equity theory, which suggests individuals make judgments on fairness based on the amount they give compared to the amount they get back. Organizational justice has mainly three components. They are procedural justice, interactional justice and distributive justice. Distributive justice is the form of organizational justice that focuses on people's beliefs that they have received fair amounts of valued work-related outcomes (eg. pay, recognition etc.). Procedural justice refers to the means by which outcomes are allocated, but not specifically to the outcomes themselves. Procedural justice establishes certain principles specifying and governing the roles of participants within the decision-making processes. Bies and Moag (1986) introduce the most recent advance in the justice literature by focusing attention on the importance of the quality of the interpersonal treatment people receive when procedures are implemented. Bies and Moag (1986) referred to these aspects of justice as "interactional justice".

While going through the studies on organizational justice, Aslam, Shumaila, Sadaqat, Bilal and Intizar (2012) aimed to identify the relationship between organizational justice and employee's vital work-related behavior i.e., job satisfaction. They found out that there was significant positive relationship between Organizational justice and overall job satisfaction. And organizational justice is a strong predictor of Job satisfaction.

In another study, Khan and Habib (2012) attempted to determine the relationship between the procedural justice as perceived by university's employee and prevailing level of work satisfaction, their turnover intentions, and their degree of trust on their management. The result showed that there was a statistically significant relationship between Job satisfaction and procedural justice, commitment and procedural justice and turnover intention and procedural justice.

An organization which shows equality and ethics to their employees may get more productive behaviors from employees. A person with high organizational justice will be very focused and attentive in their works. So such engineers will have high employee engagement also.

Employee engagement is defined as an active, work-related positive psychological state (Nimon, Shuck, & Zigarmi, 2016; Parker & Griffin, 2011; Shuck, Nimon, & Zigarmi, 2016; Shuck et al., 2014) operationalized by the intensity and direction of cognitive, emotional, and behavioral energy (Shuck & Wollard, 2010). In addition to employee engagement, several other engagements- like constructs are noted in the research literature including work engagement, job engagement, organizational engagement, and intellectual/ social engagement.

Ali Abbaas Albdour, Ikhlas I Altarawneh (2014) conducted a study on employee engagement and organizational commitment: Evidence from Jordan. The purpose of this paper was to investigate the relationship between the two measurements of employee engagement and organizational commitment measured by three key measurements which are: affective commitment; continuance commitment; and normative commitment, that is in the context of Jordanian banking sector. Their findings showed, frontline employees who have high job engagement and organizational engagement will have high level of affective commitment and normative commitment. On the other hand, high employees' job engagement can meaningfully affect employees' continuance commitment.

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Jyotsna Bhatnagar (2007) investigated talent management and its relationship to levels of employee engagement using a mixed method research design. The present study indicated that a good level of engagement may lead to high retention, but only for a limited time in the ITES sector. The need for a more rigorous employee engagement construct is indicated by the study.

There are three sub dimensions in employee engagement. They are cognitive engagement, emotional engagement and behavioral engagement. The sub dimension of cognitive engagement is defined as the intensity of mental energy expressed toward positive organizational outcomes (Rich et al., 2010; Shuck et al., 2014). Cognitively engaged employees are attentive and concentrated in their workplace and they dispense mentally laden energy toward work- related activities. Emotional engagement is defined as an employee's intensity and willingness to invest emotionality toward positive organizational outcomes (Macey & Schneider, 2008; Shuck et al., 2014). Behavioral engagement is defined as the psychological state of intention to behave in a manner that positively affects performance (Macey & Schneider, 2008; Rich et al., 2010). Tangibly, behaviorally engaged employees are willing to put in extra effort, work harder for their team and organization, and to do more than is expected.

Organizational justice and employee engagement are two factors that affect engineers very strongly. In this present study organizational justice is taken as the independent variable and employee engagement as the dependent variable. When organizational justice will increase in engineers, employee engagement also may increase according to it.

An employee who gets consideration and respect from an organization may give productive behavior and they may become attentive and focused on their work. They may bring their full selves into their work roles and may work harder for their team and organization. So, when organizational justice increases employee engagement may also increase.

Objectives

1. To find out the significant difference in organizational justice between male and female engineers.
2. To find out the significant difference in employee engagement between male and female engineers.
3. To find out the relation between organizational justice and employee engagement among engineers.

To find out whether organizational justice predicts employee engagement.

Hypotheses

- H1: There will be significant difference in organizational justice between male and female engineers.
- H2: There will be significant difference in employee engagement between male and female engineers.
- H3: There will be a significant relationship between organizational justice and employee engagement among engineers.
- H4: Organizational justice will significantly predict employee engagement.

METHODOLOGY

Participants

The research participants of the study were engineers in India. This is a quantitative method and was administered to 120 participants (60 males, 60 females). Convenient sampling technique was used to draw samples from the population. All the participants chosen for the study were fluent with English language so as to facilitate easy comprehension of questionnaire.

Measures

The measures used in the study were Organizational justice scale and employee engagement scale. Organizational justice scale was developed by Niehoff and Moorman in 1993. The scale consists of 20 items to measure distributive justice, procedural justice and interactional justice. The 5 items were related to distributive justice (alpha value 0.907), 6 items to procedural justice (alpha value 0.760) and 9 items for interactional justice (alpha value 0.902). The reliability for the 20 items was 0.905. The validity of the scale is also satisfactory. A score of 1,2,3,4 and 5 gives for strongly disagree, disagree, not sure, agree, strongly agree respectively. High score indicates high organizational justice.

Employee engagement scale (EES) is a scale used to measure employee engagement. This was developed by Brad Shuck in 2014. The scale consists of 12 items to measure cognitive engagement, emotional engagement and behavioral engagement. All three of the final subscales had strong internal consistency reliability. Alpha for the emotional engagement scale was 0.91, for the behavioral engagement scale was 0.92, and for the cognitive engagement was 0.93. This scale has high discriminant validity. Scores on items in each scale were summed to obtain the scale score. The range of possible scores for the cognitive, emotional and behavioral engagement scales (four items each) was 5 to 20, as each scale had four items measured on a 5-point Likert scale.

Procedure

Informed consent was obtained and confidentially was assured to the participant before commencement. The data forms were administered by Google forms.

Statistical Analysis

The data obtained from research participants were analyzed using different statistical techniques by using IBM SPSS version 20. Pearson's product moment correlation was used to assess the relationship between variables under the study and linear regression was used to examine the effect of predictor variables on the dependent variable. Independent 't' test was used to assess the significant gender difference.

RESULTS

Preliminary Analysis: Its includes central measures of psychological variables organizational justice and employee engagement.

Table 1: Mean, SD, skewness and kurtosis of study variables

Variables	N	Mean	Standard Deviation	Skewness	Standard Error	Kurtosis	Standard Error
Organizational Justice	120	70.26	11.602	-.493	.221	.188	.438
Employee engagement	120	47.22	5.871	-.316	.221	.569	.438

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Table 1 shows the mean, standard deviation, skewness and kurtosis of the study variables. It depicted that the mean and SD of organizational justice is 70.26 and 11.602 respectively. The mean and standard deviation of employee engagement is 47.22 and 5.871 respectively. The values for skewness and kurtosis between -2 and +2 are considered acceptable in order to prove normal univariate distribution (George & Mallery, 2010). *Hence the normality is assumed.*

Major Analysis

The major analysis consists of independent 't' test, product moment correlation and regression analysis.

Table 2: Independent sample t test with regard to gender.

Variable	Gender(n)	Mean	SD	Df	t-value
Organizational justice	Males(60)	72.15	10.675	118	-1.803
	Females(60)	68.37	12.257		
Employee engagement	Males(60)	46.45	6.624	118	1.437
	Females(60)	47.98	4.945		

Table 2 shows the t test on gender difference among organizational justice and employee engagement. It revealed that organizational justice and employee engagement did not show any significant gender difference among engineers. So, the hypothesis which states, there will be a significant gender difference in organizational justice and employee engagement (H1 and H2) is rejected.

Table 3: Correlation between organizational justice and employee engagement.

	Organizational justice	Employee engagement
Organizational justice	1	
Employee engagement	.422**	1

*** Correlation is significant at the 0.01 level (2- tailed).*

Table 3 shows the product moment correlation between study variables. It depicted that organizational justice and employee engagement has a moderate positive correlation with high significance ($r = .422, p < 0.01$).

Thus, the hypothesis H3 is accepted.

Table 4: Regression analysis of employee engagement with model summary.

	B	Std Error	Beta	t	Sig
Organizational justice	32.196	3.007		10.708	.000
Employee engagement	.214	.042	.422	5.063	.000

Table 5: Model summary of regression analysis of employee engagement

	R	R square	Adjusted R Square	Std. Error of the estimate
Organizational justice	0.422	0.178	0.171	5.344

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Table 4 shows regression analysis of employee engagement with model summary and Table 5 shows the model summary of regression analysis of employee engagement. Regression analysis revealed that employee engagement is determined by organizational justice and the predictive value is strong and significant ($p < 0.01$). So, the hypothesis H4 is accepted

From these results, it can be concluded that there is no gender difference in terms of organizational justice and employee engagement. And also, when organizational justice increases employee engagement is also increases because from the results it can be revealed that organizational justice and employee engagement is moderately positively correlated. Also, the organizational justice predicts employee engagement.

DISCUSSION

The aim of this study is to find the relationship between organizational justice and employee engagement among engineers. This chapter includes the description of the findings from the statistical analysis. Here, gender difference and correlation among study variables were discussed in detail.

The result showed that, in organizational justice and employee engagement there is no significant gender difference among engineers. It might be because in this present world equality is important in every field. Women have equal rights like men. India is a developing country so gender difference is wiping out from all sectors.

Dorothea Wahyu Ariani (2013) had conducted a study on the relationship between employee engagement, organizational citizenship behavior and counterproductive work behavior. And the findings suggested that there is no significant gender difference on employee engagement. In the study conducted by Cynthia Lee and Jiing- Lih Farh on the effects of gender in organizational justice perception they were used to examine the moderating effect of gender on the justice- outcome relationships. They found that gender did not moderate any other justice- outcome relationships. These results may indicate a recent trend toward work value similarity and narrowing of gender differences.

Another result indicates that organizational justice and employee engagement is moderately positively correlated. That means when organizational justice increases employee engagement also increases. It might be because if an organization give consideration and respect to an employee it will motivate their working behavior and it also influence the employee relationship in that organization. Soumendu Biswas, Arup Varma, and Aarti Ramaswami (2013) had conducted a study on Linking distributive and procedural justice to employee engagement through social exchange: a field study in India. Research linking justice perceptions to employee outcomes has referred to social exchange as its central theoretical premise. They tested a conceptual model linking distributive and procedural justice to employee engagement through social exchange mediators, namely perceived organizational support (POS) and psychological contract. Findings suggest that POS mediated the relationship between distributive justice and employee engagement, and both POS and psychological contract mediated the relationship between procedural justice and employee engagement. In this present study it is revealed that organizational justice and employee engagement are positively moderately correlated with each other.

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From regression analysis the result showed that the organizational justice was a significant predictor of employee engagement. It is suggesting that the individuals who have organizational justice may have employee engagement.

CONCLUSION, IMPLICATIONS AND LIMITATIONS

In the light of obtained results, it can be concluded that organizational justice and employee engagement are positively moderately related with each other. Also, there weren't any gender differences in organizational justice and employee engagement. To increase organizational justice among engineers, consider the employees and respect them when they hold the ethics always it will enhance their commitment towards the company. Consider their opinions in the meetings it will enhance their thought as a part of the company and it also make them responsible in the future of the company. Give incentives for their good work it will reinforce them to do more productive works. Listen to their needs and consider it if it is genuine it will increase the commitment towards the company. Make them comfortable in the company it reduces their work stress. Arrange a party or celebrations once in a year it will make strong relations among employees and it makes them more engaged in their works and duties. When organizational justice and employee engagement are high among engineers working in an organization it will increase the productivity of the company.

Only future research will clarify the many questions around assessing and enhancing organizational justice and employee engagement. This study was limited by a relatively small sample size and the busy schedule of engineers. So, these limitations can be considered in further research and also different components of organizational justice and employee engagement may be included in the study.

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Conflict of Interest

The author declared no conflict of interest.

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