

Study of Employee Engagement in Manufacturing Sector in NCR in Selected Industries

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ABSTRACT

Academicians have observed that employee engagement is an important determinant for long-term success of a business organization. Despite the significant academic interest in empowerment, organizational climate, self-efficacy and employee engagement, there is a relative shortage of academic literature examining the impacts of empowerment, organizational climate, and self-efficacy on employee engagement in the Indian context. In this context, current study strived to render deep insights into the relationships among these constructs in Indian context in Manufacturing Companies. The main objective of the research was to study empowerment, organizational climate and self-efficacy as predictors of employee engagement across Manufacturing Sector in an integrated model. Population for this study consisted of employees working in Manufacturing Sector in National Capital Region of India. The National Capital Region of India comprises of Delhi, Gurgaon, Noida, Greater Noida, and Ghaziabad. It was established through this descriptive research study that psychological empowerment derived through feeling of meaningfulness of work and feeling of creating impact on work lead to Employee Engagement. The other influential factor which leads to employee engagement is Leadership Empowerment of employees.

Key Words: employee engagement, empowerment, organizational climate, self- efficacy, psychological empowerment, leadership empowerment.

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INTRODUCTION

Employees are an indispensable part for the successful functioning of a business organization. They contribute largely to the success of the organization. It has been observed in past studies that employee dissatisfaction leads to high labour turnover ratio and this needs serious attention. Therefore, it becomes imperative for the top management to satisfy all their employees and keep them highly engaged giving them a sense of belongingness by providing them with ample trainings and opportunities for growth.

Employee engagement is defined in various ways. In simple words, it can be understood as the extent to which employees are happy and passionate about their jobs and feel satisfied that their efforts are being appreciated and rewarded satisfactorily. Highly engaged employees feel that they are an important part of the organization. For having engaged employees, it is necessary that employees should believe that they are doing meaningful and impactful work. Employee engagement can be achieved by creating a congenial working environment in business organizations wherein employees feel highly motivated, produce results that match with the targets and wish to continue in the organization in the long run.

Employee engagement bears a direct influence on the employee's commitment, dedication, loyalty, faithfulness and retention. An engaged and motivated employee generally performs according to the expectations from him/her and stays focused and dedicated and is highly instrumental in achieving the goals of the organization. In return, the business organization benefits from the loyalty and high productivity of its employees and less attrition rate.

Dimensions of Employee Engagement

Vigor, Dedication, and Absorption

Schaufeli & Salanova (2007) said engagement involves high levels of energy and identification with one's work, they stated engagement as "a positive, fulfilling, work-related state of mind characterized by vigor, dedication, and absorption".

Vigor:

Shirom (2003) defined vigor as the feeling of physical strength, affecting energy, and cognitive liveliness.

Dedication-

Dedication is having a positive attachment to the larger organizational body and readiness to make use of energy in support of the organization, to feel pride as an organizational member, and to have personal identification with the organization (Macey & Schneider 2008).

Absorption:

Kahn (1992) explained on the concept of engagement that a true psychological presence at work goes beyond simple task motivation. Absorption is a psychological state in which individuals feel completely absorbed in their activity (Csikszentmihalyi, 2000).

Psychological Dimension of Engagement (Kahn, 1990, 1992)

Psychological Presence

Kahn (1990, 1992) argued that engagement culminates from a state called psychological presence--a state in which the authentic, true facets of the self can be fully expressed.

Meaningfulness of Work:

According to Kahn (1990) when employees experience a sense of meaning in their work, this presence or engagement is more likely to ensue. For studying antecedents of meaningfulness of work, Rich et al. (2010) through their study found out that value congruence presumably represents the extent to which the job seems significant.

Psychological Safety:

Engagement surfaces when employees feel that problems or hard times are either unlikely or manageable. (Kahn, 1990).

Psychological Availability:

Core self evaluations represent confidence, increasing the likelihood that individuals feel willing and prepared to spend themselves into the role, called availability (Rich et al., 2010).

The Job Demands-Resources Dimension

According to the job demands-resources model job demands, like high levels of pressure, undue expectations and conflicting requirements, may also lead to unbearable stress leading to burnout. (Bakker & Demerouti, 2007; Schaufeli & Bakker, 2004).

Opposite to above job resources, including autonomy, support, and feedback, can all foster engagement as well as help to get rid of the adverse consequences of undue job demands (Bakker & Demerouti, 2007; Schaufeli & Bakker, 2004). Supervisor support, appreciation, information, job control, climate and innovation, the various resources were also associated to engagement (Bakker & Demerouti, 2007).

The following constructs are described in detail in literature as determinants of employee engagement:

Self-efficacy

Self-Efficacy can be understood as the conviction of a person in his/her own abilities. It is a popular term in the field of psychology. It is the belief of a person in oneself that helps him/her in facing all the challenges in a task and succeed in it. In simple words, self-efficacy reflects a person's self-worth. Various studies have shown that it is one of the important determinants for employee engagement in business organizations.

Psychological Empowerment

Psychological Empowerment is a psychological feeling. It reflects how happy an employee of an organization feels with the organization. The psychological approach focuses on intrinsic motivation rather than on managerial practices used to increase individuals' levels of power. Psychological

empowerment, in this instance, depends on the creation of conditions appropriate for heightening motivation for task accomplishment through the development of a strong sense of personal efficacy. Psychological empowerment is found to be one of the most important determinants of Employee Engagement in many Research Studies. Psychological Empowerment consists of meaningfulness of work, self efficacy, impact created by one's working, and self determination of work by the person's ownself.

Leadership Empowerment

Leadership Empowerment can be defined by the redistribution, or devolution, of decision-making power to those who do not currently have it and gives employees the power to do the job their positions demands. It is about providing some form of leadership to employees in a business organization by giving the employees participatory roles. Overall, it creates a positive conducive working environment in an organization which directly and positively affects the engagement of employees.

Organizational Climate

Organizational Climate, also known as corporate climate, is a set of attributes which decide the working conditions in a business organization. It plays an important role in the working of the organization. It decides how the business organization deals with its employees and other stakeholders. In simple words, organizational climate is the internal environment of the organization in which it operates. A good organizational climate lifts up the motivation level of employees. Though, it is internal to the organization, it helps the organization to face the challenges of the external environment.



LITERATURE REVIEW

From the above discussion we found that the constructs of self efficacy, Psychological Empowerment, Leadership Empowerment, and Organizational Climate encompasses concepts of Psychological Presence, Meaningfulness of Work, Psychological Safety, Psychological Availability, and The Job Demands-Resources Dimensions of Employee Engagement.

Therefore, further Literature review was carried on four important factors in determining employee engagement is as following:

Employee Engagement

Evolution of Concept of Employee Engagement

Kahn (1990) said the Employee Engagement as "the harnessing of organization members' selves to their work roles; in engagement, people work and express themselves bodily, mentally, and emotionally during their role performances".

Employee engagement as defined by Maslach et al. (2001) have proposed that engagement can be characterized by energy, involvement and efficacy. Luthans & Peterson (2002) and Schaufeli et al. (2002) explained employee engagement as

"a constructive fulfilling, work related state of mind that is categorized by vigor, dedication and absorption". Hewitt Associates (2004) put it as an attitude which shapes the employees desire to act as ambassadors of the organization, stay in the organization and stretch beyond expected by the organization. Robinson et al. (2004), defined "engagement as a positive reflection towards the organizational goals and values.

Macey & Schneider (2008) distinguished three broad conceptualizations of employee engagement, namely: state, trait and behavioral engagement. They proposed that engagement is sometimes defined on the basis of what it 'is' (psychological state), while on other occasions on the basis of the behaviors it produces, and sometimes as a disposition or attitude towards one's work (trait). Sarkar (2011) stated that employee engagement helps to gauge and determine the extent and type of association an employee has with the organization. Another way of looking at employee engagement is a combination of both individual and organizational engagement Sakes (2006), states that demonstrating varying degrees of engagement is a way for individuals to pay back their organization for the economic and socio-emotional resources they receive from it.

Further discussion about nature of Employee Engagement:

According to Wagner & Harter, 2006; Kahn, 1990, highly engaged employees develop a strong connection- both psychological and emotional- with the business organization.

Sakes (2006) emphasize on the importance of employee engagement and states the various degrees of engaging employees to fulfill their social, economic, psychological and economic wishes.

Shuck & Wollard (2010) defined employee engagement as a means and tool for achieving the stated organizational goals. They stated the importance of achieving the right behavioural and emotional mindset of employees to motivate them to work hard in order to achieve organizational goals.

Srivastava & Madan (2018) studied employee engagement in Indian Context and emphasized on the importance of engaging employees more by empowering them so that there are less labour turnover intentions amongst employees.

Self-Efficacy

Self-Efficacy reflects conviction of an employee in his or her own abilities. It portrays that an employee has a self-belief that he or she can perform well in difficult situations or tasks and achieve organizational goals (Schwarzer & Jerusalem, 1995).

Self-efficacy results from the acquisition of cognitive, social, physical skills or linguistic, through personal and/or vicarious experience (Bandura, 1982). Individuals synthesize and evaluate this information about their task abilities and make decisions about choice of action, level of effort and duration of persistence for subsequent task activities (Bandura and Cervone, 1986).

Efficacy beliefs also helps to determine how much effort people will expend on an activity, how long they will persevere

when they deal with the obstacles and how resilient they will be in the face of unfavourable situations (Schunk, 1981; Schunk, Hanson, & Cox, 1987; Schunk & Hanson, 1985).

Bandura (2000) had provided three specific approaches to develop self-efficacies, which he calls 1) guided mastery: which includes guided skill perfection and transfer back to job, 2) cognitive mastery modelling: that is about learning thinking skills and how to apply them and able to arrive at solutions to problems and make effective decisions, 3) development of self-discipline competencies like self-motivation, and self-management.

Self-Efficacy and Employee Engagement:

According to Judge et al. (2004) Individuals who perceive themselves positively are more likely to pursue roles that align to their values are called as, self-concordance, and promotes intrinsic motivation and which in turn leads to Employee Engagement. Bakker et al. (2008) findings were that self-efficacy and optimism makes a unique contribution to explain the variance in work engagement over time and found out that personal resources have a stronger impact on the work engagement than other job resources. The positive influences of self-efficacy have been well documented and strong empirical support exists for the effects of self-efficacy on Employee Engagement and in turn the performance.

Pati & Kumar (2010) studied Self-Efficacy impact on Employee Engagement and found out that positive correlation exists between the two. In this study, two dimensions were studied in depth-Perceived Organizational Support (POS) and Occupational Self-Efficacy (OSE). It was observed that Perceived Organizational Support (POS) had a moderate impact on the dedication levels of the employees while Occupational Self-Efficacy (OSE) had a moderate impact on the vigor and absorption of employees. Employees feel dedicated towards work with Perceived Organizational Support (POS) and they believe that they are worthy of achieving organizational goals with Occupational Self-Efficacy.

Self-efficacy is an important variable which determines an individual's willingness to embrace and welcome learning, change and development (Bandura 1997, Bandura & Locke 2003).

Chaudhary et al. (2012) conducted research on HRD Climate and Occupational Self-efficacy as the predictors of Employee Engagement on managers from the Manufacturing & Service Business Organizations in India. It was found that occupational self-efficacy has a direct impact on employee engagement. Further, it was observed that the climate for developing Human Resource has a moderate impact on employee engagement.

Various research studies done on employee engagement reflect that self-efficacy is an important determinant and predictor of work engagement (Harju et al., 2016). Further it has been observed that high self-efficacy is instrumental in forming perceptions about the social context at the workplace in a positive manner, thus enhancing employee engagement at work (Harju et al., 2016).

Employee Empowerment

Employee Empowerment is studied in two different perspectives: (i) Leadership Empowerment (also known as Structural Empowerment) and (ii) Psychological Empowerment.

Leadership Empowerment lays emphasis on the management practices and leadership position in business organizations while the Psychological Empowerment concentrates on the psychological strength of employees in business organizations.

Psychological Empowerment

Psychological Empowerment infers to the perceptions of employees of their mental strength to cope up with the difficulties and the adverse circumstances (Thomas & Velthouse, 1990).

Kahn (1992) reflected on the importance of psychological availability. Psychological availability is the willingness of an employee to engage in a task at a moment. It is the confidence level of an employee in his/her own capabilities that he/she feels ready to engage in any work or task.

It can also be defined as an individual's level of intrinsic motivation in regard to their role (Spreitzer, 1995).

Evolution of Psychological Empowerment

In the literature initially, the concept of empowerment was part of concept of power. Empowerment is defined as having power in the organization (Burke, 1986). Empowerment was subsequently viewed as a relational construct (Conger and Kanungo, 1988; 1989). Conger and Kanungo (1988) developed this view point; they equated empowerment with a sense of self-efficacy. Thomas and Velthouse (1990) expand on Conger and Kanungo's (1988) framework in a cognitive model of task empowerment by suggesting improvements. They specified a conceptualization of empowerment; self-efficacy is supplemented with three additional cognitive variables (called task assessments) that improve the intrinsic motivation of the individuals.

Thomas and Velthouse's (1990) model depicted empowerment as based in four cognitions, or "task assessments", that affected a person's intrinsic motivation for the job one is doing. Elements of the work environment affected these task assessments, which in turn affected whether the individual acted in the empowered manner. These four psychological dimensions of empowerment were impact, competence, meaningfulness, and choice. According to Thomas and Velthouse (1990), impact is "the scale to which behavior is seen as making a difference in terms of accomplishing the purpose of the task"; competence is "the measure to which a person can perform task activities skillfully when he or she tries"; meaningfulness "involves the individual's inherent caring about a given task"; and choice "involves causal responsibility for a person's actions".

Spreitzer (1995) built upon Thomas and Velthouse's (1990) model and defined meaning as "the value of a work goal or purpose, judged in relation to an individual's own ideals or

standards", competence as "an individual's conviction in his or her capacity to perform activities with skillfulness, self-determination (referred to as "choice" by Thomas and Velthouse) as reflected in "to do work as per one's own way in the beginning and continuance of work behaviours and processes" and 'impact as "the degree to which an individual can influence strategic, administrative or operating outcomes at work"

Psychological Empowerment and Employee Engagement, Leadership Empowerment and Psychological Empowerment, the other similar constructs, and role of Psychological Empowerment:

According to Thomas and Velthouse (1990) the various results of psychological empowerment are initiative, energy, action, determination and toughness.

Onyishiet al. (2012) conducted a research by linking organizational trust with employee engagement and what role psychological empowerment plays in determining employee engagement. The findings were both "organizational trust" as well as "psychological empowerment" have direct and positive impact on employee engagement. Also, psychological empowerment determines how employees perceive organizational trust. Employees with higher psychological empowerment and organizational trust will showcase higher levels of employee engagement.

Quiñones et al. (2013) studied about whether job resources affect work engagement via psychological empowerment. The study established that psychological empowerment mediates the associations between job resources namely (psychological task autonomy, skill utilization, and social support) and work engagement. The study also established that well being at work depends on psychological empowerment, core self-evaluations and emotional intelligence apart from Psy Cap variables (i.e., optimism, efficacy, hope, and resilience).

Rayan et al. (2018) found that empowering leadership and psychological empowerment are positively correlated. If an organization wants managers to feel psychologically empowered, then they need to give managers more authority. At the same time, leadership empowerment has a direct impact on work engagement which is improved with psychological empowerment.

Leadership Empowerment

Leadership Empowerment is about giving employees the power to do the job that their positions demand. The following is discussion of various dimensions of Leadership Empowerment.

According to Johnson (1994), leadership empowerment behaviour creates an environment that promotes success, because employees are empowered through greater responsibility, decision-making authority, feedback, and information as well as motivation, support and encouragement.

According to Konczak et al. (2000), leadership empowerment behavior includes six dimensions: accountability for

outcomes, delegation of authority, self-directed decision making, information sharing, coaching for innovative performance, and skill development. Delegation of authority involves that the leader grant power to the subordinates. Coaching for performance is related to behaviour that supports calculated risk-taking and new ideas and that provides performance feedback to employees, treating their mistakes and losses as opportunities to learn from it (Konczak et al., 2000). A supportive leader is a leader who provides positive feedback, displays concerns for employees' feelings, and needs and encourages employees to voice their concerns, who solves their work-related problems and develops employees' skills and their interest in their work (May et al., 2004; Ryan & Deci, 2001).

Various facets of Leadership Empowerment and its relation with Employee Engagement, Psychological Empowerment, job satisfaction, and other related literature survey:

Seibert et al. (2011) stated the importance of empowerment of leadership driven by the delegation of decision-making power.

Van Schalkwyk et al. (2010) researched on job insecurity, leadership empowerment behavior, employee engagement and intentions of employees to quit organizations in a petrochemical laboratory. It was observed that job security had only little impact on employee engagement and employee dissatisfaction, however, leadership empowerment was a big determinant for employee engagement and job satisfaction.

Zhang & Bartol (2010) stated that the leaders differentiate between subordinates, by giving them different powers, and enabling them to do different tasks.

Amundsen & Martinsen (2015) in their study found that Empowering Leadership have positive relationship to self-leadership and psychological empowerment, job satisfaction, work effort, creativity, and performance. The two Empowering Leadership dimensions are power sharing and motivational support.

Saad et al. (2018) researched on the influence of Leadership style, Personality attributes and Employee Communication on Employee Engagement and concluded that the employees occupying higher positions were more engaged and committed towards work than those at the lower positions.

Organizational Climate

Organizational Climate is a concept that reflects how employee perceives their working environment which influences and motivates them. It can be defined as the psychological atmosphere for employees. It plays an important role in determining the level of motivation and commitment amongst employees.

Organizational Climate at the work place having characteristics of Supportive management involves giving employees greater control over their work efforts and how they achieve their job goals (Brown and Leigh, 1996). Supportive management may indicate that managers trust their employees and have confidence in employees' abilities to carry out their jobs and should potentially create pleasurable

emotional state resulting from the appraisal of one's job as achieving or facilitating the achievement of one's job values (Locke, 1969).

According to James et al. (1990) and Brown and Leigh (1996), perceptions of the organizational environment take on personal meaning for employees, in which a cognitive depiction of the characteristics of the environment is interpreted in terms of the individual's values. According to Gilson & James (2002), climate reflects employees' perceptions of and emotional responses to, the characteristics of the work environment.

Guzzo & Noonan (1994) found that Organizations' policies and practices (e.g. HR practices), that define the functional aspect of the organizational structure and directly influences the effectiveness of four structural empowerment dimensions namely opportunity, support, resources and information

Locke (1969) stated that Supportive management indicate that managers trust their employees and have confidence in employees' abilities to do their jobs and potentially create a pleasurable emotional state by the appraisal of one's job as for the achievement of one's job values.

Brown & Leigh (1996) stated that supportive management as a major characteristic of employees' psychological safety in the workplace and found that supportive management gives employees greater control over their efforts for doing work and the way they achieve their job goals.

Organizational Climate relations with Employee Engagement and other positive attitudes.

Singh (2000) found that, if boss supports front line employees, they perceived their roles to be less stressful and their fatigue from work is reduced, and their performance as well as perceived commitment levels were increased. Thoits (1995) stated that in service organization settings, a supportive environment would build commitment, reduce turnover intentions and increase performance

Sarangi & Srivastava (2012) studied the impact of Organizational Culture and Communication on Employee Engagement in Indian Private Banks and observed that organizational culture and employee engagement as well as organizational communication and employee engagement are significantly correlated.

Shuck & Reio (2014) conducted a research study on the Human Resource Development Practices and employee engagement and examined its connection with employee turnover intentions. It was observed that good Human Resource Development practices have a positive impact on employee engagement and are negatively correlated with employee turnover intentions.

Ladyshevsky & Taplin (2018) conducted a study on the relationship between Organizational Learning Culture, and Self-Efficacy. The Manager as Coach and Workload on Employee Work Engagement has observed that positive managerial role and skills leads to a congenial working climate in the organization leading to better employee engagement.

Research Gap:

The literature review was carried to know about role of various constructs which impact Employee Engagement. It was found, that in literature, the all four constructs - Self Efficacy, Psychological Empowerment, Leadership Empowerment, and Organization Climate have impact on Employee Engagement severally, and also in combination of two or more of the above constructs, therefore all four were selected. The previous studies neither covered entire NCR nor breadth of the Companies and therefore, the need of the study was felt. Also, none of previous studies took into account the combination of these four constructs to find the impact on employee engagement.



RESEARCH METHODOLOGY

Objectives of Study

The research has investigated the determinants of Employee Engagement. Based on literature review discussed above, more specifically, the objectives of the study are:

1. To Study predictors of Employee Engagement.
2. To examine the role of Self Efficacy in enhancing Employee Engagement.
3. To study various facets of Employee Empowerment and their role in Employee Engagement.
4. To study whether Organizational Climate leads to Employee Engagement.

Hypothesis of the Study:

The following hypothesis were formulated:

- H1: Self-Efficacy has positive effect on Employee Engagement
- H2: Psychological Empowerment has positive effect on Employee Engagement
- H3: Leadership Empowerment has positive effect on Employee Engagement
- H4: Organizational Climate has positive effect on Employee Engagement



SCOPE OF THE STUDY

This study concentrates on four factors - Self-Efficacy, Psychological Empowerment, Leadership Empowerment and Organizational Climate as determinants of Employee Engagement. The study will be based on selected Manufacturing Companies in NCR region.



RESEARCH DESIGN

The study is a descriptive study to establish relationship between identified factors and employee engagement. The present study is based on both primary and secondary data.

The area of present study is National Capital Region. A

structured questionnaire was formulated and circulated amongst respondents through online methods of data collection and data was collected on the same. The collected data was classified, tabulated and grouped under various heads for the purpose of interpretation. For analysis of data, Exploratory Factor Analysis and Regression analysis were employed through SPSS.

The scales selected are all standard scales and found to be widely used with internal consistency and high Cronbach's alpha result. To check the applicability of scale in local environment, Exploratory Factor Analysis was done. All the questions were asked in relation to work environment.

Methodology to collect Data

This study targets Executives working in Manufacturing Companies in National Capital Region (NCR). Population of the current study consists of employees working in selected Manufacturing Companies. We have considered criteria of annual turnover of 1000 crores or above INR and having more than 1000 employees. We selected across various segments including Cement, Power, Pharma, Agriculture, Sugar, Retail, Apparel, Auto, Engineering, FMCG, Hotel, Mining, Oil and Gas, Power Distribution, Electronics, Water and waste treatment, Water Supply, and related industries in the segment of manufacturing Industry. The information about the Companies was taken from trade directory "Business Directory for Delhi-NCR/ Noida/ Gurgaon/ Ghaziabad". The data was collected with twin objectives, the first objective was that well-established companies should be included in the data and thesecond objective was to include as many sectors as possible so that study reflects views across breadth of Industries. The companies were selected on the basis of judgmental sampling.

No. of samples collected

The study collected 240 samples and after cleaning the data (cases with missing responses and cases which were seen to either have repeatedly same answers or similar response patterns throughout the questionnaire were deleted), 231 were retained.

The study is a descriptive study to establish a cause and effect relationship between identified factors and employee engagement. The present study is based on both primary and secondary data. The area of present study is National Capital Region. A structured questionnaire was framed and circulated among the respondents through online methods of data collection and then data was collected through the same. The collected data were classified, tabulated and grouped under various heads for the purpose of interpretation. To learn more about relevant factors for study, exploratory factor analysis was used which was followed by regression analysis to establish the relationship between dependent variable and independent variables.

Questionnaire- No. of items and Scale used

Questionnaire had 10 questions on Employee Engagement and 12 questions on Psychological Empowerment on 1 to 5 Likert's scale; 14 questions on Leadership Empowerment and 11 questions on Organizational Climate with 1 to 7 Likert's

scale; and 10 questions on self-efficacy on 1 to 4 Likert's scale. The total numbers of questions are 57.

The Research Instrument for scales

All selected scales are standard scales and are found to be widely used with internal consistency and high Cronbach's alpha result.

Employee Engagement

Utrecht Work Engagement Scale (UWES) developed by Schaufeli et al. (2002) is found to be widely used with internal consistency and high Cronbach's alpha result. The scale consisted of three dimensions; absorption (3 items); vigor (3 items); and dedication (4 items).

Psychological empowerment

Psychological empowerment has been measured by Spreitzer's (1995) instrument. It was intended to assess the degree to which employee feel empowered on the job. This 12-item questionnaire measures Psychological empowerment (PE) through four dimensions: meaning, competence, self-determination, and impact.

Leadership Empowerment Behavior

The Leader Empowering Behavior Questionnaire (LEBQ) developed by Konczak et al. (2000) has been used to measure leadership empowerment Behavior. The scale measures 6 dimensions of leadership empowerment behavior: the delegation of authority, the emphasis on accountability for outcomes, self-directed decision-making, information sharing, skills development, and coaching for innovative performance. It consists of 14 items.

General Self Efficacy

The Scale devised by Schwarzer & Jerusalem in year 1995 was used for measuring General Self Efficacy. It is a 10 item Scale and was created to assess a general sense of perceived self-efficacy.

Organizational Climate

The scale consisted of 12 items from Organizational Climate Questionnaire devised by Litwin & Stringer in year 1968. The items consisted of dimensions of Orientation (Clearly defined role), Supervision (Extent to which employees experience Support), Communication (Free Sharing of Information), and Reward (Feeling of being fairly rewarded). It consisted of 11 items.



DATA ANALYSIS, FINDINGS, AND DISCUSSION

Exploratory Factor Analysis (EFA)

Exploratory Factor Analysis (EFA) is a statistical tool for establishing a relationship among inter-related variables and groups them under some common factor.

It is a technique in which dimensions are considerably reduced and fewer new dimensions are created (Rietveld & Van Hout 1993). It offers better understanding of the data such

that the output can be used in the consequent analysis as well (Rietveld & Van Hout 1993). All the factors identified through literature review are subjected to exploratory factor analysis. Separate exploratory factor analysis for employee engagement, Psychological empowerment, Leader Empowering Behavior, Organizational Climate and Self-Efficacy was performed and results are as follows:

The Kaiser- Meyer-Olkin measure of sampling adequacy came out to be above .65 (the acceptable level) for all the factors. This shows that the items selected for the questionnaire are appropriate. The chi- square value of Bartlett's Test of

Sphericity was found to be significant for all the factors which means that the factor analysis is acceptable. Each exploratory factor analysis generated single/two factors for all the components with eigen-values above 1. Total variance explained for items are ranging between 56.423% for self-efficacy to 75.039% for Psychological Empowerment. The Varimax rotation clubbed the items as factors. One or two factors were determined on the basis of exploratory factor analysis and named afterwards on the basis of their factor loadings. Cronbach's Alpha values for all identified factors are shown in Table1.

Table 1: Summary of Exploratory Factor Analysis

	Items	Factor Loading	Cronbach's Alpha
KMO= 0.661, Total Variance Explained=63.825%			
Employee engagement(E)	E23	0.842	0.716
	E24	0.781	
	E35	0.772	
KMO=0.639, Total Variance Explained= 75.039%			
Psychological empowerment- Psychological Meaningfulness(PE_1)	PE31	.893	0.718
	PE33	.865	
Psychological empowerment- Psychological Impact (PE_2)	PE12	.854	0.61
	PE11	.826	
KMO= .935, Total Variance Explained= 66.263%			
Leader Empowering Behavior(LE)	LE12	.8630	.953
	LE41	.860	
	LE63	.847	
	LE13	.843	
	LE33	.842	
	LE51	.836	
	LE52	.824	
	LE32	.815	
	LE42	.786	
	LE53	.784	
	LE11	.775	
	LE21	.673	
KMO= 0.888, Total Variance Explained= 65.171%			
Organizational Climate(OC)	OC13	.8620	.892
	OC33	.825	
	OC23	.804	
	OC12	.800	
	OC11	.783	
	OC32	.767	
KMO= 0.763, Total Variance Explained= 56.423%			
Self-Efficacy	SE9	.774	0.742
	SE10	.761	
	SE8	.761	
	SE4	.707	

Items identified through exploratory factor analysis to formulate scale for Employee Engagement, Psychological Empowerment, Leader Empowering Behavior, Organizational Climate and Self-Efficacy summated an averaged Likert scale which was used for correlation and regression analysis.

Correlation and Regression Analysis

Correlation is a tool to measure the strength of linear relationship between two or more variables and it always lies between -1 and 1. The degree of the correlation coefficient indicates the strength of the association. Higher the value of correlation coefficient stronger the relationships (Taylor, 1990). Correlation analysis amongst identified variables is depicted in Table 2. However, if the two variables are related it means that when one changes by a certain amount the other changes on an average by a certain amount. If y represents the dependent variable and x the independent variable, this relationship is described as the regression of y on x. Regression Analysis is a statistical and research technique which is quantitative in nature. It is usually used in cases where there is a need to study and analyze various variables, where there is a dependent variable and one or more independent variables.

The basic standard form of a regression analysis includes unknown parameters (β), independent variables (X), and the dependent variable (Y).

Regression model, basically, specifies the relation of dependent variable (Y) to a function combination of independent variables (X) and unknown parameters (β) $Y \approx f(X, \beta)$

Regression Analysis

Using the SPSS program kit in the case of multiple regression depicts the following results:

Both tolerance and VIF values given in Table 3 depicts no multi collinearity issues in independent variables/ predictors. On the basis of un-standardized coefficients of regression following regression equation can be obtained:

Employee Engagement

$$= 1 \times 10^{-13} + 0.180PE_1 + 0.570 PE_2 + 0.244 LE - 0.056 OC - 0.016 SE$$

Following table 4 represent estimation of standard deviation for the model. Coefficient determination R square indicates

Table2 : Correlation Analysis

Correlations		E	PE_1	PE_2	PE_	OC	SE
E	Pearson Correlation	1	.258**	.595**	.238**	.172**	.167*
	Sig. (2-tailed)		.000	.000	.000	.009	.011
	N	231	231	231	231	231	231
PE_1	Pearson Correlation	.258**	1	.187**	.184**	.243**	.184**
	Sig. (2-tailed)	.000		.004	.005	.000	.005
	N	231	231	231	231	231	231
PE_2	Pearson Correlation	.595**	.187**	1	.034	-.013	.145*
	Sig. (2-tailed)	.000	.004		.606	.846	.028
	N	231	231	231	231	231	231
LE_	Pearson Correlation	.238**	.184**	.034	1	.839**	.402**
	Sig. (2-tailed)	.000	.005	.606		.000	.000
	N	231	231	231	231	231	231
OC	Pearson Correlation	.172**	.243**	-.013	.839**	1	.409**
	Sig. (2-tailed)	.009	.000	.846	.000		.000
	N	231	231	231	231	231	231
SE	Pearson Correlation	.167*	.184**	.145*	.402**	.409**	1
	Sig. (2-tailed)	.011	.005	.028	.000	.000	
	N	231	231	231	231	231	231

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

* . Correlation is significant at the 0.05 level (2-tailed).

Table 3: Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	1.000E-	013	.051		.000	1.000	
PE_1	.180	.053	.180	3.395	.001	.931	1.074
PE_2	.570	.052	.570	10.948	.000	.969	1.032
LE	.244	.095	.244	2.571	.011	.290	3.443

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
OC	-.056	.097	-.056	-.575	.566	.278	3.592
SE	-.016	.057	-.016	-.279	.781	.796	1.257

a. Dependent Variable: E

40.9% of the total variance is explained by all the five predictors. In order to test the null hypothesis, it can be ascertained that the value of the calculated F is 31.78 (as given in Table 5) for the variance generated by the regression. The critical value of F, at the significance level of 0.05 with 5 degrees of freedom at numerator and 225 at denominator is 2.25417507. By comparing the values of F, it results that it is compulsory to accept the alternative hypothesis, meaning that not all regression coefficients are equal to zero. This means that a significant influence of multiple regression models occurs over the dependent variables. The issue that arises now is to know which regression coefficients may be zero and which may not. It is imposed therefore to achieve an individual evaluation of the regression coefficients. It is compulsory to make an assessment of the realization of a statistical test for each under the conditions where the null hypothesis state different from zero Turóczy & Marian(2012).

2.571 for LE, -0.572 for OC and -0.279 for SE per employee. In order to define the decision rule concerning the null hypothesis, the calculated t values will be compared with the critical value of t at a significance level of 0.05 or significance value is compared with 0.05. The results are:

The level of significance indicated by the test .001, .000, .011 respectively for PE_1, PE_2 and LE is lower than the chosen level of significance of 0.05. Therefore, the null hypothesis is rejected for all the three predictors and it is accepted that regression coefficient is different from zero. Further for LE and OC the significance values are .566 and .781 respectively. This implies that null hypothesis is accepted, and regression coefficient is equal to zero for OC and SE.

Therefore, it is considered that two of the variables: OC and SE are not significant predictors for the dependent variable:

Table 4: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.640 ^a	.409	.396	.77707499	.409	31.178	5	225	.000

a. Predictors: (Constant), SE, PE_2, PE_1, LEA, OC
Following table represent

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	94.135	5	18.827	31.178	.000 ^b
Residual	135.865	225	.604		
Total	230.000	230			

a. Dependent Variable: E

b. Predictors: (Constant), SE, PE_2, PE_1, LEA, OC

The test used is the Student test, respectively t with n-(k+1) degrees of freedom (Turóczy& Marian, 2012). For each of the five variables, from the SPSS results, we get the calculated t values (Table 3). These are: 3.395 for PE_1, 10.948 for PE_2,

employee engagement. In this case the regression model will no longer contain these variables. If we make the determinations for the new regression model, the results will be:

In this case coefficient of determination R square is 41.4% (Table 6). ANOVA Table 7 depicts a significant influence of multiple regression model occurs over the employee engagement. Again, we need to know which regression coefficients may be zero and which not. For this reason, an individual evaluation of the regression coefficients is given in Table 8 which clearly indicated that all the predictors are significant and regression coefficients for all PE_1, PE_2 and LE are different from zero. A new regression equation can be presented as:

$$\text{Employee Engagement} = -0.898 + 0.114PE_1 + 0.547 PE_2 + 0.199 LE$$

Table 6: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.643 ^a	.414	.406	.77236	.414	53.387	3	227	.000

a. Predictors: (Constant), LE, PE_2, PE_1

Table 7: ANOVA^a

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	94.135	5	18.827	31.178	.000 ^b
Residual	135.865	225	.604		
Total	230.000	230			

a. Dependent Variable: E

b. Predictors: (Constant), LE_, PE_2, PE_1

Table 8: Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	-.898	.551		-1.629	.105		
PE_1	.114	.052	.116	2.213	.028	.934	1.071
PE_2	.547	.050	.566	10.946	.000	.965	1.036
LE_	.199	.052	.197	3.812	.000	.966	1.035

a. Dependent Variable: E



CONCLUSIONS AND IMPLICATION OF STUDY

The study identified through literature has four constructs: Psychological Empowerment, Leadership Empowerment, Self-Efficacy, and Organizational Climate which are among the most influential determinants of Employee Engagement, the Study by Sarkar (2011) on Employee Engagement at Manufacturing Industries established the same. The study identified many more factors contributing to the employee engagement such as Top Management, Managers, Coworkers, Intrinsic Motivation, Resources, Career Opportunities, Training and Development, Benefits, HR Policies, Recognition, Physical Work Environment, and provision of an environment without interference. In the model, Psychological Meaningfulness-Psychologically feeling Meaningfulness of work, Psychological Impact-feeling of creating impact of work, Leadership Empowerment, Self-Efficacy, and Organizational Climate are five constructs as determinants of Employee Engagement. The model was significant, and we found that 40.9% of total variance is being explained through the model. Meaningfulness and Impact are components of Psychological Empowerment. Further, through individual evaluation of regression coefficients, it was found that Meaningfulness of work, Impact on work and Leadership Empowerment in combination are able to explain 41.4% of total variance on

Employee Engagement. Mgbeke (2007) supports this observation and in his study, he established that employee empowerment is an effective instrument to increase administrative efficacy in Nigeria.

Thus, the study established conclusive relationship between Employee Engagement and Psychological empowerment; Psychological Empowerment in the study is derived through meaningfulness of work and the impact one is able to create on work. The study also establishes relationship between Employee Engagement and Leadership empowerment derived through delegation of authority, accountability, self-directed decision making, information sharing, skill development and coaching for innovative performance.

The study suggests that Managers/ Supervisors should confide in their employees by providing meaningful work and also empower them, so that they are able to create an impact on work given to them. Additionally, managers should delegate authority, reckon accountability, encourage self-directed decision making, ensure free flow of information, focus on skill development by organizing regular training and development sessions and challenging employees to come up with innovative ideas. They should mentor their employees in developing competencies relating to work and also encourage, guide, and facilitate for innovative performance.

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APPENDIX
Questionnaire

Instructions: Answer the following questions by encircling the number on the questionnaire that best represents your answer. Please make sure that you answer all questions. There is no right or wrong answer to the question, your answers should reflect your true feeling.

1. Please indicate the strength of agreement or disagreement to the following statements on a 5 point scale (1 = strongly disagree, 2= disagree, 3= neither agree nor disagree, 4= agree, 5 = strongly agree).

1.	At my work, I feel bursting with energy E12	1	2	3	4	5			2
2.	At my job, I feel strong and vigorous E13	1	2	3	4	5			2
3.	At my work I always keep trying even when things do not go well E16	1	2	3	4	5			2
4.	I find the work that I do full of meaning and purpose E21	1	2	3	4	5			
5.	I am enthusiastic about my job E22	1	2	3	4	5			
6.	My job inspires me E23	1	2	3	4	5			

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7.	I am proud for the work that I doE24	1	2	3	4	5			
8.	I am immersed in my work E34	1	2	3	4	5			
9.	I get carried away when I am working E35	1	2	3	4	5			
10.	I feel totally attached with my job E36	1	2	3	4	5			
		1	2	3	4	5			
11.	The work I do is very important to me PE11	1	2	3	4	5			
12.	My job activities are personally meaningful to me PE12	1	2	3	4	5			
13.	The work I do is meaningful to me PE13	1	2	3	4	5			
14.	I have significant autonomy in determining how I do my job PE21	1	2	3	4	5			
15.	I can decide on my own how to go about doing my work P22	1	2	3	4	5			
16.	I have considerable opportunity for independence and freedom in how I do my job P23	1	2	3	4	5			
17.	My impact on what happens in my department is large P31	1	2	3	4	5			
18.	I have a great deal of control over what happens in my department P32	1	2	3	4	5			
19.	I have significant influence over what happens in my department P33	1	2	3	4	5			
20.	I am confident about my ability to do my job P41	1	2	3	4	5			
21.	I am self-assured about my capabilities to perform my work activities P42	1	2	3	4	5			
22.	I have mastered the skills necessary for my job P43	1	2	3	4	5			

Please indicate the strength of agreement or disagreement to the following statements on a 7 point scale (1 = strongly disagree, 2= disagree, 3= somewhat disagree, 4= neither agree nor disagree, 5= somewhat agree, 6= agree, 7 = strongly agree).

23.	My manager gives me the authority I need to make decisions that improve work processes and procedures L11	1	2	3	4	5	6	7	
24.	My manager gives me the authority to make changes necessary to improve things L12	1	2	3	4	5	6	7	
25.	My manager delegates authority to me that is equal to the level of responsibility that I am assigned L13	1	2	3	4	5	6	7	
26.	My manager holds me accountable for the work I am assigned LE 21	1	2	3	4	5	6	7	
27.	I am held accountable for performance and results LE22	1	2	3	4	5	6	7	
28.	My manager relies on me to make my own decisions about issues that affect how work gets done LE 32	1	2	3	4	5	6	7	
29.	My manager encourages me to develop my own solutions to problems I encounter in my work LE33	1	2	3	4	5	6	7	
30.	My manager shares information that I need to ensure high quality results LE 41	1	2	3	4	5	6	7	
31.	My manager provides me with the information I need to meet customers' needs LE42	1	2	3	4	5	6	7	
32.	My manager encourages me to use systematic problem-solving methods LE51	1	2	3	4	5	6	7	

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33.	My manager provides me with frequent opportunities to develop new skills LE52	1	2	3	4	5	6	7	
34.	My manager ensures that continuous learning and skill development are priorities in our department. LE53	1	2	3	4	5	6	7	
35.	My manager is willing to risk mistakes on my part if, over the long term, I will learn and develop as a result of the experience LE61	1	2	3	4	5	6	7	
36.	My manager focuses on corrective action rather than placing blame when I make a mistake LE63	1	2	3	4	5	6	7	

Please respond truly about yourself, no answer is right indicate your or wrong, 1=Not at all true, 2=Hardly true, 3=Moderately true, 4= Exactly True

37.	I can always manage to solve difficult problems if I try hard enough SE31	1	2	3	4				
38.	If someone opposes me, I can find the means and ways to get what I want SE32	1	2	3	4				
39.	It is easy for me to stick to my aims and accomplish my goals SE33	1	2	3	4				
40.	I am confident that I could deal efficiently with unexpected events SE34	1	2	3	4				
41.	Thanks to my resourcefulness, I know how to handle unforeseen situations SE35	1	2	3	4				
42.	I can solve most problems if I invest the necessary effort SE36	1	2	3	4				
43.	I can remain calm when facing difficulties because I can rely on my coping abilities SE37	1	2	3	4				
44.	When I am confronted with a problem, I can usually find several solutions SE38	1	2	3	4				
45.	If I am in trouble, I can usually think of a solution SE39	1	2	3	4				
46.	I can usually handle whatever comes my way SE 40	1	2	3	4				

4. Please indicate the strength of agreement or disagreement to the following statements on a 7 point scale (1 = strongly disagree, 2= disagree, 3= somewhat disagree, 4= neither agree nor disagree, 5= somewhat agree, 6= agree, 7 = strongly agree):.

47.	I have clear defined goals and objectives for my job OC11	1	2	3	4	5	6	7	
48.	I have got flexibility in solving problems OC12	1	2	3	4	5	6	7	
49.	Organization helps me to achieve my individual goals OC 13	1	2	3	4	5	6	7	
50.	I get support from my supervisor OC21	1	2	3	4	5	6	7	
51.	Proper Supervision and Directions are received OC23	1	2	3	4	5	6	7	
52.	In my organization there is free sharing of information among employees for carrying out work OC31	1	2		3	4	5	6	7
53.	In my organization, there is communication for future directions OC32	1	2	3	4	5	6	7	
54.	In my organization there is free sharing of information between management and employees for carrying out work OC33	1	2	3	4	5	6	7	
55.	There is fair and uniform salary structure in my organization OC41	1	2	3	4	5	6	7	
56.	There are fair promotional policies in my organization OC42	1	2	3	4	5	6	7	
57.	Rewards are given on basis of achievement in my organization OC43	1	2	3	4	5	6	7	