Understanding Employee Engagement: A Moderation Analysis Perspective

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ABSTRACT

This study investigated the role of demographic variables as moderators in the relationships among Organizational Climate, Empowerment, Self-Efficacy and Employee Engagement. For the study the total data of 447 employees including managers was collected from Manufacturing and Information Technology sectors in NCR, India. In the study first it was studied and found that there exist high levels of employee engagement in all the three dimensions, that is prevalence of empowerment, supportive organisational climate and high level of self-efficacy belief among the employees of the organizations. The measurement scales to measure study constructs were adopted from literature. The study data was analyzed by using moderation analysis in higher order structural equation modelling with the help of IBM AMOS 16.0. The result revealed that in case of gender, there was no evidence found of differential impact of predictors on the employee engagement. Whereas in case of other demographic variables used in the study (education, age and tenure of work), there was strong evidence of differential impact on response variable (employee engagement).

KEYWORDS

Employee Engagement; Organizational Climate; Self-Efficacy, Demographic Variables

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INTRODUCTION

IT and Manufacturing sectors along with Mining and Utilities makes for a significant portion of GDP (33%) and both the sectors are instrumental in generating huge employment. (Statisticaltimes.com and statista.com 2021).

Manufacturing is the driver and the backbone of Economy. It generates growth of the service sector multi fold. Long-term growth prospects of the manufacturing sector are positive due to the strong Indian economy, attracting huge FDI investments, its young population, availability of talent of appropriate aptitude, huge initiative of skill-India.

India's competitive advantage in IT services is more pronounced- India has the largest share of world outsourcing industry at 55% in year 2019-20 (IBEF). The sector's contribution to India's GDP has increased from 1.2% in 1998 to 8% in 2021. According to NASSCOM the sector's total revenues was of US$ 227 billion in 2022. Export revenue was at US$149 billion and domestic at US$47 billion in 2021. This was 2.3% more than 2020 (ndtv.com).

The National Capital Region, India is one of the major hubs of Information Technology and Manufacturing sector industries. Both the Sectors employ millions of people and contribute significantly to GDP. The available Oxford Economics data of FY 15-16 has stated that the NCR's GDP of $ 370 billion was 15% total GDP. When this is compared with the related population figures NCR has a population of 4.2% of total population of India in FY-16. NCR is the second largest destination for employment in Information Technology after Bengaluru in India. It is also contributing more than a million jobs directly.

The big opportunities discussed in the manufacturing and IT sectors also accompany huge challenges of organizing resources. This study focuses on Employee Engagement, which is one of the areas that lead to a competitive edge for any organization.

Review of literature has established that employee engagement leads to improvement in organizational performance which results in decrease in job turnover, increase in productivity and an energetic working environment. Employee Engagement also leads to innovations, improvement of quality of work, and rise of creativity in the organizations.

The Review of Literature

Employee engagement

Kahn (1990) stated that in a state of engagement, employees immerse in their role at work and they become completely involved physically, at cognitive level, as well as effectively to do their work roles. Also, Erickson (2005) said that in state of Engagement people not only do their assigned work diligently but they are completely passionate about work and also go beyond the defined work role to also devote themselves to work in their discretionary efforts also which were not necessary for them to discharge to do their assigned role.

The various determinants of Employee Engagement:

Self-Efficacy

Bandura (1997) defined Self Efficacy as belief one has in own capacity to plan and executeeffectively any situations which arise in future. Pethe etal. (1997) defined Occupational Self –Efficacy as the person having confidence as well aspersonal effectiveness, positive attitude, complete control of situation, and personally feeling of effectiveness, and positive attitude towards own capabilities.

Psychological Empowerment

It is four recognized states of mind as stated by Thomas and Velthouse (1990) that affect a person's intrinsic motivation for the job one is doing. Elements of the work environment are affected by these states of mind, which in turn affects whether the individual acted in the empowered manner. These four psychological dimensions of empowerment are impact, competence, meaningfulness, and choice.

Leadership Empowerment

"Leadership empowerment is characterized by the redistribution, or devolution, of decision-making power to those who do not currently have it, and provide employees the power to do their job as required by their positions". (Carson & King, 2005; Cunningham et al., 1996; Johnson, 1994).

Behavioral Empowerment

Empowerment is not only executed at work place to change employee cognitions, but also according to (Boudrias and Savoie, 2006) it is to have them change in behavior too to have positive impact on outcomes.

Organizational Climate

Organizational Climate has been defined by Litwin and Stringer (1968) as it is perceived by outsiders on the way it is behaving as a unit as well as its various departments with its members,the various groups in it, as well as dealing with various issues it is dealing with.

Human Resource Development (HRD) Climate:

HRD climate has been defined by Rao and Abraham, (1986) as perception of the members of the organization about the development environment within their organization.

Job Characteristics:

Job Characteristics is about what the job consists of: mental, physical, skills and knowledge abilities necessary

to do a job as well as working conditions under which a job is performed. The Job Characteristics Theory, proposed by Greg R. Oldham and J. Richard Hackman in 1980, helps to comprehend how job satisfaction and other outcomes are affected by particular job characteristics.

Organisational trust:

It is about members of organization having following characteristics:

1. Existence of faith about the intentions as well as behaviour on each other.

2. Believing that the members of the organization can be relied upon and they have got qualities of honesty, integrity, and doing true dealings with each other.

3. Belief in the leader that he is having honesty, integrity, and ability to lead the group.

Fulmer and Gelfan (2012) defined trust in an organization at the individual level as a psychological state comprising willingness to accept vulnerability based on positive expectations of an organization.

Supervisors' Empowering Management Practices (SEMP):

Supervisor empowerment is devolution of decision-making power to employees working in their supervision; it is the power to do the job their positions demand.

According to Ford and Fottler(1995), empowerment delegates power but also makes individuals and teams responsible for outcomes.

Employee characteristics:

Employee characteristics are inherent qualities employees which influence their work behaviour. Being passionate, good communication skills, goal orientation, organized and detail focus, adaptability, and creativity are examples of employee characteristics. A study by Adhikari, B. & Arora, R. (2011) found that employees with higher superego strength and control, and emotional sensitivity have higher engagement.

Age, gender, education experience, job tenure:

The above are individual biographic characteristics of employees. Job tenure is number of years employees have been working in organization. Marcus A. and Gopinath Namitha M. (2017) through their study have established that the above biographic characteristics make effect on employee engagement.

Literature survey of relationship between employee engagement and its determinants and how various moderators play role in it

Zhang (2011) discussed the moderation role of employee characteristics in relation between employee engagement and different leadership styles the result indicated that employee engagement is influenced by leadership style of their supervisors The three characteristics of moderating behaviour are equity sensitivity, need for achievement, and need of clarity. It has been identified that the first two lead to visionary leadership style and have positive relation with employee engagement while the third characteristic leads to transactional leadership style and employee engagement is strengthened. A Study of Coetzee, M. et al. (2014) established relationship between job commitment and Employees' work engagement: and the moderating role of career anchors. established that four career anchors, namely dedication to a cause, high preference for the pure challenge, autonomy or independence, and the lifestyle career anchors as moderators lead to an increased significant relationship between job commitment and the participants' work engagement. The Study by Chen, et al. (2013) established that flight attendants with high work engagement perform better than those with low work engagement. Higher performance occurs among flight attendants who are more experienced in their jobs in comparison to less experienced flight attendants even when they have high levels of burnout. Rice & Katherine (2009) opined that tenure does not moderate the relationship between the dimensions of work engagement and job satisfaction. Study also concludes that two dimensions of work engagement, dedication and vigour predict a major portion of the variance in satisfaction with co-workers and supervisor.

Richet al. (2010) carried a study that Employee engagement mediates relationships between two job performance dimensions namely task performance and organizational citizenship behaviour; and value congruence, perceived organizational support, and core self-evaluations. The study established a statistically significant relation between them. A study by Luthans and Peterson (2002)revealed that manager's self-efficacy was a partial mediator of the relationship between cognitive and emotional engagement of their subordinates, and their effectiveness. Dikkers Josje S.E. et al. (2010) established that high job demands and high job resources predict an increase in engagement over time, and a proactive personality will lead to increased levels of engagement over time and high job demands and high job resources will be strongly related to engagement over time among proactive employees than among less proactive employees.Ugwu F. O. et al., (2012) in their study established that psychological empowerment moderates the relationship between organisational trust and employee work engagement that is employees who perceive both good organisational trust and great psychological empowerment will show higher levels of engagement.

Quiñonesa et al. (2013) in their study about whether job resources affect work engagement via psychological empowerment established that psychological empowerment mediates the relationship between job resources namely skill utilization, task autonomy and social support; and work engagement.Schalkwyk1 et al. (2010) about employee engagement playing a role as moderator in the relationship between leadership empowerment

behaviour and intention to leave.It was established that leadership empowerment contributed considerably to employee engagement and intention to leave (inversely). Employee engagement also partly mediated the relationship between leadership empowerment behaviour and intention to leave the organization. A Study conducted by Boudrias et al.(2009)revealed that psychological empowerment (PE) partially mediates the relationship between Supervisors' empowering management practices SEMP and behavioural empowerment (BE).Shuck et al. (2014) established that participation in HRD practices and cognitive, emotional, and behavioural engagement were negatively related to intention to leave. Sowath(2014) established that workplace environment practices, job design and characteristics, supervisor and co-worker relationships, and HRD are main antecedents to employee engagement. They established individual characteristics andjob demands to act as moderators. It also established positive relations between employee engagement and organizational citizenship behaviour and job performance; and employee engagement and turnover intention have an inverse relationship.Pawar (2016) established teachers organizational commitment and teachers perceived organizational support, teachers rewards and recognition, teachers' perceived supervisor support, account majorly for teachers job contribution. The study also established experience, and type of university significantly moderated the relationship.

Literature survey of relationship between employee engagement and demographic characteristics of employees.

The Study by Sharma et al. (2017) concluded that there was no difference in Work engagement as far as gender, marital status, tenure, and income was concerned whereas it significantly differed with education level,experience, and age and also predictors of work engagement are gender, and education. Meyers etal. (2020) state thatemployees who perceive organizational support for strengths use (POSSU) display higher levels of well-being. Further moderating role of age was studied, it was found the effect of (POSSU) was significant for all age groups, but it was significantly stronger for younger employeeswho are still seeking to explore who they are and want to be (at work). In the Study by Zhanget al. (2022), it was found that age profiles are significant predictors of work engagement,the relationship between development opportunities and work engagement was significantly stronger for younger employees than for older employees. The findings provide empirical evidence of the life span perspective, suggesting that age profiles influence work engagement. Horváthováet al. (2019) found that employee engagement has a major impact on both, and overall organisation performance, and staff performance. It also found age of the workers determined level of engagement. The paper proposed a new adjusted engagement model, and developed a new questionnaire used to evaluate the significance of the developed engagement's factors.

Dwivedi, et al. (2022), concluded that age, work experience, rewards and recognition had influence on employee engagement. While gender had no influence on employee engagement in the select private sector banks.Marcus A. and Gopinath N M. (2017),observed that the age of the respondents has an influence on the drivers of employee engagement. It was further noted that gender has no impact on the selected drivers of employee engagement.

RESEARCH GAP:

Based on studies conducted by various Researchers about Understanding Employee Engagement from Moderation Analysis perspective discussed in this paper, summary of various findings of the studies have been listed below:

1. Career anchors, namely dedication to a cause, high preference for the pure challenge, autonomy or independence, and the lifestyle as moderators lead to an increased relationship between job commitment and the participants' work engagement.

2. Between Burnout and performance, job tenure plays a moderator role. Higher performance occurs among those who are more experienced in their jobs in comparison to less experienced even when they have high levels of burnout.

3. Employee engagement mediates relationships between two job performance dimensions namely task performance and organizational citizenship behaviour; and value congruence, perceived organizational support, and core self-evaluations.

4. Manager's self-efficacy was a partial mediator of the relationship between cognitive and emotional engagement of their subordinates, and their effectiveness.

5. A proactive personality will lead to increased levels of engagement over time and high job demands and high job resources will be strongly related to engagement over time among proactive employees.

6. Psychological empowerment moderates the relationship between organisational trust and employee work engagement

7. Psychological empowerment mediates the relationship between job resources namely skill utilization, task autonomy and social support; and work engagement.

8. Leadership empowerment contributed considerably to employee engagement and intention to leave (inversely).

9. Psychological empowerment (PE) partially mediates the relationship between Supervisors' empowering management practices SEMP and behavioural empowerment (BE).

10. Individual characteristics and job demand moderate relationship between Workplace environment

practices, job design and characteristics, supervisor and co-worker relationships, and HRD and Employee engagement.

11. Experience significantly moderated the relationship organizational commitment, perceived organizational support, teachers' rewards and recognition, teachers' perceived supervisor support, and teachers job contribution.

12. No difference in work engagement as far as gender, marital status, tenure, and income was concerned whereas it significantly differed with education level, experience, and age.

13. It was found the effect of Perceived organizational support for strengths use (POSSU) was significant for all age groups, but it was significantly stronger for younger employees who are still seeking to explore who they are and want to be (at work).

14. The relationship between development opportunities and work engagement was significantly stronger for younger employees than for older employees.

15. Age, work experience, rewards and recognition had an influence on employee engagement. While gender had no influence on employee engagement.

16. Age of the respondents has an influence on the drivers of employee engagement. It was further noted that gender has no impact on the selected drivers of employee engagement.

In the above-mentioned extensive research summary, none of the studies undertakes a simultaneous analysis of relationship between self-efficacy, empowerment, and organization climate and employee engagement in IT and Manufacturing industries with moderating role of demographic variables.

This research gap is being addressed in this study.

NEED, OBJECTIVES AND HYPOTHESES OF THE STUDY

Need of Study

The study is to establish that in relationship between employee engagement antecedents and employee engagement the moderators play very important roles.

The study also helped in understanding how the various job attitudes and their factors e.g., job satisfaction, employee engagement, job involvement, psychological and leadership empowerment and others act as moderators between the relationship between them along with demographic and other HR parameters.

This helps in how practically the various HR parameters can be used to give better results at workplace.

Objectives of the Study

1. To make an empirical study on how biographic individual variables play the role of moderator among self-efficacy, empowerment, organization climate and employee engagement in IT and Manufacturing industries in NCR.

2. To study the relationship between employee engagement and its determinants and how various moderators play a role in it.

Hypotheses of the Study

H_1a: Gender moderates the relationship between self-efficacy and employee engagement.

H_1b: Gender moderates the relationship between empowerment and employee engagement.

H_1c: Gender moderates the relationship between organizational climate and employee engagement.

H_2a: Education moderates the relationship between self-efficacy and employee engagement.

H_2b: Education moderates the relationship between empowerment and employee engagement.

H_2c: Education moderates the relationship between organizational climate and employee engagement.

H_3a: Age moderates the relationship between self-efficacy and employee engagement.

H_3b: Age moderates the relationship between empowerment and employee engagement.

H_3c: Age moderates the relationship between organizational climate and employee engagement.

H_4a: Tenure of work moderates the relationship between self-efficacy and employee engagement.

H_4b: Tenure of work moderates the relationship between empowerment and employee engagement.

H_4c: Tenure of work moderates the relationship between organizational climate and employee engagement.

PROPOSED MODEL OF STUDY
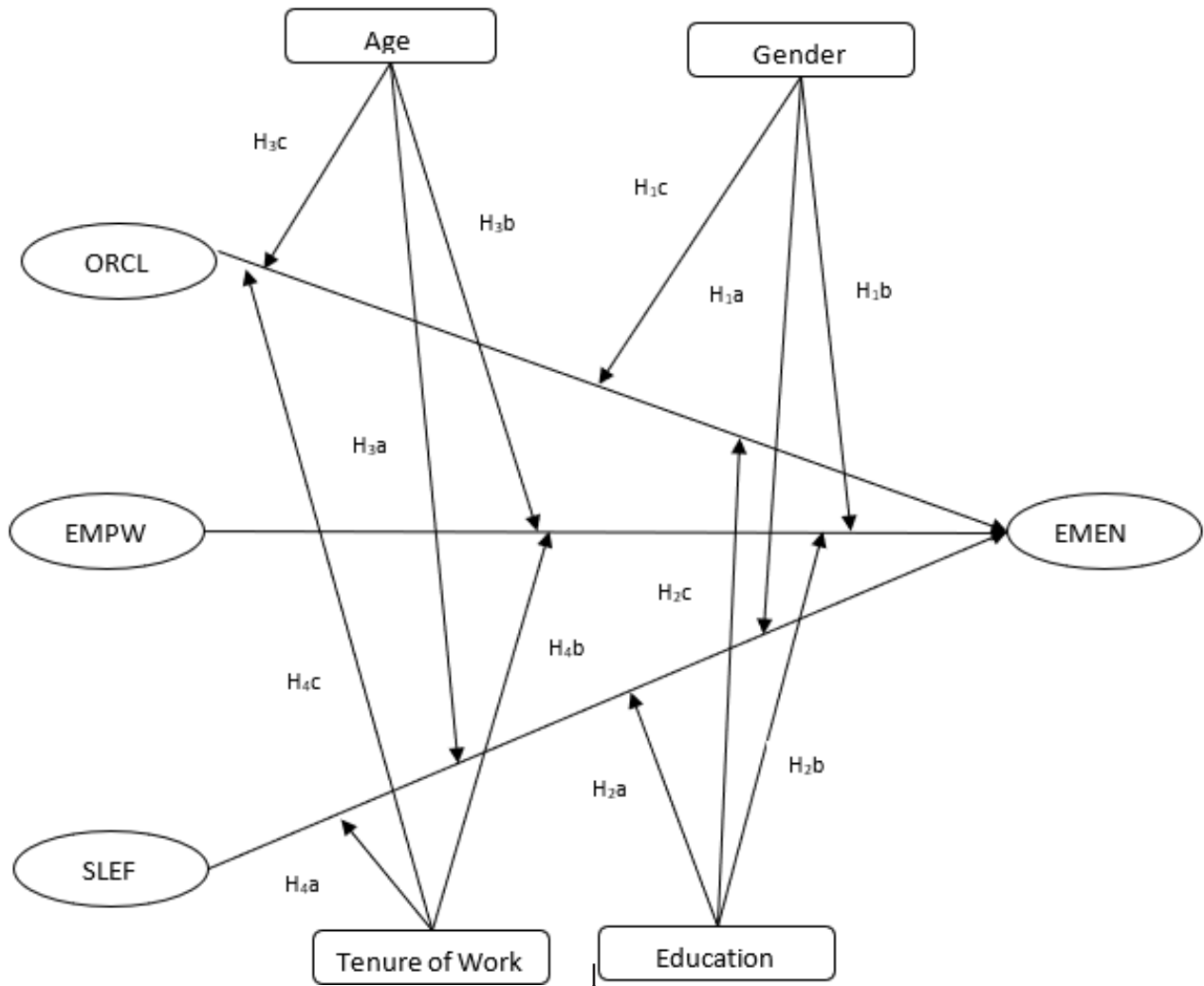
Figure 1: Proposed Model of Study

ORCL = Organizational Climate, EMPW = Empowerment, SLEF = Self-Efficacy, EMEN = Employee Engagement

RESEARCH METHODOLOGY

Sample Design:

The target population consisted of employees working in Information Technology manufacturing Industries in the National Capital Region (NCR) of India. Data was collected of employees working across select Information Technology and manufacturing sectors organizations in NCR. We collected samples from 40 firms each in Information Technology Services and Manufacturing Sectors. We collected 6 samples from each firm. After cleaning of data total no. of responses used were 447.

Questionnaire adaptation for the study:

In the next para under sample and measurement scales it

is explained about the measurement scales and the no. of items in each measurement scales used. All measurement scales are picked from literature being used in various studies and their validity and reliability is established in literature. Total no. of questions based on it are employee engagement -10, psychological empowerment -12, leadership empowerment-14, organizational climate construct had a total of 11 items, and self-efficacy -10. In total there are 57 questions.

Sample and measurement scales

The target population consisted of employees working

in Information Technology manufacturing industries in the National Capital Region (NCR) of India. Data was collected from a sample of 447 employees working across select Information Technology manufacturing organizations in NCR. Utrecht Work Engagement Scale (UWES) developed by Schaufeli et al., (2002) was used to measure Employee Engagement. The scale consists of three dimensions (sub-constructs) of Employee Engagement namely, Vigor (6 items), Absorption (6 items), Dedication (5 items). Based on EFA we have 10 items out of 17 items that were retained: Vigour(3 item), dedication(4), Absorption (3).The instrument hasand 7-point Likert's scale (1 = strongly disagree, 7 =strongly agree) to record responses. Psychological empowerment has been measured by Spritzer's (1995) instrument. This 12-item questionnaire measures psychological empowerment (PE) through four dimensions: meaning, competence, self-determination, and impact, Scoring has been done on 5-point Likert's scale for measuring level of agreement with each item (1 –strongly Disagree to 5 - strongly agree). The Leader Empowering Behaviour Questionnaire (LEBQ) developed by Konczak, L.J. et al.(2000) has been used to measure leadership empowerment behaviour. It consists of 17 items. In the present study 14 out of 17 items have been retained through the Exploratory Factor Analysis (EFA) analysis. Scoring has been done on a Likert's scale varying from 1 ('strongly disagree') to 7 ('strongly agree'). We had borrowed the General Self-Efficacy 10 items scale developed by Schwarzer, R & Jerusalem, M (1995) to measure Self-Efficacy construct in our study. In this construct also, we used 4-point Likert's scale (1

-not true at all to 4 exactly true). to record responses of our target respondents. The 3rd construct of our study, namely Organizational Climate, was measured using a 12 items Organizational Climate Questionnaire developed by Litwin and Stringer (1968). This Organizational Climate questionnaire consisted of 4 dimensions (sub-constructs) namely; Orientation (3 items); Supervision (3 items); Communication (3 items); Reward Management (3 items). Therefore, the organizational climate construct had a total of 12 items. Further in the present study 11 out of 12 items have been retained through the Exploratory Factor Analysis (EFA) analysis. In this construct also, we recorded responses on a 7-point Likert's scale (1 = strongly disagree, 7 =strongly agree). All the above scales valid and reliable as well as their acceptance have been found in literature,

Demographic Profile of the respondents

The average age for the sample was found to be 27. Most of them were in their thirties (51%). while 35% were in their twenties and above thirties were only (17%). With the male-female ratio being 73:27, it was largely a sample of male employees. In terms of level of education, graduates were (51%), 47 % were postgraduates, and 2% diploma holders. In terms of work experience, it ranges from 1 year experience to 24 years work experience; 1-3 years' experience (36%); 5-8 years' experience were (18%) and above 8 years' experience were 46%. Occupational status ranges from executives to senior managerial level.

DATA ANALYSIS

Descriptive Statistics

Study has found high levels of employee engagement in all the three dimensions, prevalence of empowerment in organizations (mean score indicating 3.96 out of 5), prevalence of supportive organisational climate in the organisations (mean score range 5.22 out of 7) and presence of high level of self-efficacy belief among the employees (mean score 3.31 out of 4) **(See Table 1 of Annexure1)**

Table 2

Results of the Study

a.   IT Sector Path Coefficients:

Relationship	Estimate	S. E.	C. R.	P-value
EMEG <--- ORCL	.174	.058	3.018	.003
EMEG <--- SLEF	.256	.068	3.759	***
EMEG <--- EMPW	.181	.088	2.055	.040

b.   Manufacturing Sector- Path Coefficients:

Relationship	Estimate	S. E.	C. R.	P-value
EMEG <--- ORCL	.154	.061	2.508	.012
EMEG <--- SLEF	.380	.141	2.257	.007
EMEG <--- EMPW	.108	.044	2.451	.013

c.   Demographic variables: gender, age, education, and tenure of work analysis results:

Demographic Variable	Level	Organizational Climate Employee Engagement	Empowerment Employee Engagement	Self-Efficacy Employee Engagement
Gender	Male	.476 (p < .0023)	.502 (p < .011)	.342 (p < .042)
	Female	.437 (p < .0018)	.483 (p < .002)	.313 (p < .038)
Education	Graduate	.562 (p <.000)	.487 (p <.003)	.274 (p <.037)
	Post-Graduate	.634 (p < .000)	.563 (p < .017)	.261 (p < .043)
	Diploma Holder	.551 (p < .003)	.503 (p < .021)	.206 (p < .049)
Age		.733 (p < .000)	.671 (p < .000)	.104 (p < .075)
Tenure of Work		.642 (p < .000)	.692 (p < .000)	.553 (p < .001)

Structural equation modeling approach has been employed to analyze the proposed model by using groups of each demographic variable. The results of estimates are as shown in the above table. It can be concluded from the table that in case of all study demographic variables like; gender, age, education, and tenure of work, there is significant coefficients in case of all relationships such as; Organizational Climate → Employee Engagement; Empowerment → Employee Engagement; Self-Efficacy → Employee Engagement. Further, to confirm whether the difference across gender and education levels is significant, chi-square test was used.

Results of Hypotheses Testing

The outputs of IBM AMOS 16.0 for the simultaneous analysis of individual demographic factors show the Chi-square statistics of differences among demographic groups. The following table summarizes the results of each analysis indicating the hypotheses concerned.

Table 3

Results of the Hypotheses Testing

Demographic Variable	Hypothesis	Chi-Square	df	p-value	Decision
Gender	H_1a	.236	2	0.621	H_0 cannot be rejected
	H_1b	.243	2	0.412	H_0 cannot be rejected
	H_1c	.178	2	0.231	H_0 cannot be rejected
Education	H_2a	14.122	3	0.013	H_0 is rejected
	H_2b	15.114	3	0.005	H_0 is rejected
	H_2c	17.324	3	0.001	H_0 is rejected
Age	H_3a	11902.342	446	<.000	H_0 is rejected
	H_3b	14257.322	446	<.000	H_0 is rejected
	H_3c	22.457	446	<.215	H_0 cannot be rejected
Tenure of Work	H_4a	14829.345	446	<.000	H_0 is rejected
	H_4b	13472.233	446	<.000	H_0 is rejected
	H_4c	26,113	446	<.126	H_0 cannot be rejected

It can be seen from the above table that out of the total 12 hypotheses formulated in the present study, there isstrong evidence to reject 7 out of them and for remaining 5 hypotheses did not get statistical evidence to reject them. In other words, there is statistical evidence that demographic variables play a significant role in evaluating relationships among independent variables and dependent variables while testing for cause and effect.

DISCUSSION AND CONCLUSIONS

The results of this study have shown that all three predictors namely; organizational climate, empowerment and self-efficacy have significant positive impacts on employee engagement. Further the path (Beta) coefficient of causal relationship of organizational climate and employee engagement established that organizational climate positively impacted employee engagement and path coefficient of causal relationship between self-efficacy and employee engagement established that self-efficacy positively impacted employee engagement. In addition, the path coefficient of causal relationship between empowerment and employee engagement shows

empowerment positively impacted employee engagement (Substantiated through Table 2a and 2bof Data Analysis section)

In the case of gender, there was no evidence of differential impacts of predictors on response variables. Whereas in case of other demographic variables used in the study (education, age and tenure of work), there was strong evidence of differential impacts on response variable (employee engagement). (Substantiated through Table 3 of Data Analysis section).

The study concludes that all the three independent constructs Self Efficacy, Organizational Climate, and Psychological & Leadership Empowerment have significant positive impact on Dependent Construct Employee Engagement and the demographic factors. Age, work experience, and education have a moderation influence on the level of employee engagement. All the three moderators are positively influencing Employee Engagement, the result also revealed that in case of gender, there was no evidence found of differential impact of predictors on the employee engagement.

In case of all study demographic variables like; gender, tenure of work, age, and education, we found significant coefficients in case of all relationships such as; Self-Efficacy → Employee Engagement, Organizational Climate → Employee Engagement; Empowerment → Employee Engagement. (Substantiated through Table 2c of Data Analysis section)

Bandura explained the concept of self-efficacy, as the belief in one's ability to successfully perform a task and also individuals' beliefs about their capabilities to produce designated levels of performance (Bandura, 1994).Therefore, individuals who perceive themselves as effective are more likely to prefer roles that are in accordance with their values, called self-concordance, which promotes intrinsic motivation (Judge, Van Vianen, & De Pater, 2004) and may promote engagement at work. Singh (2000) found that with boss support frontline employees perceived their roles to be less stressful and their exhaustion from work is reduced, and their performance and perceived commitment levels were increased. May et al. (2004) also found that supportive and worthwhile interpersonal relationships with co-workers and supervisors were indirectly related to work engagement through the mediating role of psychological safety. Moreover, organizational Climate at the workplace 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). Several studies have also supported organisational climate to be positively and significantly related to work engagement (Hakanen et al., 2006; Dollard & Bakker, 2010; Halbesleben, 2010).

Demographic background factors have also been found to influence employee engagement. Gallup's research has revealed that American women find more fulfilment in their jobs and are more engaged than their male counterparts

(Johnson, 2004). However, the same research has found no clear difference between Thai men and women in terms of their level of engagement. The research findings also indicate no differences in the levels of employee engagement between male and female employees and between different levels of educational qualification. In their study Rana S. and others (2019) it was found that age, designation and tenure except gender, employees working at higher level of organizational hierarchy had higher engagement. But in case of other demographic variables like age, tenure of work, and education this study confirmed significant moderation effects. In the literature survey the role of various demographic factors influence Employee Engagement is discussed and also helps to understand Employee Engagement from a Moderation Analysis Perspective.

Managerial/ practical implications

From the results obtained in the research significant and positive causal relationships among predictors (empowerment, organizational climate and self-efficacy) and employee engagement across both IT and manufacturing industries were found.

Therefore, in order to augment and boost the level of employee engagement in the organization, managers should focus on empowerment, organizational climate and self-efficacy aspects in order to retain them and further increase their loyalty towards organization as well as improve productivity of the organization.

It has been observed in different organizations across the globe that co-worker support helps in increasing employee's self-efficacy and there exists a strong positive correlation between supervisor's support and co-workers' support. Therefore, in this context supervisors are expected to play a model role in encouraging congenial and optimistic atmosphere in the organization. It is quite evident that co-worker support and self-efficacy will help in creating a productive and supportive environment in the organization, which will definitely enhance employee engagement.

In the research it is found a significant and positive impact of employee empowerment on employee engagement. To enhance engagement of employees, top management should put their efforts to augment the psychological empowerment experienced by employees of the organization. As suggested by Bhatnagar, (2005), organizational practices can be streamlined to increase perceived competence among employees and leaders must persuade employees regarding their value systems to enhance true empowerment and consequently engagement. Therefore, managers are advised to empower their employees to generate the sense of meaningful job, self-determination, impact creating actions and competence.

Additionally, managers should strongly believe in delegating authority, reckoning accountability, encouragement to self-directed decision making, free flow of information in the entire organization, focus on

skill development by organizing regular training and development sessions and challenging employees to come out with innovative ideas. It is also found that with the above they will empower subordinates' behaviour. It is also found here that those employees who are psychologically empowered through means discussed in the above paragraph will be more positive towards showing empowered behaviour.

Employees feel satisfied and secured mostly, when they perceive fair or unbiased authority, have well defined work and are able to feel a sense of respect by others in the organization, where all work-related information is provided to them and have rewards and recognition for better work performance. All the above elements of organizational climate and work culture will lead to highly engaged employees.

Another finding led to the conclusion that organizations must work on increasing a manager's self-efficacy relating to his job which will help managers to have better cognitive and emotional engagement with his subordinates.

The organizations following the practice of "Perceived organizational support for strengths use" POSSU, and providing development opportunities will help younger employees to be more engaged.

Various demographic factors affect level of employee engagement. Age, work experience, and education had a moderation influence on the level of employee engagement. Therefore, these demographic characteristics of employees should be considered while setting engagement practices and different practices for different groups will lead to better Employee Engagement. For example, younger employees who are provided development opportunities result in enhanced work engagement. Therefore, Gen Y should be taken into account when Engagement Practices developed for their enhanced participation.

It is suggested that employees learning, development and education programs should be organized for employees who are at comparatively lower level of education and skills, and this is going to increase Employee Engagement. These programs should be designed based on future needs, and the gaps existing in the current level and desired levels. Management needs to let employees understand the importance of employee development activities and influence them to take trainings seriously so that those gaps can be filled. Team managers must sit with their teams to find out in which all areas where new employees are lacking and inculcate those skills in employees. For development and educational purposes, the conceptual and knowledge level needs of less skilled and educated employees be identified and these inculcated through special organized programs and educational institutes organized collaborated programs with the organizations.

The employees who have comparatively low tenure of working in organization need be mentored by senior persons. The employees should be provided on the job training and coaching in organization. Mentors help the employees in setting goals, provide feedback and evaluating progress and inculcate Empathy, Relationship building, Leadership, Delegation, Constructive feedback, Organisation, and Problem-solving skills. Coaching and mentoring increase confidence in the employees, used to build stronger teams and also help the employees adopting organisation's ethos. "On the job training" helps to increase skills relevant to jobs and organization should implement this for their employees who are relatively inexperienced to inculcate in them the relevant skills.

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Descriptive Analysis of Variables

Table 1

Information Technology Sector Descriptive Analysis of Variables

Construct	Items	Mean	Std. Deviation
Employee Engagement			
Vigor	VG1: At my job, I feel strong and vigorous	4.01	.668
	VG2: When I get up in the morning, I feel like going to work	4.06	.726
	VG3: At my work I always keep trying, even when things do not go well	4.20	.604
Dedication	DE1: I find the work that I do full of meaning and purpose	4.22	.600
	DE2: I am enthusiastic about my job	4.18	.689
	DE3: My job inspires me	4.00	.696
	DE4: I am proud on the work that I do	4.06	.690
Absorption	AB1: I am immersed in my work	3.90	.653
	AB2: I get carried away when I'm working	4.09	.662
	AB3: I feel totally attached with my job	4.01	.702
Psychological Empowerment			
Meaning	ME1: The work I do is very important to me	3.95	.985
	ME2: My job activities are personally meaningful to me	3.93	.922
	ME3: The work I do is meaningful to me	3.87	.931
Self-Determination	SD1: I have significant autonomy In determining how I do my job	3.85	.925
	SD2: I can decide on my own how to go about doing my work	3.79	.910
	SD3: I have considerable opportunity for independence and freedom in how I do my job	3.73	.952
Impact	IM1: My impact on what happens in my department is large	3.49	1.007
	IM2: I have a great deal of control over what happens in my department	3.40	1.025
	IM3: I have significant influence over what happens in my department	3.57	1.000
Competence	CM1: I am confident about my ability to do my job	4.36	.746
	CM2: I am self-assured about my capabilities to perform my work activities	4.07	.774
	CM3: I have mastered the skills necessary for my job	3.79	.796
Organizational Climate			
Orientation	OR1: I have clear defined goals and objectives for my job	5.04	1.608
	OR2: l have got flexibility in solving problems	5.02	1.528
	OR3: Organization helps me to achieve my individual goals	4.87	1.560
Supervision	SP1 : I get support from my supervisor	5.58	1.027
	SP2: Proper Supervision and Directions are received	5.59	.979
Communication	CO1: In my organization there is free sharing of information among employees for carrying out work	5.42	.999
	CO2: In my organization there is communication for future directions	5.38	1.009
	CO3: In my organization there is free sharing of information between management and employees for carrying out work	5.41	1.030
Reward Management	RM1: There is fair and uniform salary structure in my organization	4.68	1.455
	RM2: There are fair promotional policies in my organization	4.80	1.454
	RM3: Rewards are given on basis of achievement in my organization	4.88	1.397
Self-Efficacy			
	SE1: I can always manage to solve difficult problems if I try ha rd enough	3.34	.729

	SE2: If someone opposes me, I can find the means and ways to get what I want	3.15	.722
	SE3: It is easy for me to stick to my aims and accomplish my goals	3.24	.678
	SE4: I am confident that I could deal efficiently with unexpected events	3.33	.668
	SE5:Thanks to my resourcefulness, I know how to handle unforeseen situations	3.21	.714
	SE6:I can solve most problems if I invest the necessary effort	3.52	.654
	SE7:I can remain calm when facing difficulties because I can rely on my coping abilities	3.19	.791
	SE8:When I am confronted with a problem, I can usually find several solutions	3.20	.744
	SE9: If I am in trouble, I can usually think of a solution	3.28	.695
	SE10:I can usually handle whatever comes my way	3.40	.653

Manufacturing Sector Descriptive Analysis of Variables

Construct	Items	Mean	Std. Deviation
Employee Engagement			
Vigor	VG1: At my job, I feel strong and vigorous	3.42	1.187
	VG2: When I get up in the morning, I feel like going to work	3.30	1.213
	VG3: At my work I always keep trying, even when things do not go well	3.70	1.249
Dedication	DE1: I find the work that I do full of meaning and purpose	3.48	1.226
	DE2: I am enthusiastic about my job	3.63	1.205
	DE3: My job inspires me	3.46	1.232
	DE4: I am proud on the work that I do	3.47	1.240
Absorption	AB1: I am immersed in my work	3.44	1.166
	AB2: I get carried away when I'm working	3.52	1.254
	AB3: I feel totally attached with my job	3.46	1.211
Psychological Empowerment			
Meaning	ME1: The work I do is very important to me	3.53	1.264
	ME2: My job activities are personally meaningful to me	3.61	1.193
	ME3: The work I do is meaningful to me	3.69	1.211
Self-Determination	SD1: I have significant autonomy In determining how I do my job	3.28	1.116
	SD2: I can decide on my own how to go about doing my work	3.50	1.208
	SD3: I have considerable opportunity for independence and freedom in how I do my job	3.41	1.186
Impact	IM1: My impact on what happens in my department is large	3.15	1.121
	IM2: I have a great deal of control over what happens in my department	3.27	1.164
	IM3: I have significant influence over what happens in my department	3.23	1.191
Competence	CM1: I am confident about my ability to do my job	3.89	1.220
	CM2: I am self-assured about my capabilities to perform my work activities	3.61	1.192
	CM3: I have mastered the skills necessary for my job	3.59	1.197
Organizational Climate			
Orientation	OR1: I have clearly defined goals and objectives for my job	5.11	1.600
	OR2: l have got flexibility in solving problems	5.09	1.507
	OR3: Organization helps me to achieve my individual goals	4.93	1.535
Supervision	SP1 : I get support from my supervisor	5.60	1.020
	SP2: Proper Supervision and Directions are received	5.63	.978

Communication	CO1: In my organization there is free sharing of information among employees for carrying out work	5.45	.998
	CO2: In my organization there is communication for future directions	5.42	1.005
	CO3: In my organization there is free sharing of information between management and employees for carrying out work	5.45	1.041
Reward Management	RM1: There is fair and uniform salary structure in my organization	4.75	1.452
	RM2: There are fair promotional policies in my organization	4.87	1.450
	RM3: Rewards are given on basis of achievement in my organization	4.93	1.370
Self-Efficacy			
	SE1: I can always manage to solve difficult problems if I try hard enough	3.42	.597
	SE2: If someone opposes me, I can find the means and ways to get what I want	3.18	.711
	SE3: It is easy for me to stick to my aims and accomplish my goals	3.22	.689
	SE4: I am confident that I could deal efficiently with unexpected events	3.32	.654
	SE5: Thanks to my resourcefulness, I know how to handle unforeseen situations	3.27	.644
	SE6:I can solve most problems if I invest the necessary effort	3.42	.679
	SE7:I can remain calm when facing difficulties because I can rely on my coping abilities	3.24	.724
	SE8: When I am confronted with a problem, I can usually find several solutions	3.30	.641
	SE9: If I am in trouble, I can usually think of a solution	3.41	.639
	SE10: I can usually handle whatever comes my way	3.43	.621