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## Factors predicting employee engagement in Indian manufacturing sector

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**Abstract:** Employee engagement is associated with many desirable outcomes such as job satisfaction, intention to stay, high productivity, job performance and customer satisfaction. Engaged employees over time become more creative, sensitive, productive and contribute from their heart, which can create significant difference to the organisational goal and objective. The promising Indian economy expecting 25% of India's GDP and 100 million jobs by 2022 from manufacturing sector with the help of effective policies created and monitored by government authorities. This calls for a special focus on manufacturing sector and to trace the attributes which are predicting the employee engagement, so that organisations can formulate proper plans and policies to ensure retention and increase in engagement level. This study witnessed organisation and work culture, job profile and accountability, compensation and benefits, resources at work, caring attitude of organisation and communication are the principal factors which govern employee engagement in manufacturing sector.

**Keywords:** employee engagement; manufacturing sector; Indian industry; private manufacturing firms; principal factor analysis.

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## **1 Introduction**

The Indian economy is considered as the third largest economy of the world based on purchasing power parity (PPP) and the sixth on the basis of gross domestic product (GDP). The contribution of manufacturing sector to the Indian economy in terms of GDP has remained very substantial. Manufacturing sector plays a very vital role in employment generation, contribution to GDP and also acts as a strong linkage between other sectors of business. This statement is true for every country in the world. The Indian manufacturing sector has become a focus area for many developing and developed countries because of the availability of delivering cheap labour, technology and investor friendly policies. Consequently, the manufacturing sector in India has grown at a robust rate over the past ten years and has been one of the best performing sectors in the economy. There is currently 12% of the country's total workforce and 50% of the total export contributed by manufacturing sector. About 25% of India's GDP and 100 million jobs are expected from this sector by 2022 (<http://www.ibef.org>).

Industrial productivity depends more on the skill, motivation and engagement of the organisational workforce. Out of these factors, engagement of employees has received more attention in recent years across the globe as the single most important factor contributing to industrial productivity. The Indian employers have been trying hard to engage employees in their respective work front. The capacity of an organisation to manage its employee engagement is closely linked to its ability to achieve high performance levels and superior business results. "Employee engagement is the level of commitment and involvement that the employees have towards their organization and the organizational values" (<http://www.Lawsociety.mb.ca>). Engaged workers provide the company increased productivity, higher financial returns, lower attrition, greater talent pool, higher morale and create emotional engagement and loyal customers (<http://www.Haygroup.com>). Employee engagement is a unique subject and driven by job resource and personal resource. Autonomy, supervisory coaching, performance feedback under job resource and optimism, self-efficacy, self-esteem under personal resource can play tremendous role in increasing engagement level. Work engagement can make a true difference for employees and may offer organisations a competitive advantage. Engaged employees work hard (vigour), are involved (dedicated), and feel happily engrossed (absorbed) in their work (Bakker et al., 2008; Bakker and Demerouti, 2008). Employees who are engaged in their work are fully connected with their work roles and they are bursting with energy, dedicated to their work, and immersed in their work activities. Engaged workers proactively change their work environment in order to stay engaged (Bakker et al., 2008).

The degree to which employees are engaged can have a significant impact on the success of an organisation. It has been observed that an engaged employee is well aware of the business context, who works well with the colleagues to improve performance within the job for the benefit of the organisation. The concept of employee loyalty has changed in the 21st century in the backdrop of the modern workforce. Today, employers see loyalty in terms of employees' attitude, behaviour and work performance rather than the length of the service that one has rendered. Engendering loyalty from the employees is more crucial in the current knowledge economy where the human talent is the deciding factor in creating market differentiation and competitive advantage. Contemporary organisations need employees who are psychologically connected to their work; who are willing and able to invest themselves fully in their roles; who are proactive and committed to high quality performance standards (Bakker, 2011). This results in improved employer-employee relationship, talent retention and productivity, the other form of employee engagement. Job redesign, transformational leadership, assisting in getting personal and job resource by leaders and HRM policies and practices can influence engagement substantially (Bakker and Albrecht, 2018).

With reference to the above backdrop the present study is focus on the principal factors of employee engagement in selected manufacturing industries of India. As manufacturing sector is one of the key core sector in Indian economy and having high potential to support the future economy, understanding of engagement attributes are very important from country's perspective.

## **2 Brief literature review**

A highly engaged workforce means the difference between a company that outperforms its competitors and one that fails to grow. A staggering 87% of employees worldwide are not engaged. Many companies are experiencing a crisis of engagement and are not aware of it (<http://Gallup.com>). An engaged employee is aware of business context and works with colleagues to improve performance within the job for the benefit of the organisation (Rama Devi, 2009). For many organisational issues engagement is the answer. So it is more important to understand the reasons of the engagement and formulate action plans to get and retain engagement dimensions. Through this study we have tried to consolidate all prominent engagement attributes explored so far globally in a chronological order. The span of the study considered here is from 1990 to 2018.

Kahn (1990) has been credited with developing the concept of employee engagement. Drawing from the earlier work of Goffman (1961), Kahn (1990) developed the idea of employee engagement. He suggested that people's attachment and detachment from their roles varied. When an individual's behaviour shows lack of separation between that person and his or her role, it indicates role embracement, and when an individual's behaviour reveals a resistance to a disdained role, it indicates role distance. Consequently, workers were more engaged when they were in situations that offered them psychological meaningfulness and psychological safety and when they were more psychologically available. Harter et al. (2002) identified significant relationships between employee engagement and improved customer satisfaction, productivity, profits, decreased turnover and accidents. They clearly established link between engaged employee and productivity. Employee engagement drivers in the organisation were clarity in expectations of management towards the employees, input of basic needs for

performing task in the form of materials and equipment, opportunity for each employee to perform the best, recognition of good work, caring culture, encouragement for self-development, respect to the opinions of the employee, clarity in organisational mission, committed to maintain quality, creating best friends at work, feedback on progress and opportunity to learn and grow concept (Harter et al., 2003). The support at workplace perceived by the employees is having impact on both organisational and job engagement and the organisational justice system influence organisational engagement (Saks, 2006). Attractive financial rewards (in relation to competitor's organisations, rather than in an absolute sense), good benefits compared to competitor organisations, flexible benefits packages were important for engagement (Saks, 2006). Organisational affiliation, autonomy and influence, work-work and work-life balance, opportunities for growth, role factors, reward culture, quality of relationships, quality of supervision and work culture are prominent factors of employee engagement (Stairs et al., 2006).

Drivers of the employee engagement are financial rewards, participation in decision making process, job autonomy, performance feedback in task level resources (Chen, 2007). Those key areas are leadership, effective management, open and two-way communication, pay and benefits, fair and equal treatment, employing the 'right' workforce, career development and training, working hours, and health and safety (Scotland Government, 2007). The drivers are: trust and integrity, nature of the, line of sight between employee performance and company, career growth, pride about the company, co-workers/team, employee development and relationship with one's manager (Ryan, 2007). Organisational culture, career planning along with incentives and organisational support are having impact on engagement (Bhatnagar, 2007). Employees feel engaged when they find personal meaning and motivation in their work, receive positive interpersonal support, and function in an efficient work environment (Srivastava and Bhatnagar, 2008). Engagement is influenced by some key factors such as recognition, workplace culture, communication, managerial styles, trust and respect (Miller, 2008). Engagement is support and recognition from colleagues and supervisors, performance feedback, opportunities for learning and development, and opportunities for skill use (Bakker and Schaufeli, 2008). Job satisfaction, organisational commitment, psychological empowerment, and job involvement (Macey and Schneider, 2008). Quality of political and administrative leadership is having positive influence on employee engagement (Park and Rainey, 2008). Workplace culture, organisational communication, managerial styles, trust and respect, leadership and company reputation are having impact on employee engagement (Swarnalatha and Prasanna, 2010).

Role benefit, job autonomy, and strategic attention were all significantly related to higher employee engagement (Slatten and Mehmetoglu, 2011). Good relationship with co-workers at workplace, relationship with direct line manager, role in organisational culture and learning facility at workplace motivates employees and increases engagement level (Shuck et al., 2011). Employment relationship that gets fostered in an organisation is partly attributed to the kind of HR system it adopts (Krishnan, 2011). Motivation and satisfaction which ultimately brings engagement level is derived from opportunities to use skills and abilities, relationship with immediate supervisor, the work itself, meaningfulness of job, flexibility to balance life and work issues (Chalofsky and Krishna, 2011). Employee welfare, empowerment, employee growth and interpersonal relationships were found to be the predictors of employee engagements (Mani, 2011). cooperation between departments, nature of job, immediate supervisor, recognition to

work, equality and working environment where trust, cooperation and creativity can be sustained leads to high level of satisfaction and subsequent employee engagement (Abraham, 2012). Perceived organisational reputation is defined as the overall employee evaluation of the organisation over time. This evaluation includes emotional appeal, products and services, financial performance, vision and leadership, work environment, and social responsibility (Men, 2012). Employees having higher levels of psychological well-being are healthier both mentally and physically at work, live long, live happier lives and productive too (Robertson et al., 2012). Organisation practices, organisational communication, reward and recognition and employee development are the vital factors which increase the employee engagement level (Suan Choo et al., 2013). Perceived organisational support and psychological contract are linked to employee engagement (Biswas et al., 2013). The drivers are working environment and team and co-worker relationship in the organisation (Anitha, 2014). Communication, work life balance and leadership are having substantial impact on engagement (Bedarkar and Pandita, 2014). Specifically three drivers, namely communication, work life balance and leadership can influence employee engagement significantly (Bedarkar and Pandita, 2014). Job design, job characteristics, supervisor, co-worker relationships, workplace environment and HRD practices are the major influencers of employee engagement (Rana et al., 2014). Procedural justice, interactional justice and psychological contract fulfilment are direct and positive link with work engagement (Agarwal, 2014). Ahamed and Hassan (2014) tried to establish relation between employee engagement with organisational trust, interpersonal relationship and transformational leadership. The study found that all these attributes are closely linked with each other and has positive impact on employee engagement.

The role of management in engaging talent management practices can lead to employee engagement and work satisfaction (Kaliannan and Adjovu, 2015). Appraisal justice has a direct link with employee engagement with trust as a catalyst (Nair and Salleh, 2015). Drivers of engagements are organisational invest in corporate social responsibility, focus on customer, supporting workplace for democracy, work life balance and rewarding culture (Taneja et al., 2015). There is direct impact of psychological safety on employee engagement and commitment to the organisation (Tiwari and Lenka, 2016). Variable rewards and recognition is found to be significantly related to both employee engagement and normative commitment (Ghosh et al., 2016). There is a direct link between workplace safety and employee engagement (Whiteoak and Mohamed, 2016). The degree of power distance, the extent of empowering leadership and participation and quality of relationship between employee and supervisor (Kwon et al., 2016). Leader, team, perceived organisational support and organisational culture has direct impact on employee engagement (Al Mehrzi and Singh, 2016; Teimouri et al., 2016) explores relationship between employee engagement and organisational effectiveness in Iran. The study found there is direct link between organisational effectiveness with six dimensions of employee engagement, i.e., internal marketing, organisational justice, reward, training, information sharing, employee participation and job security. Badawy et al. (2016) conducted research to know the relationship between succession planning and job satisfaction on employee engagement. This study conducted in Egypt. The outcome of the research suggests that there is close inter linkage between employee engagement, succession planning and job satisfaction. Organisation's plan to create successor and job satisfaction influences employee engagement. Karimi and Karimi (2016) explore the relationship between spiritual intelligence, emotional intelligence and quality of work life

on engagement. The study found that there is direct impact of employee engagement on work life and indirect impact on spiritual intelligence and emotional intelligence. Gawke et al. (2017) found employee intrapreneurship gives positive impact on employee engagement. Organisational communication and recognition of employee voice with employee engagement (Ruck et al., 2017). Perceived organisational support is having positive influence on employee engagement and the engaged employees deliver higher performance and having high degree of commitment (Nazir and Islam, 2017). Triwibisono et al. (2017) studied the influence of strategic human resource management on employee engagement in telecom sector of Indonesia through survey method. The study suggests there is a significant impact of organisation's strategic human resource management approach on employee engagement. Bakker and Albrecht (2018) explored that job redesign, transformational leadership, assisting in getting personal and job resource by leaders and HRM policies and practices can influence engagement substantially. Transformational leadership and employer branding is mediated by employee engagement (Sahu et al., 2018).

### **3 Research methodology**

Considering the requirement of the study, a purposive sampling method was chosen. The samples here require in-depth knowledge of core function and human attributes in manufacturing area. Non-random sampling technique was chosen since the sample items depend exclusively on the sample's knowledge and professional judgement. Mostly samples are selected from operational management related departments of the manufacturing units. Four large-scale discrete manufacturing industries of India are selected for this study. These industries are involved in manufacturing of products related to various core sectors. Data collected through both questionnaire method and interview method. Expert opinion collected through structured interview method and around 40-minute of duration. There are 42 variables (engagement drivers) derived from the literature review and expert opinion. These variables were included in the questionnaire administered during pilot study and there after weak variables were dropped, in the final study 31 number of variable were taken. Questionnaire is framed based on five-point Likert scale. The final questionnaire was distributed among 220 selected samples. One hundred eighty-three respondents provided the information by filling up the questionnaire, out of which 12 responses were rejected for not being complete. Finally, 171 responses were retained and used for the final data analysis. Data collected from the respondents processed through SPSS software. Factor analysis is applied to find out the principal factors of the employee engagement.

### **4 Data analysis and findings**

#### *4.1 Test of data reliability*

The data used in the present study have been collected from primary sources through questionnaires. Reliability of the collected data has been checked through calculation of Cronbach's alpha as in Table 1.

**Table 1** Test of data reliability

<i>Case processing summary</i>			
		<i>N</i>	<i>%</i>
Cases	Valid	171	100.0
	Excluded <sup>a</sup>	0	0.0
	Total	171	100.0
<i>Reliability statistics</i>			
<i>Cronbach's alpha</i>	<i>Cronbach's alpha based on standardised items</i>		<i>N of items</i>
0.917	0.918		31
<i>Reliability statistics segment wise</i>			
<i>Principal factors</i>	<i>Cronbach's alpha based on standardised items</i>		<i>N of items</i>
1	0.939		9
2	0.931		8
3	0.923		4
4	0.891		3
5	0.887		4
6	0.864		3

Note: <sup>a</sup>List wise deletion based on all variables in the procedure.

Data with Cronbach's alpha of more than 0.5 is considered as reliable (Nunnally, 1978). In the present study, the Cronbach's alpha is found to be 0.918, indicating thereby that the data collected for the study can be considered as statistically reliable and consistent.

**Table 2** KMO and Bartlett's test of sample adequacy

Kaiser-Meyer-Olkin measure of sampling adequacy		0.899
Bartlett's test of sphericity	Approx. chi-square	1.12E + 03
	Df	903
	Sig.	0

#### 4.2 Test of sample adequacy

Adequacy of the sample used in the study has been tested through the Kaiser-Meyer-Olkin (KMO) and Bartlett's test as given in Table 2. As can be seen from the table, the KMO measure of the sample adequacy has a value of 0.899 compared to the standard value of 0.6 to be adequate. Similarly, the Bartlett's test of sphericity gives a higher chi-square value of 1.12E + 03, indicating that the sample included in the study is statistically found to be adequate.

#### 4.3 Test of data normalcy

Data normalcy has also been tested through the descriptive statistics in the form of mean (first moment) and standard deviation (second moment) of the opinion of 171 employees from manufacturing sector who are having minimum five years of working experience.

**Table 3** Total variance explained by the factors extracted

Total variance explained		Initial eigenvalues		Extraction sums of squared loadings		Rotation sums of squared loadings	
Component	Total	% of variance	Cumulative %	Total	% of variance	Total	Cumulative %
1	10.50	33.88	33.88	10.50	33.88	6.17	19.89
2	4.44	14.31	48.19	4.44	14.31	4.28	33.70
3	2.79	8.98	57.17	2.79	8.98	3.67	45.54
4	2.48	8.01	65.18	2.48	8.01	3.54	56.94
5	2.18	7.05	72.23	2.18	7.05	3.50	68.25
6	1.59	5.12	77.35	1.59	5.12	2.82	77.35
7	1.38	4.46	81.81				
8	1.05	3.37	85.18				
9	0.96	3.10	88.28				
10	0.79	2.54	90.81				
11	0.68	2.19	93.00				
12	0.52	1.67	94.67				
13	0.49	1.59	96.26				
14	0.32	1.03	97.29				
15	0.21	0.68	97.96				
16	0.17	0.54	98.51				
17	0.15	0.48	98.99				
18	0.11	0.35	99.34				
19	0.07	0.22	99.56				
20	0.06	0.20	99.76				
21	0.04	0.13	99.89				
22	0.02	0.05	99.94				
23	0.01	0.04	99.98				
24	0.01	0.02	100.00				
25	0.00	0.00	100.00				
26	0.00	0.00	100.00				
27	0.00	0.00	100.00				
28	0.00	0.00	100.00				
29	0.00	0.00	100.00				
30	0.00	0.00	100.00				
31	0.00	0.00	100.00				

Note: Extraction method: principal component analysis.

It is evident from the mean and standard deviations that there have been no outlier and deviation, hence the data is found to be normal.

**Table 4** Rotated component matrix

	<i>Component</i>					
	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>
VAR00001			0.697			
VAR00002	0.540					
VAR00003					0.618	
VAR00004					0.737	
VAR00005				0.799		
VAR00006				0.539		
VAR00007				0.789		
VAR00008		0.576				
VAR00009		0.525				
VAR00010						
VAR00011	0.775					
VAR00012	0.825					
VAR00013	0.852					
VAR00014						
VAR00015	-0.534					
VAR00016					0.737	
VAR00017	0.619					
VAR00018		0.681				
VAR00019						0.67
VAR00020			0.618			
VAR00021			0.872			
VAR00022		0.663				
VAR00023					0.714	
VAR00024		0.796				
VAR00025						0.773
VAR00026						0.655
VAR00027	0.566					
VAR00028	0.800					
VAR00029		0.518				
VAR00030		0.880				
VAR00031			0.691			

Notes: Extraction method: principal component analysis.  
 Rotation method: varimax with Kaiser normalisation.  
 Rotation converged in 17 iterations.

*4.4 Principal drivers*

Factor analysis is used to remove the redundant variables as well as to reduce the number of variables into a definite number of factors. The factor analysis in the present study has been performed using the principal component extraction method with varimax rotation. The result of factor analysis has been displayed in Table 3, Table 4 and Table 5.

**Table 5** Principal factors along with the sub factors

<i>Sl</i>	<i>Principal factors</i>	<i>Variable code</i>	<i>Sub-factors</i>
1	Organisation and work culture	VAR0002	Team spirit and cooperation
		VAR0011	Loyalty and honesty
		VAR0012	Best friend at works
		VAR0013	Clarity in mission and goals
		VAR0015	Leadership
		VAR0017	Work life balance
		VAR0027	Organisational reputation and branding
		VAR0028	Organisational policy
2	My job profile and accountability	VAR0008	Job autonomy
		VAR0009	Role clarity
		VAR0018	Respect to opinion
		VAR0022	Job characteristics and challenge
		VAR0024	Relationship with immediate superior
		VAR0029	Role and responsibility
		VAR0030	Initiatives
3	Compensation and benefits	VAR0001	Skill and performance-based job allocation
		VAR0020	Non-financial benefits
		VAR0021	Welfare amenities
		VAR0031	Attractive financial benefits
4	Resources at work	VAR0005	Shop floor arrangement
		VAR0006	Working condition
		VAR0007	Safety features
5	Caring attitude of organisation	VAR0003	Healthcare facility
		VAR0004	Retirement benefits
		VAR0016	Recognition
		VAR0023	Training and development
6	Communication	VAR0019	Feedback on progress
		VAR0025	Flow of communication
		VAR0026	Performance feedback

In the initial application of the technique, the numbers of variables are reduced from 31 to 29 as two redundant variables namely system’s transparency and education facility were dropped for having all the six components loading less than 0.5. In the second application, these 29 variables are classified under six dimensions based on their

factor-loading scores. The sorted rotated values of factor loading with minimum value of 0.5 or more are considered. After that a matrix has been formed to understand the significant components that explain 77.35% of variation in the criteria of employee engagement. Generally, factor loading represents how much a factor explains a variable. High factor loading indicates that the factor strongly influences the variable. Factor loading score of more than 0.70 is considered to have high impact on the variables.

Based on the results of factor analysis, the variables are classified into six different principal factors which have been suitably named and displayed in Table 5.

#### *4.5 Description of principal factors*

##### *4.5.1 Factor 1: organisation and work culture*

Factor 1 describes the ‘organisation and work culture’ component of employee engagement which comprised of eight sub factors, namely, team spirit and cooperation, loyalty and honesty, best friend at works, clarity in mission and goals, leadership, work life balance, organisational reputation and branding and organisational policy. The factor loads these eight sub factors have been 0.54, 0.775, 0.825, 0.852, 0.534, 0.619, 0.566, and 0.800 in order.

Considering the factor loads as above, we may conclude that employees of the manufacturing sector in India strongly believe that clarity in mission and goals (0.852), best friend at works (0.825), good organisational policy (0.800) and loyalty and honesty (0.775) make the organisation more vibrant and increase the level of employee engagement in the organisation.

##### *4.5.2 Factor 2: my job profile and accountability*

Factor 2 describes ‘my job profile and accountability’ comprising of seven sub factors, namely, job autonomy, role clarity, respect to opinion, job characteristics and challenge, relationship with immediate superior, role and responsibility and initiatives with factor loads of 0.576, 0.525, 0.681, 0.663, 0.796, 0.518, and 0.880, respectively.

The sub factors namely initiatives (0.880) and ‘relationship with immediate line manager’ (0.796) is the significant contributors towards employee engagement in the manufacturing sector in India.

##### *4.5.3 Factor 3: compensation and benefits*

Factor 3 describes ‘compensation and benefits’ comprising of four sub factors, namely, skill and performance-based job allocation, non-financial benefits, attractive financial benefits and welfare amenities having factor loads 0.697, 0.691, 0.618 and 0.872 respectively.

The above load factors clearly indicate that welfare amenities (0.872) has been considered by the employees as the most important attribute for employee engagement in the Indian manufacturing sector. As most of the large manufacturing firms in India are situated in the remote areas which lack many facilities available to their urban counterparts, it is natural that employees of the sample organisations consider welfare amenities like school, health centre, local market, canteen, bus services to nearby towns including for the students inside their works campus as important for them. This has been confirmed by the above findings with welfare amenities getting a weightage of 0.872.

#### *4.5.4 Factor 4: resources at work*

Factor 4 describes 'resources at work' consisting of three sub factors, namely, working condition, shop floor arrangement and safety features having factor loads of 0.539, 0.799, and 0.789, respectively.

Table 5 clearly reveals that out of the above three sub factors describing resources at work, it is the shop floor arrangement (0.799) and the safety features (0.789) are prominent among the three in influencing the employee engagement in the Indian manufacturing sector. Obviously, 'safety' plays a major role in engagement and productivity of its employees in all the manufacturing units. A well-organised shop floor with all the required machines, tools, accessories, material handling facilities and technical inputs has impact on employee engagement and productivity.

#### *4.5.5 Factor 5: caring attitude of organisation*

Factor 5 describes 'caring attitude of organisation' under which four sub factors, namely, healthcare facility, retirement benefits, recognition, and training and development have emerged as the influencing factors with factor loads of 0.618, 0.737, 0.737, and 0.714, respectively.

High value of factor loading for the sub factors retirement benefits (0.737), recognition (0.737) and training and development (0.714) indicate that they are the most influencing factors contributing to employee engagement in the Indian manufacturing sector.

#### *4.5.6 Factor 6: communication*

Factor 6 describes 'communication' as a component of employee engagement and has put three sub factors, namely, feedback on progress, flow of communication and performance feedback as influencing factors having factor load of 0.670, 0.773, and 0.655 respectively. Out of the three influencing sub factors of communication, it is the flow of communication with a factor load of 0.773 is found to be the most significant influencing sub factor determining the employee engagement in the Indian manufacturing sector.

From the above analysis, we may conclude that:

- 1 clarity in mission and goals
- 2 best friend at works
- 3 good organisational policy
- 4 loyalty and honesty
- 5 initiatives
- 6 relationship with immediate line manager
- 7 welfare amenities
- 8 shop floor arrangement
- 9 safety features
- 10 retirement benefits

- 11 recognition
- 12 training and development
- 13 flow of communication are the most significant attributes of employee engagement in the manufacturing industries in India.

## 5 Summary and conclusions

Employee engagement is associated with many desirable outcomes such as job satisfaction, intention to stay, high productivity, job performance and customer satisfaction. As such, the relevance of the present study lies with the fact that its findings will enable the firms to identify the areas needing attention for improvement in job satisfaction, job performance and customer satisfaction. Further, firms with a greater number of engaged employees typically have lower operating costs, higher customer satisfaction and higher profits (<http://www.thompsondunn.com>). This ultimately brings the other relevance of the study in as much as its findings will enable the firms reorient their actions to keep their employees engaged so as to be able to cut their operating costs and improve profitability. Main attributes of employee engagement in Indian manufacturing segment observed are clarity in mission and goals, best friend at work, good organisational policy, loyalty and honesty, initiatives, relationship with immediate line manager, welfare amenities, shop floor arrangement, safety features, retirement benefits, recognition, training and development and flow of communication out of the 31 identified attributes of employee engagement, divided into six principal factors namely organisation and work culture, my job profile and accountability, caring attitude of organisation, compensation and benefits, communication and resources at work, which together explain about 77.35% of the engagement factor with respect to the total engagement.

This study is limited to four different manufacturing organisations, two in the public sector and two private sectors in the state of Odisha, India. The finding of the study may not have universal applicability to organisations that are not included in the study. The personal experience of the employees and any biasness on the part of the respondents that might have gone into the analysis through the collected data could affect the outcome of the research. Also, the finding may not also hold good to organisations operating in countries other than India given India's unique sociocultural, demographic and political setup. An intra and inter industry study on drivers of employee engagement and productivity may be tried for further validation of the findings of the present study both in Indian organisational setting and organisations outside India. A cross country analysis in the present line of study may give further insight into the present findings. A study may also be undertaken with large sample base by including more number, size and variety of organisations.

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