

THE INTERNATIONAL JOURNAL OF HUMANITIES & SOCIAL STUDIES

Employee Engagement, Job Characteristics and Happiness among Millennials in Selected Information Technology Organizations in India

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Abstract:

Demographic profile of employees from information technology organizations in India underwent a change for the past decade with millennials forming large part of the workforce and is believed to be technological multitaskers with aspirational attitude found to be different from that of other generations. These organizations started contemplate on value profiles of individuals while architecting work processes and attribute their growth, admiration and excellence for this aspect of human resources intervention. However, attrition rates are high despite these interventions. Happiness is assumed to be outcome of all human resources efforts and is not being emphasized for measurement. This led to exploratory study to measure happiness and relates to job characteristics and employee engagement as later two interventions are extensively researched. It is observed that millennials engagement structure consists of self-worth realized through peers and mission of organization, quality conscious peer group and right fit for the job and high paid groups showed greater inclination for higher engagement. Autonomy, mastery and purpose anchored to material gains encompass job characteristics. Happiness is found to relate to employee engagement and job characteristics.

Keywords: Employee engagement, job characteristics, happiness, millennials

1. Introduction

The Information Technology Industry is the fastest growing sectors in India creating several jobs in economies across the world (Scott, 2011). Chandrasekhar (2003) stated that, the Industry's technological intensity, work intensity in the context of demographic changes at the intersection of globalization and liberalization provide challenging opportunities for research. Russel (2008) posited that information technology organizations have garnered attention attributable to their novel means of organizing particular type of work and as the venue to understand different managerial practices. Argyris (1973) described modern organizations as monolithic, rigid, mechanistic, hierarchical and soulless. To find current scenario, six focus group interviews consisting of human resources managers from Tata Consultancy Services, Cognizant Technology Solutions, Lister Technologies, HCL Technologies Limited, Wipro (Western India Products Limited), Infosys Technologies Limited are conducted by researcher. They attributed their success for creation of a fit between individual profiles, psychological pre-disposition and organizational requirements. These observations are further confirmed by seminal work of Singh and Bhanadarker (2011).

The interviews indicated that while employee engagement and work design are given utmost importance; happiness is assumed to be natural outcome of these interventions. It is believed that engaged employees with well-designed job characteristics is likely to make them happy. However, voluntary attrition rates for these organizations range from 10.9% to 18.1% as reported in press indicating some other factors need to be considered. Further probing indicated that employees may not be happy and lack of happiness may be reason for attrition and it is not measured. The focus groups further pointed out that there is general lack of engagement and meaningfulness of work among employees. However, they observed that most of the employees are millennials and educated in engineering, computer science and other related subjects and their expectation from jobs may be different from that of other generations. Thus the purpose of the study is to investigate; how the organization members harness themselves while performing roles physically, cognitively, and emotionally; the degree to which an information technology job requires a multiplicity of different activities in carrying out the work which involved the use of skills and talents; and subjectively; and derive happiness.

Present research adopts the general age related definition of people for millennials; they are born from 1979 to 1988, as given by different authors (Chen and Choi, 2008; Tapscott, 1998). It is observed that psychological characteristics such as neuroticism has increased from other generations to Gen Xers (Twenge, 2000); self-esteem (Twenge & Campbell, 2001), extraversion (Twenge, 2001) and external locus of control and narcissism has increased from Gen Xers to Millennials (Twenge, Campbell, & Bushman, 2008).

Employee engagement was introduced by the Kahn (1990) and defined as “harnessing of organization members' selves to their work roles; in engagement, people employ and express themselves physically, cognitively, and emotionally during role performances.” Bakker, Schaufeli, Leiter and Taris (2008) posited that, Organizations today realize that the level of job satisfaction of an employee merely reflects the superficial relationship between the employee and the employer. (Shuck, Reio and Rocco, (2011) and Shuck and Wollard (2010) established that Job satisfaction is a reflection of a superficial, transactional relationship that is only as good as the last round of perks and bonuses while engagement is about passion - the willingness to invest oneself and expand one's discretionary effort to help the employer succeed, which is beyond simple satisfaction with the employment arrangement or basic loyalty to the employer (Erickson 2005). An engaged employee is one who mentally and emotionally clear with the organization and feels indulgent about its goals and is committed towards its values. Thus employee goes the extra mile beyond the basic job requirements.

Schaufeli (2002) defined engagement as “a positive, fulfilling, work-related state of mind characterized by vigor, dedication, and absorption”. The work situation is likely to occur when an employee experiences a good balance between the job demands or challenges of the job and his or her professional skills. Langelan *et al.*, (2006) showed that employees who experienced a high level of work engagement were low in neuroticism and high in extraversion of the big five personality characteristics. Employee engagement is pivotal to successful commercial and business performance, where engaged employees are the ‘backbone of good working environments where people are industrious, ethical and accountable (Bhatnagar, 2007).

Twenge, Campbell, Hoffman and Lance (2010) found that engaged employees are deeply committed to their employer, leading to key improvements in business outcomes, including reductions in absenteeism turnover, shrinkage, safety incidents and product defects. Building a culture that enables employees to engage in their work, organizations may benefit from staffs that are willing to go the extra mile and achieve better financial performance. Bontis, Richards and Serenko (2011) Reported that 85 per cent of engaged employees plan on sticking around compared to 27 per cent of disengaged employees. Engaged employees are concerned about future of the company and they willingly invest their discretionary effort to work towards organizational success (Rutledge, 2009). For present study definition of employee engagement refers to an individual's involvement and satisfaction with as well as enthusiasm for work (Harter *et al.*, 2002).

Job design has impact on organizational performance and individual well-being (Campion, 1996). Work design tries to attain diverse objectives such as efficiency and satisfaction. Nature of work has an influence on subordinate work and provides insights into individual outcomes. Heckman and Lawler (1971) brought out how job characteristics are related to individual reactions to work. This led to job characteristics theory articulated by Heckman and Oldham (1971, 1975, 1976, and 1980). Job characteristics model proposes that the conditions under which individuals become internally motivated to perform effectively on their jobs and proposes five job characteristics; skill variety; task identity; task significance; autonomy and feedback. Job characteristics theory is a dominant approach though there are number of criticisms (Roberts and Glick,1981; Loher, Noe, Moller and Fitzgerald,1985). However, this approach found to establish majority of the relationships (Fried and Ferris, 1986). Brief and Weiss (2002) shows that, the model focuses on interaction among three classes of variables: (a) the psychological states of employees to motivate to perform;(b) the characteristics of job that create these psychological states and (c) the attributes of individual that determine how an employee will respond to the job.

Said and Munap (2010)suggested that the model has five core job dimensions affect certain personal and work related outcomes. Most research has supported the validity of the Job Characteristics (Mueller, Wallace and Price, 1992) as the degree to which a job requires a variety of different activities in carrying out the work that involved the use of a number of skills and talents of the employee. Coelho and Augusto (2010) noted that task identity on the feeling that the job is having an important effect and advisable thus motivating the employee to work smart. Bateman and Organ (1983) stated that autonomy is the degree to which a job provides freedom, independence and discretion to the employees in scheduling his or her work and in formative the procedures to be used in carrying it out. Brown (1996)posited that, it is the vertical expansion of responsibility, the amount of decision making and independence allowed for employee.

According to Coelho and Augusto, (2010) autonomy can motivate and enable employee to try new ideas and learn from consequences, and expend their domain- relevant skills (Cable and Rue, 2002).Research has shown that there is a significant relationship among the situational variables of autonomy, feedback, skill variety, task identity and task significance and job satisfaction (Diener, Oishi and Lucas, 2009). Job characteristics model of Hackman and Oldham (1975, 1976) which is studied in work design literature and Job Diagnostic Survey is adopted for present study.

A large number of studies have examined and attempted to replicate this five-factor structure (Birnbau, Farh, and Wong, 1986; Fried & Ferris, 1986; Griffin, Moorhead, Johnson and Chonko, 1980; Harvey, Billings & Nilan, 1985; Idaszak and Drasgow, 1987; Pierce *et al.*, 1979; Pokomey, Gilmore and Beehr, 1980). However, Dunham (1976) found that job complexity a single dimension was mostly represented. Dunham *et al.* (1977) found two-three-four and five factor solutions based on larger samples. One of the most important studies is by Green, Armenakis Marbert and Bedeian (1979), they found that the research addresses complex issues and it may not be possible to design a priori a factor structure. Researchers accept this observation and no apriori assumptions are made about the factor structure and factor structure need to be established based on the study.

If employees are highly engaged and jobs are designed to make them perform effectively, then working on such jobs may lead them to be happy (Diener, Tay and Oishi, 2013). Thus happiness is assumed to be a natural outcome of engagement. Happiness is deemed to be goal of life. Harter, Schmidt and Keyes (2003) regards that everyone has their own ideas about happiness and the good life. Gilbert (2011) posited that by using rating scales happiness can be measured. American Psychological Association research did indicate that people want contentment, love and happiness derived from meaningful work. Achor (2011) posited that thesingle greatest advantage in the modern economy is a happy and engaged workforce. A decade of research proves that happiness moves up business and

educational outcomes in addition to health and quality of life improvements. Luthans, Youssef, Sweetman, and Harms (2013) stated that happiness play role in leadership effectiveness. Frey and Stutzer (2002) stated those workplaces are more productive due to happiness of employees as it enhanced the decision making ability and reduced stress and uncertainty and further indicated that happy employees will have high level of job satisfaction. Bhattacharya (2014) also suggests that employees who are happy in their work are more likely to stay in the organization. Thus happy employees are also an indication that they are satisfied employees. Therefore, measurement of happiness is one the major thrust of the present research and there is paucity of information especially relating to millennials.

2. Methods

The purpose of this paper is to measure and relate Engagement, Job characteristics, and Happiness of millennials working in Information Technology. Gallup Work Analysis (Q¹²) The GWA is a 12-item measure of employee engagement using instrument and its validity and reliability is well established after being administered to more than seven million employees in 112 countries across cultures (Harter, Schmidt, Kallham and Asplund, 2006). However, most of the research focused on analysis of 12 item measure. These items postulated to have constructs relating to mission of organization, association with peer groups, role of immediate supervisor and job fit, thus there is need to explore these dimensions. Job Diagnostic Survey based on Job Characteristics Model (JCM) of Hackman and Oldham (1980) with revised items from Idnszak and Drasgow (1987) is adopted with fifteen statements to be ranked on a five point Likert scale. The scale is validated by different studies. The factor structure is questioned by different researcher and exploration of latent variables is undertaken for the present study. Happiness, which is a measure of subjective well-being, is measured by way of Oxford Happiness Questionnaire (OHQ) developed by Hills and Argyle (2002). It is an improvement over its predecessor Oxford Happiness Inventory (Argyle, Martin, & Crossland, 1989) was devised as a broad measure of personal happiness and its properties were appraised by Argyle, Martin, and Lu (1995). It consists of twenty-nine items that may be responded on a six-point Likert scale with twelve items being given reverse rating. This is to reduce the probability of contextual and compliant answering. The scale has been found to perform consistently across different cultures especially in UK (Furnham & Brewin, 1990) and USA (Valiant, 1993). However, its validity in the context of Indian environment is yet to be tested. Cross sectional study is conducted by way of questionnaires is obtained from eight hundred and fifty employees. Cronbach's alpha reliability scores for Q¹² (0.83), job characteristics Scale (0.92) and happiness index (0.91) indicating that there is high reliability for the measurement.

2.1. Objectives of the Study

1. Find demographic profile of millennials working in six Information Technology Majors.
2. Measure and find factor structure of Employee engagement, Job characteristics and Happiness.
3. Relate happiness to job characteristics and employee engagement for Millennials.

2.2. Data

The sample unit consists of the employees working on projects as Project manager, Technical leads, Senior software developer, Developer, Senior software engineer, Software engineer, Test manager, Test lead, Senior test engineer, Test engineer project associates and Project heads of information technology sector and residing in India. The promotion to higher levels is considered from this level and approximately 75% of the employee strength of any information technology organization is from this level. For the purpose of research, employees with a minimum of two years of experience in any of the IT majors in India are considered. List of employees from IT majors are obtained and employees more than 2 years' service of selected and listed and 2800 employees are randomly selected based on simple random sampling. Total 1040 responses are collected and 850 are found to be complete. The non response rate is 69%. There were more men (55.4%) than women (44.6%). The mean age of respondents is 26.89 years and work experience ranged from 2 years to 8 years. Different statements in each of the instruments are rated with the lowest agreement anchored in 1 and higher in 5. Bartlett, Kotrlik, and Higgins (2001) suggested suitable sample size calculation for scaled variables. For present research alpha level is set a priori at 0.05 and the level of acceptable error at 5%. The estimated standard deviation of the scale as 0.5. Cochran's sample size formula for categorical data is:

$$\text{Sample Size (n)} = \frac{t^2 p^2 q^2}{d^2}$$

$$n = (1.96)^2 (.5)^2 (.5)^2 / (0.05)^2 = 384$$

The value of 1.96 gives t-value for selected value of alpha level of .025 in each tail. (The alpha level of .05 indicates the degree of danger that the true margin of error may exceed the acceptable tolerance of error); (p) (q) that is an estimation of variance equal to 0.25. Where d is the acceptable margin of error of proportion being estimated equal to .05 and it is the error that the researcher is willing to accept. However, to increase the validity and reliability eight hundred and fifty samples are collected.

3. Results

3.1. Demographic Characteristics of Respondents

Demographic attributes indicate that majority of the respondents (79.6%) are below 29 years with qualified Engineering Graduates (49.6%) and MCA (25.8%) forming part of the large workforce. The average income levels range from 3 to 4 lakhs (43.2%). Majority of Respondents (53.8%) are having three or less than three years of experience and 18% of the respondents have more than 8 years of experience.

Location	Chennai (TamilNadu)	850 (100%)	
Gender	Male	471(55.4)	
	Female	379 (44.6)	
Age	24-25	84 (9.9)	
	26-27	319 (37.5)	
	28-29	274 (32.2)	
Mean (26.89)	30-31	169 (19.9)	
Median (27.00)	34+	4 (.5)	
Standard Deviation (1.949)	BE	422(49.6)	
Educational Qualification	BBA	41 (4.8)	
	BBM	11 (1.3)	
	BSc	14 (1.6)	
	ME	79 (9.3)	
	MBA	12 (1.4)	
	MCA	219 (25.8)	
	MSc	52 (6.1)	
	Designation	Project Manager	3 (0.4)
		Technical Leads	230 (27.1)
Senior Software Developer		63 (7.4)	
Developer		226 (26.6)	
Senior Software Engineer		12 (1.4)	
Software Engineer		50 (5.9)	
Test Manager		7 (0.8)	
Test Leads		84 (9.9)	
Senior Test Engineer		142 (16.7)	
Test Engineer		33 (3.9)	
Income		3 lakhs – 4 lakhs	367 (43.2)
		4 lakhs – 5 lakhs	173 (20.4)
	5 lakhs – 6 lakhs	105 (12.4)	
	More than 6 lakhs	205 (20.1)	
Experience	2 – 3 years	457 (53.8)	
	4 – 5 years	210 (24.7)	
	6 – 7 years	30 (3.5)	
	8 +	153 (18.0)	

Table 1: Demographic Characteristic of Respondents

3.2. Employee Engagement

The employee engagement is measure through Gallup Instrument using a 5-point scaling technique with five anchored to extremely satisfied while first anchor to extremely dissatisfied. There are 12 items the data is subjected to factor analysis for data reduction. The Kaisen-Meyer-Olkin and Bartlett's test indicate the p value is less than 0.05 and sample adequacy equals to 0.661 indicating that factor analysis is appropriate for present study. Factor analysis with varimax rotation having Eigen value more than 1 explained 77.72% of the variation in the data. Factor loading greater than 0.40 is selected for each factor and appropriate nomenclature is arrived.

Factor Loading	Factors	Factor Name	Cronbach's Alpha	Eigen Value	Percentage of Variance
Factor 1					
.857	There is someone at work who Encourages my development	Self-worth	.702	.528	4.403
.768	This last year, I have had opportunities at work to learn and grow	realized through peers and mission of organization	.825	.073	.607
.731	The mission/purpose of my company makes me feel my job is important.		.707	.277	2.307
.725	At work my opinions seem to count		.701	.405	3.373
Factor 2					
.907	I have a best friend at work	Association with	.740	.189	1.575
.857	In the last six months, someone at work has talked to me about my progress	quality conscious peers	.722	.131	1.094
.801	My associates (fellow employees) are Committed to doing quality work		.704	.247	2.062
Factor 3					
.853	My supervisor or someone at work seems to care about me as a person	Consideration, warmth and	.710	.823	6.857
.846	In the last seven days, I have received recognition or praise for doing good work	recognition by immediate supervisor	.722	1.094	9.114
.548	At work, do you have the opportunity to do what I do best every day?		.690	1.227	10.223
Factor 4					
.915	I know what is expected of me at Work		.716	4.656	38.803
.841	I have the materials and equipment I need to do my work right.	Right fit	.708	2.350	19.582

Table 2: Identification of constructs of employee engagement using factor analysis

Four constructs are identified and they are given the following nomenclature.

1. Self-worth realized through peers and mission of organization
2. Association with high quality conscious peers.
3. Consideration and warmth and recognition by immediate supervisor.
4. Right Fit.

3.3. Identification of categories of employee engagement

The data is further analyzed to find the high, medium and lowly engaged employees, if such groups are existing. K-means clustering is used to find existence of groups and 3 groups are identified.

It may be discerned that the first group may be called as low employee engagement as they have scored many of 3's for different items. The second group is highest scoring of 5 in two items; I have the materials and equipment I need to do my work right and this last year; I have had opportunities at work to learn and grow, while 4 for all items. The third group scored uniformly the same value of 4 across all the items and may be called as moderately engaged employees.

Items	Employee Engagement Groups		
	Low Engagement (Group 1)	Moderately engaged having resources & opportunity to learn (Group2)	Moderately Engaged (Group3)
I know what is expected of me at work.	4	4	4
I have the materials and equipment I need to do my work right.	4	5	4
At work, do you have the opportunity to do what I do best every day?	3	4	4
In the last seven days, I have received recognition or praise for doing good work	3	4	4
My supervisor, or someone at work, seems to care about me as a person	4	4	4
There is someone at work who encourages my development	3	4	4
There is someone at work who encourages my development	3	4	4
The mission/purpose of my company makes me feel my job is important.	3	4	4
My associates (fellow employees) are committed to doing quality Work.	3	4	4
I have a best friend at work.	3	4	4
In the last six months, someone at work has talked to me about my progress	4	4	4
This last year, I have had opportunities at work to learn and grow	3	5	4

Table 3: K-means Cluster Analysis to identify engagement groups among respondents

Employee Engagement Groups	No. of employees	Percentage
Low Engaged Employees (Group 1)	151	17.76
Moderately engaged having resources and opportunity to learn (Group2)	313	36.82
Moderate Engaged Employees (Group 3)	386	45.42
Total	850	100

Table 4: Number of respondents at different Levels of employee engagement

Majority of the respondents (45.5%) are having moderate employee engagement. However, there are (36.82%) of respondents moderately engaged with having resources and opportunity to learn and grow and less number (17.76%) of the employees has low engagement. The results indicate that moderate engagement with having resources to perform and opportunity to learn is the only distinguishing factor for the group 2 from that of the group 3. High engagement across all twelve items is not observed indicating that there is a need for improvement in employee engagement. The employee engagement groups are further subjected to discriminant analysis with respect different demographic variables such as gender, marital status, age, qualifications, designation and present salary.

	Wilks' Lambda	F	df1	df2	Sig.
Gender	.997	1.088	2	847	.337
Marital Status	.992	3.225	2	847	.040
Age	.963	16.280	2	847	.000
Qualification	.999	.229	2	847	.795
Designation	.905	44.398	2	847	.000
Present Salary	.939	27.680	2	847	.000

Table 5: Discriminant Analysis of Different Demographic Variables with Respect to Engagement of Respondents

It has been observed gender and qualification are not statistically significant. Marital status, age, designation and salary are the variables that are likely to impact employee engagement status. Designation has an impact on the engagement status indicating that promotions and diligently designed designations are likely to have an impact on the engagement. A significant outcome of the study is the role of salary as a factor that is likely to impact engagement status.

3.4. Employee Income and Employee Engagement

Salary is categorized into four groups. Which salary group is likely to be more engaged? The employee engagement groups are analyzed using multi-dimensional scaling with respect to income.

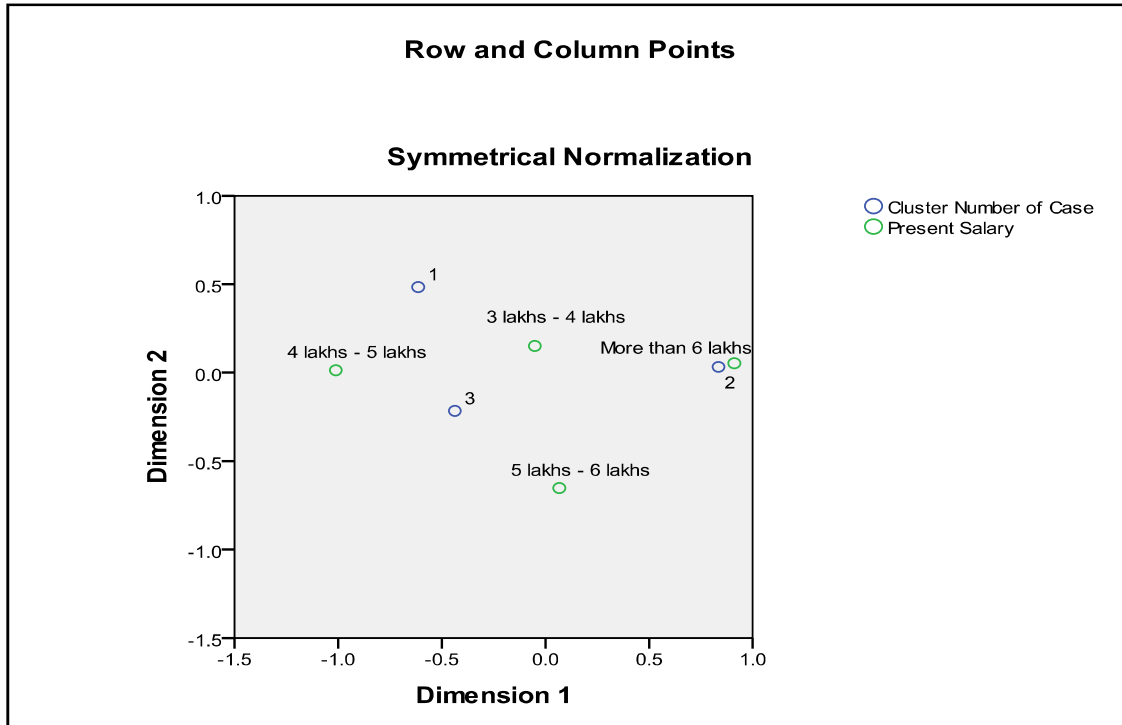


Figure 1

It is observed that higher income group of more than six lakhs per annum is spatially near cluster 2 representing moderately engaged having resources and opportunity to learn. Thus higher income is likely to play a role in employee engagement.

3.5. Job Diagnostic Survey

Hackman & Oldham Instrument consists of fifteen items and the data is subjected to factor analysis for data reduction. The Kaiser-Meyer-Olkin and Bartlett's test indicate the p value is less than 0.05 and sample adequacy equals to 0.682 indicating that factor analysis is appropriate for present study.

Factor analysis with varimax rotation having Eigen value greater than one is selected for each factor and appropriate nomenclature is arrived.

Factor Loading	Factors	Factor Name	Cronbach's Alpha	Eigen Value	Percentage of Variance
	Factor 1	Autonomy			
0.843	How much variety is there in your job?		0.879	8.003	50.02
	That is, to what extent does the job require you to do many different things at work, using a variety of your skills and talents?				
0.771	Respect from the people you work with		0.876	2.018	12.613
	In general, how significant or important in your job? That is, are the results of your work likely to significantly affected the lives or well-being of other people?				
0.769	Job Security		0.875	1.63	10.189
0.701	Training and Development opportunities		0.872	1.094	6.839
0.692	More freedom and opportunities		0.868	0.891	5.572
0.664	Praise from your supervisor		0.873	0.666	4.163
0.648	There is someone at work who encourages my development. To what extent does doing the job itself provide you with information about your work performance?		0.87	0.484	3.026
0.647	That is, does the actual work itself provide clues about how well you are doing aside from any "feedback" co-workers or	0.873	0.354	2.214	

	supervisors may provide?				
	Factor 2				
0.845	Some form of public recognition (e.g. employee of the month).	Mastery	0.879	0.237	1.484
0.819	To what extent does your job involve doing a “whole” and identifiable piece of work? That is, is the job a complete piece of work that has an obvious beginning and end? or is it only a small part of the overall piece of work, which is completed by other people or by automatic machines?		0.875	0.15	0.937
0.782	To what extent do managers or co-workers let you know how well you are doing on your job?		0.871	0.138	0.862
0.781	A reward or token of appreciation (e.g. lunch).		0.872	0.129	0.808
0.622	More challenging work assignments		0.871	0.1	0.624
	Factor 3				
0.921	A Promotion	Purpose	0.882	0.053	0.333
0.881	A Pay raise		0.879	0.017	0.21

Table 6: Identification of constructs of job characteristics of respondents using factor analysis
 Source: Based on Hackman and Oldham (1980) instrument with revised items from Idaszak and Drasgow (1987)

Autonomy, mastery and purpose by way of material gain are the most important factors that are preferred by the millennials. The following definitions are derived from the observation of the research.

Autonomy refers to “experience of responsibility for outcomes of work with authority to do variety of tasks and being respected by peers and immediate supervisor”. This definition stretches the general definition by including need for acknowledgement by peers and immediate supervisor. Mastery is referred as ability to perform whole task with challenging assignments work assignments to prove one. Purpose is referred in the sense of material gain to obtain pay rise and promotion.

Hackman and Oldham model (1976) posited core job dimensions consisting of 5 constructs; Skill variety; task identity; task significant; autonomy and feedback. These core job dimensions indicated three critical psychological states. Skill variety, task Identity and task significance giving raise to experience meaningfulness of the work, among giving risk to experience responsibility of the outcomes of the work and feedback leading to knowledge of the actual results of the work activities.

However, the results about millennials have only three constructs in the job. This indicates that millennials have different job design requirements.

Job Characteristics groups	Number of employees	Percentage	Cumulative Percentage
Low on Job Characteristics	414	48.70%	44.47%
Moderate on Job Characteristics with lower scores on purpose	436	51.3%	
Total	850	100	100%

Table 7: Number of respondents at different levels of job characteristics

The job characteristics responses are further subjected K-Means Clustering. There are two distinct groups with low scores with 3 for all items and 4 for all items are identified and majority (51.3%) is moderate on job characteristics with (48.70%) having lower scores.

3.6. Happiness Index

There are twenty-nine items and twelve items are reversing scored. The reverse scores are changed and the total scores are aggregated and divided by 29 to arrive at the average. The average is scored according the scale given by Hills and Argyle, 2002 and the following table is obtained.

Happiness States	Frequency	Percent	Cumulative Percentage
Not happy	3	4	4
Somewhat unhappy	19	2.2	2.6
Not particularly happy or unhappy	300	35.3	37.9
Rather happy, Pretty happy	416	48.9	86.8
Very happy	87	10.2	97.1
Very happy	25	2.9	100.0
Total	850	100.0	

Table 8: Classification of respondents according to Happiness

The given table indicates 60% of respondents are rather happy, pretty happy, very happy & too happy Furthermore 37.9% of respondents are not particularly happy or unhappy indicating that a considerable segment of employees is ambivalent towards happiness.

3.7. Factor Composition of Employee Happiness

The output of factor analysis of twenty-nine items scale (Hills and Argyle, 2002) is used to measure happiness of the respondents the highest value of six is anchored to strongly agree and one anchored to strongly disagree is given in the table 10. The Kaiser-Meyer-Olkin and Bartlett's test stated that the p value is less than 0.05 and sample adequacy equals to 0.714 indicating that factor analysis is appropriate for present study. Factor analysis with varimax rotation having Eigen value greater than 83.68% is selected for each factor an appropriate nomenclature is arrived. All the factors are tested on the literature review.

Factor Loading	Factors	Factor Name	Cronbach's Alpha	Eigen Value	Percentage of Variance
	Factor 1				
.923	I have particularly happy memories of the past	Well balanced	.886	9.866	34.020
.916	I feel particularly healthy		.886	6.472	22.317
.842	I have sense of meaning and purpose in my life		.887	2.350	8.103
.818	I am in control of my life		.886	1.828	6.302
.787	I find it make my decision		.881	1.449	4.996
.776	I look attractive		.897	1.178	4.063
.734	World is a good place		.887	1.127	3.888
.705	I have fun with others		.888	.812	2.801
.695	I don't feel like there is a gap between what I would like to do and what I have done		.892	.753	2.597
	Factor 2				
.840	I usually have a good influence on events	Commitment and Involvement	.891	.619	2.135
.785	I am always committed and involved		.886	.600	2.070
.772	I always have a cheerful effect on others		.885	.364	1.255
.715	I feel I have a great deal of energy		.885	.305	1.052
.692	I find beauty in some things		.886	.236	.814
	Factor 3				
.844	I feel able to take anything on	Enjoy being in control			
.774	I often experience joy & elation				
.744	I can fit in (find time for) everything I want to				
.642	I am well satisfied everything about in my life				
	Factor 4				
.881	I am intensely interested in other people	Empathy	.885	.104	.358
.789	I feel that life is very rewarding		.901	.075	.258
.718	I have very warm feelings towards almost everyone		.885	.052	.181
	Factor 5				
.803	I do feel particularly pleased with the way I am	Self-fulfilling	.882	.048	.165
.557	I wake up feeling rested		.885	.034	.116
.519	I find most things amusing		.885	.029	.101
.453	I am very happy		.887	.026	.088
	Factor 6				
.905	Life is good	Alertness	.886	.014	.047
.858	I feel fully mentally alert		.886	.012	.042
	Factor 7				
.754	I laugh a lot	Optimism	.883	.010	.033
.492	I am particularly optimistic about the future		.884	.007	.025

Table 9: Factor analysis of Employee Happiness

Happiness factor structure based on Oxford Happiness Index indicates well-balanced, commitment and Involvement; enjoy being in control; self-fulfilling & alertness and optimism as the factors. Ryff (1989) study on factor structure indicated self-acceptance, positive relations with others, autonomy, environmental mastery, purpose in life, and personal growth regarding happiness. Linley, Maltby, Wood, Osborne, & Hurling, (2009) study on factor structure according to different scales indicated similar structure To find the association of employee happiness and employee engagement, and job characteristics groups the following hypotheses are designed.

H₀₁: The employee engagement groups and employee happiness groups are independent.

H₀₂: The employee engagement groups and job characteristics groups are independent.

Happiness Profile	Low engaged	Moderately engaged having resources and opportunity to learn	Moderately engaged	Total
Not happy	3	0	0	3
Somewhat unhappy	7	8	4	19
Not particularly happy or unhappy	93	146	61	300
Rather happy, Pretty happy	48	82	286	416
Very happy	0	52	35	87
Very happy	0	25	0	25
Very happy	151	313	386	850
Total				

5 cells (27.8%) have expected count less than 5. The minimum expected count is .53.

Table 10: Employee happiness groups and employee engagement groups among respondents

Chi-square test indicate χ^2 (df = 8, N=850 P=.000 at .05 significance level) the rejection of null hypothesis. It may be considered that happiness and employee engagement are associated.

Job characteristics Profile	Not happy	Somewhat unhappy	Not Particularly happy or unhappy	Rather happy: Pretty happy	Very happy	Too happy	Total	Percentage
Lower Job characteristics Group 1	3	4	147	221	39	0	414	49
Higher job characteristics Group 2	0	15	153	195	48	25	436	51
Total	3	19	300	416	87	25	850	100

a. 2 cells (16.7%) have expected count less than 5. The minimum expected count is 1.46

Table 11: Job Characteristics groups and Happiness profile of respondents

Chi-square test indicate χ^2 (df = 8, N=850 P=.000 at .05 significance level) the rejection of null hypothesis. It may be considered that happiness and employee Job characteristics are associated. It may be discerned that happiness and job characteristics are statistically dependent.

3.8. Discussion

This study is an exploratory study on measures of engagement, job characteristics and happiness and explores their relationship among millennials in major information technology organizations. The Indian IT industry is on a high momentum path. Growth, however, has come with its own set of challenges. Chief among them relates to attrition of skilled manpower resources. Employee engagement of millennials indicates; self-worth being nurtured by organization mission is to be acknowledged by the peers; wish to associate with high quality peers is uniquely dimension; role of immediate supervisor to be considerate, show warmth and recognition and right fit to the job are the key aspects. These inferences are supported by (Gilson and Harter, 2004; Piccolo and Colquitt, 2006) and appropriate job fit (Kristof, 1996). Association with quality conscious peers is one of the key finding that is unique to millennials, indicating that the association is likely to improve engagement and human resource policies need to create an environment where employees with lower quality conscious may not only perform poorly and impede performance of others. The expectation of job fit that takes into consideration the requirements and provide resources for effective performance of job is likely to improve engagement. However, high employee engagement is absent indicating need for improvement. Opportunity to learn and grow and having resources to perform tasks distinguishing factors the higher employee engagement. Gender and qualification are found to have no impact on the employee engagement. However, age, marital status, designation and salary are found to be that are likely to impact employee engagement. Higher income is likely to lead to higher employee engagement. Regarding job characteristics while the original model suggested has five core job dimensions, millennials job characteristics are illustrated by autonomy, mastery and purpose anchored in material benefits. The purpose of millennials is likely to relate to remuneration and promotion. One third of employees are neither happy non unhappy indicating that there is needed to address the issue of happiness as it may be one of the causes of attrition that requiring

further study. Well-balanced, commitment and Involvement; enjoy being in control; empathy; self-fulfilling & alertness; and optimism are the factors considered to be structure of happiness. There is a statistically significant relationship between employee happiness, employee engagement and job characteristics.

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