

Factors Influencing Faculty Engagement in Technology and Management Institutions in Chennai

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Abstract:

The factors which influence the faculty engagement are always diverse in nature. The feel good factor of a faculty about their effective engagement is significantly impacted by the institution's culture, inclusivity and support. A leader can be at his best when he encourages collaboration and pay heed to the input from the faculty. The involvement of faculty during any decision making drills can improve the commitment and garners sense of ownership thereby creating an environment of shared governance. A faculty with clear cut directions, clarity about their role in the system and limitations about the workspace can prevent them from getting frustrated and disengaged. A faculty with the liberty of accepting opportunities for self-growth and professional upgradation of skills will motivate them towards achieving more. In order to avoid stress and stay focussed at work, a faculty should maintain a comfortable work and personal life balance. To keep the faculty motivated, recognition and rewards has to be offered which may be concrete or abstract. A mutually respectable collegial environment offers healthy collaboration and support thereby enhancing the engagement. To excel in teaching and continuing research one must be provided with adequate resources and facilities. Constructive feedback will always garner the faculty's attention towards work and also it maintains a proper communication channel. An environment where job security is not a concern until the commitment is met, make a faculty to invest more time and work effectively towards the goal. Their commitment will create a positive impact on the students which in turn drives their commitment further. When the faculty member is having adequate knowledge about the institution's mission and values, then all efforts will focussed be in a single direction. With proper challenges and tasks assigned a faculty can always be enjoying the challenges upfront and gets stimulated towards completing it. The institutions should not hesitate on investing to improve the facilities required for research and teaching. In special cases based on individual's needs, a flexible arrangement can be made temporarily or permanently without affecting the ethics and policies. More to it, involvement in community initiatives makes a faculty to be a better individual of all sorts. Granting decision-making autonomy empowers faculty, reinforcing their dedication. In sum, faculty engagement thrives when these intertwined factors converge to create an environment that values, supports, and recognizes their contributions. An engaged faculty in technology and management institutes shows an extraordinary commitment and connection in their work. For faculty teaching is highly commitment than that of compliance. Very particular needs to be evaluated is that the factors influence the behaviour of faculty members which drives them to ensure high commitment and involvement. This paper drives highly into analysis of many factors that engages the faculties of technology and management institutions in such a way that improves the performance of faculty therefore it also reflects upon students' overall development.

Key words: Faculty engagement, Technology and Management Education, students' Overall performance.

Introduction:

Employee engagement, a crucial surface of organizational dynamics, comprehends the emotional commitment and outlay that employees express towards their work and the organization. It goes beyond mere job satisfaction, probing into the depth of an employee's loyalty, passion, and alliance with the company's goals. In today's competitive business setting, where talent retention and performance optimization are predominant, furthering employee engagement has emerged as a strategic imperative.

Engaged employees are capable of providing prolonged efforts, yields better productivity, and contribute healthily towards workplace culture. Faculty engagement is acquired thorough the combination of below factors which includes significant work, a supportive collegial environment, active communication, recognition and rewards. If an organisation prefers and maintains healthy employee engagement can reap increased employee retention, elevated performance and a healthy work culture.

Faculty engagement signifies the active involvement, commitment, and enthusiasm of academic staff within an educational institution. It encompasses their emotional investment in teaching, research, and institutional advancement. A positive institutional culture, clear communication, recognition of achievements, opportunities for professional growth, and alignment with the institution's mission are pivotal factors that contribute to faculty engagement. When these elements converge, they foster an environment where faculty members are motivated to excel, resulting in enhanced educational quality and institutional success.

Literature Review:

It is evident that over a decade the employee engagement from scholar and practitioners gathered all attention as evidenced by studies such as those by Kahn (1990), Schaufeli and Baker (2004), Shuck and Wollard (2010), and Saks and Gruman (2014). In countries like China, Finland and Greece the research is initiated earlier, followed by Spain, South Africa, the Netherlands, Portugal, and Thailand (Schaufeli et al., 2002; Strom & Rothmann, 2003; Schaufeli & Bakker, 2003; Yi-Wen & Yi-Qun, 2005; Rurkkhum, 2010; Xanthopoulos et al., 2012). Despite wide research and thorough study there is no consensus acquired among academicians or practitioners regarding the precise and confined definition for employee engagement is achieved.

Alexander C. McCormick: The research conducted by McCormick on faculty engagement in higher education, relating the students' performance metrics with the faculty teaching practices, elaborates the implications of faculty engagement over student engagement and their learning experiences.

Karen M. Whitney: The research by Whitney analyses the faculty engagement influenced by the factors such as organisational behaviour and leadership. She explores the role of leadership, communication, and institutional culture in shaping the level of engagement among faculty members.

KerryAnn O'Meara: O'Meara is known for her work on faculty development and engagement. The overall satisfaction and faculty engagement is related to the professional growth and monitoring .

Adrianna Kezar: Kezar's research focuses on higher education organizational change and leadership. She explores how institutional practices, policies, and leadership strategies impact faculty engagement, especially in the context of academic reform.

Elliott Shore: Shore's work in faculty engagement emphasizes the relationship between faculty and the broader institutional context. He often discusses how faculty involvement in decision-making processes, governance, and institutional leadership influences their level of engagement.

Marsh and Hattie: (2002) investigated the relationship between research productivity and teaching effectiveness. Their research revealed that faculty members' institutional experience and student learning outcomes have an impact on both teaching and research. However, they did not explicitly define the role of faculty members within the institution.

Paul D. Umbach and Mathew R in their work 'faculty matters to the core: the role of educational faculty in student learning and engagement' and examined the impact of faculty behaviour and its influence and interaction on student learning. They talked about faculty behaviour but not about faculty engagement.

Recently, the concept of employee engagement has become very popular with scholars and practitioners. **Although Saks (2006)** notes a continued lack of academic literature on the topic, numerous studies have been conducted by practitioners and consultants. This disparity between practitioner-driven and academic research has led to considerable confusion regarding the definition of employee engagement, resulting in multiple interpretations of the term. **Kahn (1990)**, one of the early theorists in this field, defined employee engagement as a combination of physical, cognitive, and emotional attachment to job roles—a concept that remains foundational in understanding employee engagement today. When referring to faculty commitment, the author is specifically addressing the commitment of faculty members to their work and/or organization, with this research focusing solely on organizational commitment.

Teachers of technology and management institutes are expected to engage in teaching, research and administrative services to their organization. The proportions of the three aforementioned activities vary by institution and discipline, but all faculties work in a combination of these three fields. In this research, the author investigated various factors that influence the commitment of technology and management faculty to their organizations.

Research Gap and Importance of Study

Only few research on faculty engagement have done so far. Throughout the period teaching and research has progressed as important responsibilities of the faculties. The collective Opinion was that faculty those who were highly involved and committed towards teaching engages students that will reflect in students' overall development, but it's not as said. The further research on faculty performance and its influencing factors must be analysed in the future and their relationship with students learning outcome. To answer all the above needs vastly fresh answer as well as orthodox model must be framed.

Objective of the Study:

1. The core objective of the research is to analyse multiple factors influencing faculty engagement of technology and management institutes and its impact on students development.
2. To construct a framework for faculty engagement based on the various employee engagement factors.

Research Methodology:

The methods adopted here to better understand the factors influencing faculty engagement and its impact on students' performance have been tested by having six strong factors using employee engagement model and the same been tested using 190 faculties of technology and management in Chennai were asked to fill questionnaires within which 150 were considered as valid. Respondents were selected by using nonprobability convenience sampling technique from three

management and five technology institutes in Chennai. The total time taken for data collection was almost nine weeks. The results were analysed using ranking correlations methods.

Data Analysis and Outcomes:

The first objective is to determine the diverse factors that contribute to faculty engagement of Technology and Management Institute. In this perspective, one of the most important factors in determining faculty engagement is the work acumen. It is a multi-faceted arrangement that focuses on employees' engagement, work acumen, performance management, institute practices, brand value and leadership.

A systematic reduction is critical for obtaining a consistent and unbiased estimate on a unit of sample. To achieve this goal, the researcher used exploratory factor analysis to obtain the results. The twenty-eight variables of the faculty engagement are subjected to factor analysis using the principal component method and varimax rotation. This method is used to reduce the variables to the most important ones. The data reduction procedure is based on the association of likelihood variables with high correlation coefficients.

The Kaiser-Meyer-Olkin (KMO) test determines whether data is suitable for factor analysis. It assesses the adequacy of sampling for each variable. For a satisfactory factor analysis to proceed, the KMO measure should be greater than 0.7. The Sphericity Bartlett test determines whether or not the variables are sufficiently correlated. To demonstrate that the variables are valid and fit for a factor analysis, this test should have a significance level of 0.05. Otherwise, it is not suitable for factor analysis.

Table-A KMO and Bartlett's test for factors that influence the work environment		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.951
Bartlett's Test of Sphericity	Approx. Chi-Square	15660.125
	Df	946
	Sig.	.000*

*Significant at 5% level of significance

Source: Computed data

Ks

According to table-A, the Kaiser-Meyer-Olkin measure of sampling adequacy is 0.951. Because it falls between 0.90 and 1.00, the value of the result is considered good. With 946 degrees of freedom, the appropriate chi-square value for Bartlett's Test of Sphericity is 15660.125. Bartlett's test of sphericity has a significance level of less than 0.05 and is statistically significant at the 5% level. This means that all twenty-eight variables have a normal distribution.

The extent to which a variable correlates with other variables is explained by communalities. Higher communalities, i.e. greater than 0.5, are preferable and will be considered for further analysis. If a variable has a small co-efficient of less than 0.5, it was ignored. This results in the validation of individual variance, as shown in table 4.3.

Table B Communalities for factors that influence faculty engagement		
Factors	Initial	Extraction
Happy with the pay	1.000	.699
Excited about the benefits	1.000	.764
Highly happy with work environment	1.000	.620
Highly balanced both work and personal life	1.000	.762
Feel good being secured and highly appreciated	1.000	.587
Complete my task time with given resources	1.000	.613
Accomplish the target within stipulated time with support	1.000	.741
Highly empowered on my job	1.000	.641
Autonomy to decide my task and job	1.000	.795
Highly happy with colleagues doing collaborative work	1.000	.642
Time and facility to do R&D work	1.000	.601
Satisfied with career growth	1.000	.662
Scope for Learning and Development	1.000	.587
Highly happy the way, my performance been appraised	1.000	.689
Satisfied with employer and employee relationship	1.000	.513
Highly happy and satisfied with rewards and recognition	1.000	.644
Treated well and connected with people	1.000	.715
Timely information I receive	1.000	.675
Effective and Efficient Staffing Process	1.000	.580
High level of Talent calibration	1.000	.656

Enough Infrastructure and Resources	1.000	.778
Transparency and clarity	1.000	.615
Reputation	1.000	.691
High Employee value proposition	1.000	.657
High CSR initiatives	1.000	.653
Accessibility and Direction	1.000	.539
Clear Vision and Mission	1.000	.755
High Code of Conduct	1.000	.669
Extraction Method: Principal Component Analysis.		

Source: Computed Data

From table-c, it is found that twenty-eight variables are in the range from 0.513 to 0.795. This shows that the twenty-eight variables possess the variance ranging from 51.3% to 79.5%, which is statistically significant to form the predominant factors.

The number of extracted factors with eigenvalues greater than one is represented by eigenvalues. When the eigenvalue is less than one, it indicates that the component scores are unreliable. Table-c summarises the findings.

Table-C Total variance explained of factors that influence faculty engagement

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	15.821	35.957	35.957	15.821	35.957	35.957		11.353	11.353
2	2.359	5.360	41.318	2.359	5.360	41.318	3.903	8.871	20.224
3	1.684	3.827	45.145	1.684	3.827	45.145	3.548	8.063	28.287
4	1.668	3.791	48.937	1.668	3.791	48.937	3.277	7.449	35.736
5	1.441	3.275	52.211	1.441	3.275	52.211	3.247	7.379	43.114
6	1.369	3.111	55.322	1.369	3.111	55.322	2.787	6.335	49.449
7	1.209	2.748	58.070	1.209	2.748	58.070	2.516	5.718	55.167
8	1.183	2.688	60.758	1.183	2.688	60.758	2.460	5.591	60.758

Extraction Method: Principal Component Analysis.

Source: Computed Data

From table-c, we see that eight predominant factors whose eigen value is greater than 1 accounts for 60.758%. It can be noted that twenty-eight variables are reduced into eight predominant factors with cumulative variance of 35.957 %, 41.318 %, 45.145 %, 48.937%, 52.211 %, 55.322 %, 58.070 % and 60.758%. After the extraction, the twenty-eight variables are loaded into eight predominant factors that are stated in the rotated component matrix.

Friedman’s Test

Faculty Engagement	Mean	S.D	Mean Rank	Reliability
Happy with the pay	3.5429	1.15908	14.74	0.877
Excited about the benefits	4.1571	.78906	18.31	
Highly happy with work environment	3.8429	1.28786	16.96	
Highly balanced both work and personal life	2.3857	1.52950	9.34	
Feel good being secured and highly appreciated	2.9571	1.19273	11.59	
Complete my task time with given resources	4.1571	.78906	18.31	
Accomplish the target within stipulated time with support	3.8429	1.28786	16.96	
Highly empowered on my job	2.3857	1.52950	9.34	
Autonomy to decide my task and job	3.5429	1.15908	14.74	
Happy with colleagues doing collaborative work	4.1571	.78906	18.31	
Time and facility to do R&D work	3.8429	1.28786	16.96	
Satisfied with career growth	2.3857	1.52950	9.34	
Scope for Learning and Development	2.9571	1.19273	11.59	
Highly happy the way, my performance been appraised	4.1571	.78906	18.31	
Satisfied with employer and employee relationship	3.8429	1.28786	16.96	

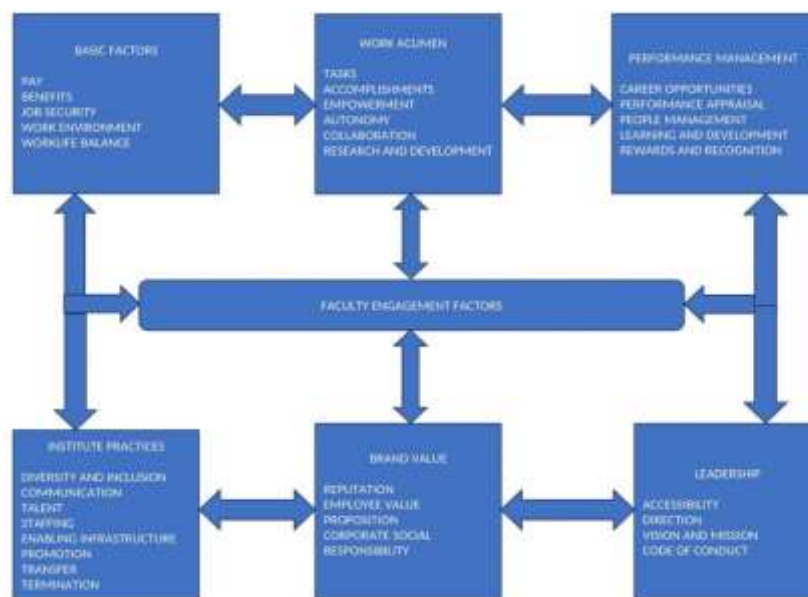
Highly happy and satisfied with rewards and recognition	2.3857	1.52950	9.34
Treated well and connected with people	3.5429	1.15908	14.74
Timely information I receive	4.1571	.78906	18.31
Effective and Efficient Staffing Process	3.8429	1.28786	16.96
High level of Talent calibration	2.3857	1.52950	9.34
Enough Infrastructure and Resources	2.9571	1.19273	11.59
Transparency and clarity	4.1571	.78906	18.31
Reputation	3.8429	1.28786	16.96
High Employee value proposition	2.3857	1.52950	9.34
High CSR initiatives	3.5429	1.15908	14.74
Accessibility and Direction	4.1571	.78906	18.31
Clear Vision and Mission	3.8429	1.28786	16.96
High Code of Conduct	2.3857	1.52950	9.34

Findings and Result Analysis:

To identify the factor which is more influencing the respondents towards faculty engagement the Friedman’s test analysis has been used and the results have been presented in the Table. Most of the respondents have given Highest rank to the following factors that influence faculty engagement as follows the foremost factors have given specifically – 1. excited about the benefits, 2. Complete the task within time by given resources, 3. Highly happy with colleagues doing collaborative work, 4. Highly happy the way, my performance been appraised, 5. Timely information which they receive, and 6. Transparency and clarity and Accessibility and Direction.

The identified factors having the high potential influence on the faculty engagement in the Technology and Management institutions can be shown as the figure -1

The Proposed Model for Faculty EngagementFigure - 1



Conclusion

This study understands the importance of Teaching faculty and their involvement in the teaching and learning process that contributes the wholistic development of an individual student which in turn builds nations. Hence the paper investigates various identified factors given above in the proposed model have high influence on faculty engagement in technical and management institutes in Chennai.

The study aims at a very qualitative and relative aspects of faculty engagement in the Technical and Management Institutions. It is very clear that this research study has come to the result and given a new proposed model keeping in place various earlier models and methodologies to understand influencing factors earlier. The Researcher do not claiming the proposed model as the best one as the area is very relative, but still it can elicit us a relatively clear choice to understand the fact of better faculty engagement in the near future.

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