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Analysis of Employee-Employer Relationship in Private Education Institutions: A Case Study of Technical Institutions in Madhya Pradesh (Part – II)

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Abstract **– In this paper the problem is to ascertain various facets of employee-employer relationship that can play vital role in uplifting status of technical education in Madhya Pradesh in Private sectors. For this factors responsible for attrition rate and factors missing in current job are discussed and final findings are presented that can be considered for further progress.**

Keywords **– Employee, Employer, Relationship, Private Education Institutions.**

I. INTRODUCTION

There is high interest for technical education in present time of science and innovation (Mitra, 2014). Technical Education spreads information of particular trade, craft or profession. Technical Education can full fill the needs of a growing society. In our everyday life, the impact of science and innovation is turning out to be so extensive that it appears that man mind is essentially endless. This is the reason, to prepare young generation according to the time's need, hence training must be redesigned to give essential, practical and technical foundation. Such education alone can produce the requisite specialty for making and operating the modern machines (Mitra, 2014).

Research Framework for the study has been proposed in the paper which led to development of base for identifying and analysing research objectives, led to survey development and data collection and finally the tools are describe which is used for data analysis purpose.

II. LITERATURE REVIEW

There have been certain noted contributions in the field of employee-employer relationship and their satisfaction towards an organization. Attrition rate and employee satisfaction are quite important and topical.

An employee-employer relationship has been identified through employee involvement rewards, and employee satisfaction by (Kanungo, 1992; Mohrman, Lawler & Ledford1996; Mottaz, 1988; Price & Mueller, 1986; Rusbult & Farrell, 1983; Mueller and Lawler 1996).

Scott, Bishop and Chen (2003) indicated that participatory initiatives in organizations have stimulated employee involvement, increased flexibility and autonomy, and causally increased employee satisfaction. These relationships are consistent with several other studies (Cohen, Ledford & Spreitzer, 1996; Cordery, Mueller & Smith, 1991; Harris, 1992; Manz & Sims, 1987; Versteeg, 1990).

Locke and Schweiger (1979) also determined these rela--tions in term of employee participation indecision-making. Other relationships affecting employee satisfaction includes job participation (Griffeth, 1985), job enrichment (Wall, Corbett, Martin, Clegg & Jackson, 1990), and participative management (Fried, 1991; Fried & Ferris, 1987; Hackman & Oldham, 1980; Spector, 1997).

A study performed by (Anne and Gronholdt, 2001) was focused on employee loyalty.

Ren (2001) discussed this relationship based on employee personality traits, or characteristics.

Cappelli and Sherer (1988) investigated employee satisfaction from an exogenous and economic view. In the 1930s by (Hoppock, 1935) among others, who observed that overall employee satisfaction was affected by economic conditions?

According to (Bluedorn, 1982) education levels were not significant to job satisfaction, but they did influence the decision to leave an organization by an employee.

Locke (1975) defined job satisfaction as an emotional state which results from the job related experiences of an employee.

Luthans (1989) expanded on Locke and described employee satisfaction, further Spreitzer and Kizilos (1997) believed that employee satisfaction was associated with psychological empowerment.

Employee engagement is a vast construct that touches almost all parts of human resource management facets. This issue is addressed by (Kompaso and Sridevi, 2010).

Curristine, Lonti and Joumard (2007) reviewed key institutional drivers that may contribute to improve public sector efficiency, and focused on one of them in more detail: performance information and its role and use in the budget process.

This paper (Tansel & Gazioglu, 2013) investigated the job satisfaction in relation to managerial attitudes towards employees and firm size using the linked employer-employee survey results in Britain.

Barnes, Smeaton and Taylor (2009) provide summary on Recruitment of old workers.

Negi and Chauhan (2012) analyses and suggests possible innovation strategies for improvement of technical education in India.

Natarajan (2000) defined nature of Quality and perception of Quality to assess the performance of the Institutions.

As per report (University Grants Commission, 2011) Higher education in India is passing through a phase of unprecedented expansion, marked by an explosion in the volume of students, a substantial expansion in the number

of institutions and a quantum jump in the level of public funding.

Kaul (2006) provides a brief description of some of the salient features of India's education system, especially in the context of higher education.

Artess, Forbes and Ripmeester (2011) explores the development of employability skills in the UK and in an international setting.

FICCI Higher Education Summit (2012) focused their study on Higher Education in India.

Burke (2008) presented a case study for an upper-level undergraduate or master's level HR students to design a pay structure using a case scenario and integrated application exercises.

Agrawal, (2013) attempted to provide a review on challenges, outcomes and present situation in vocational education and training (VET) programs in some Asian countries.

Maclean, (2007) applied Luhmann's theory (Luhmann, 1984) of society to explain the relationships between higher education, industry and vocational education.

Brand, (2008) provided ideas on how federal and state policies can support a greater role for CTE in high school reform by providing meaningful, relevant, and rigorous learning opportunities for all youth.

Hattangdi & Ghosh, (2007) concluded that promoted integration of ICT in higher education by imparting easily accessible, affordable and quality higher education leading to the economic upliftment of India.

Harvey, (2000) addressed one aspect of the 'New Realities' of higher education: the employer-higher education interface. It explores the development of the employability agenda in higher education system.

United Nations Educational, Scientific and Cultural Organization, (2004) covered the on-going discussion on the implications of globalization for higher education.

UNESCO, (1995) did a brief analysis of what considered the main trends in higher education and which can serve as a basis for the formulation of the Organization's policy.

III. Model Generation

To direct the research, research model has been generated (Fig. 1) whereby research is reviewed in order to identify the dimensions or factors of employee-employer relationship that are able to show the impact on Technical Education. The multifaceted perspective has been adopted in terms relationship between employee-employer. The concept is broad considering the range of potential factors of relationship effecting performance of Technical organizations.

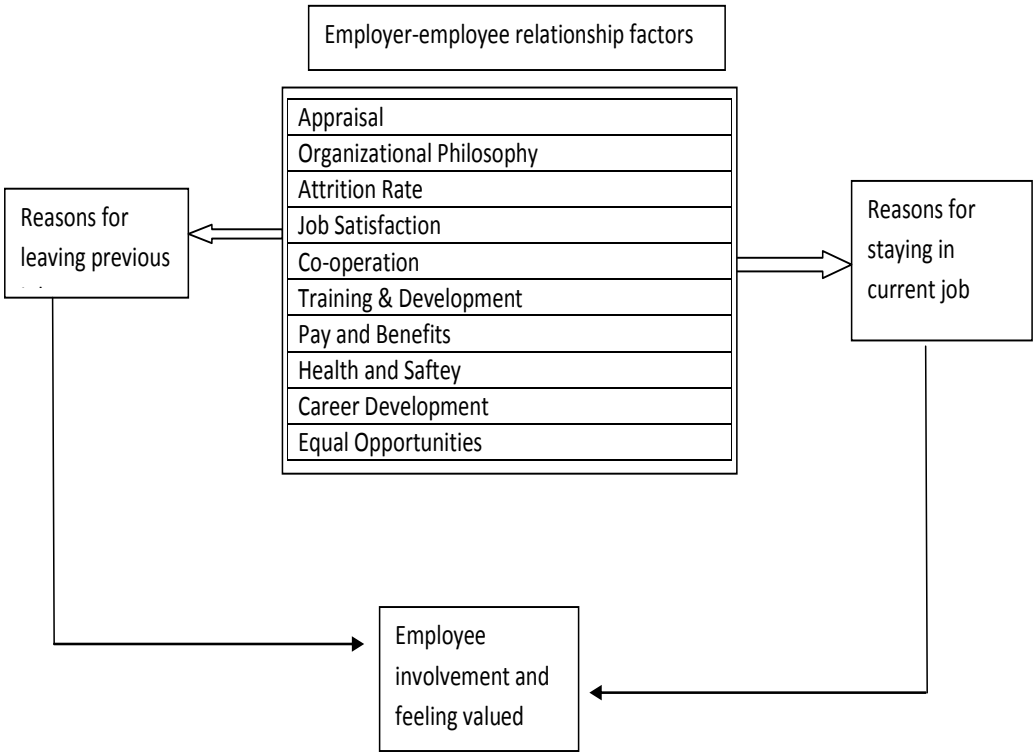

Fig. 1. Employee-Employer Relationship factors which impact on Technical Education

IV. Data and Methodology

4.1 Research Hypotheses

Following are the hypotheses set for the study-

H_{o1}: Lack of Employee Welfare & Benefits does not influence attrition rate.

H_{a1}: Lack of Employee Welfare & Benefits influences attrition rate.

H_{o2}: Lack of Empowerment of Employee does not influence attrition rate.

H_{a2}: Lack of Empowerment of Employee influences attrition rate.

H_{o3}: Work life balance does not influence attrition rate of the employee.
H_{a3}: Work life balance influences attrition rate of the employee.
H_{o4}: Organisation Ethic code of conduct does not influence attrition rate of the employee.
H_{a4}: Organisation Ethic code of conduct influences attrition rate of the employee.
H_{o5}: Training and development of employee does not influence attrition rate.
H_{a5}: Training and development of employee influences attrition rate.
H_{o6}: Performance management of employee does not influence attrition rate.
H_{a6}: Performance management of employee influences attrition rate.
H_{o7}: Job dissatisfaction in the employee does not influence attrition rate.
H_{a7}: Job dissatisfaction in the employee influences attrition rate.
H_{08}: Employee welfare/benefits are not missing in current job.
H_{a8}: Employee welfare/benefits are missing in current job.
H_{09}: Employee empowerment is not missing in current job.
H_{a9}: Employee empowerment is missing in current job.
H_{010}: Work life balance is not missing in current job.
H_{a10}: Work life balance is missing in current job.
H_{011}: Organization Ethics and its code of Conduct are not missing in current job.
H_{a11}: Organization Ethics and its code of Conduct are missing in current job.
H_{012}: Training and Development opportunities are not missing in current job.
H_{a12}: Training and Development opportunities are missing in current job.
H_{013}: Performance Management is not missing in current job.
H_{a13}: Performance Management is missing in current job.
H_{014}: Job dissatisfaction is not missing in current job.
H_{a14}: Job dissatisfaction is missing in current job.

4.2 Sample Design

4.2.1 Sampling Population: All the faculty members of the various Private Technical Institutions of Gwalior, Jabalpur, Indore and Bhopal regions constitute the sampling Population.

4.2.2 Sampling Technique: Non-probability convenient sampling technique was utilized to select the sample elements.

4.2.3 Sample Size: A total of 600 questionnaires were distributed, and 350 of them were returned. For the sample, only Assistant Professor (entry level) were taken as respondents.

4.3 Tools Used for Data Collection

The survey method utilized a self-designed questionnaire to collect data which intends to measure impact of employee- employer relationship on growth of Private Technical Institutions in Madhya Pradesh.

4.4 Measurement

Data was collected on a Likert type scale, where 1 stands for minimum agreement and 5 stands for maximum agreement.

4.5 Tools Used for Data Analysis

Item to total correlation was applied to check the internal consistency of the questionnaire. The measure was standardized through computation of reliability and validity.

Cronbach's α (alpha) is used as a (lower bound) estimate of the reliability of a psychometric test.

Factor analysis Test was applied to find out the underlying factors of Employee employer relationship.

Chi–Square (χ^2) test has been done as a part of factor analysis (PCA) taking into account that Chi–Square (χ^2) test is a distribution free test, which means that sample distribution does not affect the test (Bajpai, 2010).

V. Result and Discussion

In this section result are drawn from surveyed sample data and analysis is performed to identify factors which are responsible to affect employee-employer relationship in Technical education institutions of MP.

This chapter divided into two sections,

- Section 5.1: Contain the factor responsible for Attrition Rate.
- Section 5.2: Discussed Factors Missing in Current Job.

The statistical analysis has been done as (Malhotra, N., Birks, D., & Wills, P., 2012) and (Bajpai, 2010).

5.1 Factors Responsible for Attrition Rate

A questionnaire was administrated to sample size of 350. And the results were analysed using SPSS 19. Cronbach's Alpha test was conducted to judge the reliability and validity of the sample tested.

Cronbach's Alpha value was found to be 0.893 (as shown in Table 1) with F-Stat value of 6.941 (as shown in Table 3) with 0% significance (i.e. 100% confidence). This is an excellent statistical result signifying the reliability of sampling process.

5.1.1 Reliability Test

Table 1. Reliability Statistics (Attrition Rate Analysis)

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.893	.892	25

Table 2. Scale Statistics (Attrition Rate Analysis)

Ean	Variance	Std. Deviation	N of Items
81.4414	224.568	14.98558	25

Table 3. ANOVA (Attrition Rate Analysis)

		Sum of Squares	df	Mean Square	F	Sig
Between People		1293.510	144	8.983		
Within People	Between Items	159.833	24	6.660	6.941	.000
	Residual	3316.007	3456	.959		
	Total	3475.840	3480	.999		
Total		4769.350	3624	1.316		

Grand Mean = 3.2577

5.1.2 Factor Analysis

Factor analysis was done using Principal Component Analysis (PCA) Bartlett's Test of Sphericity and Kaiser-Meyer-Olkin (KMO) test was used to judge sampling adequacy (cut-off value fixed at 0.50) as shown in Table 4.

Observed value of KMO was 0.857 (>= 0.50) and Chi-Square value was 1963.002 with significance of 0% (i.e. 100% confidence) as shown in Table 4.

Minimum value of ***r*** for PCA is being kept at 0.3 (as shown in Table 5) for extraction PCA factor of the value of co-factors was observed to be higher than the cut-off.

In this analysis the cut-off initial Eigen value was kept at 1. As per Table 6 this gave a six factor explaining a cumulative percentage variance of 63.901. The same is also supported by the Scree plot shown in Fig. 2.

However, it is observed that rotation method Oblimin with Kaiser Normalization have weak results as per shown in Table 7.

Table 4. KMO and Bartlett's Test (Attrition Rate Analysis)

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.857
Bartlett's Test of Sphericity	Approx. Chi-Square	1963.002
	Df	300
	Sig.	.000

Table 5. Communalities (Attrition Rate Analysis)

	Initial	Extraction			Initial	Extraction
y1	1.000	.694		y20	1.000	.669
y10	1.000	.720		y21	1.000	.773
y11	1.000	.597		y22	1.000	.699
y12	1.000	.635		y23	1.000	.662
y13	1.000	.645		y24	1.000	.639
y14	1.000	.633		y25	1.000	.634
y15	1.000	.644		y3	1.000	.628
y16	1.000	.653		y4	1.000	.686
y17	1.000	.585		y5	1.000	.476
y18	1.000	.549		y6	1.000	.535
y19	1.000	.523		y7	1.000	.583
y2	1.000	.693		y8	1.000	.626
				y9	1.000	.794

Table 6. Total Variance Explained (Attrition Rate Analysis)

Extraction Method: Principal Component Analysis.						
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	7.774	31.097	31.097	7.774	31.097	31.097
2	2.603	10.411	41.508	2.603	10.411	41.508
3	1.578	6.313	47.821	1.578	6.313	47.821
4	1.491	5.966	53.787	1.491	5.966	53.787
5	1.450	5.801	59.588	1.450	5.801	59.588
6	1.078	4.313	63.901	1.078	4.313	63.901
7	.946	3.782	67.683			
8	.898	3.593	71.277			
9	.779	3.118	74.394			
10	.704	2.817	77.211			
11	.631	2.523	79.735			
12	.591	2.362	82.097			
13	.555	2.218	84.315			
14	.484	1.936	86.251			

Extraction Method: Principal Component Analysis.						
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
15	.438	1.752	88.003			
16	.411	1.643	89.646			
17	.382	1.529	91.175			
18	.374	1.497	92.672			
19	.335	1.340	94.012			
20	.333	1.331	95.343			
21	.308	1.230	96.573			
22	.284	1.136	97.709			
23	.235	.941	98.650			
24	.177	.707	99.357			
25	.161	.643	100.000			

Extraction Method: Principal Component Analysis.
a. When components are correlated, sums of squared loadings cannot be added to obtain a total variance.

Table 7. Pattern Matrix[a] (Attrition Rate Analysis)

	Component					
	1	2	3	4	5	6
y21	.836					
y20	.810					
y22	.789					
y17	.728					
y4	.712			.336		
y23	.543	.459				
y18	.479	.316				
y16	.467					
y13	.399			-.343	.344	
y6		.692				
y19		.690				
y14		.661				
y25	.390	.626				
y24		.585				
y15		.524		-.304		
y5		.376		.373		
y11			.758			
y12			.734			
y3				.773		
y1					.792	
y2				.324	.765	
y9						.728
y8						.645
y7			-.409			.596
y10			.427			.573

Extraction Method: Principal Component Analysis.
Rotation Method: Oblimin with Kaiser Normalization.[a]
a. Rotation converged in 17 iterations.

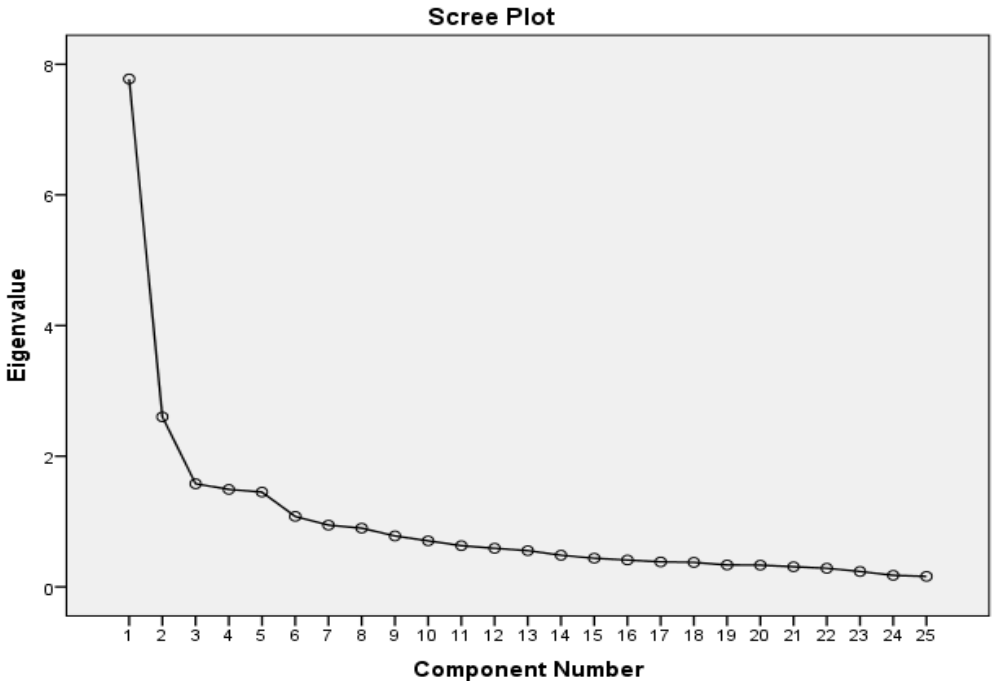

Fig. 2. Scree Plot (Attrition Rate Analysis)

5.1.3 Varimax Factor Analysis

The second set of Factor analysis was done using Principal Component Analysis (PCA) with varimax rotation was performed. Bartlett's Test of Sphericity and Kaiser-Meyer-Olkin (KMO) test was used to judge sampling adequacy (cut-off value fixed at 0.50).

Observed value of KMO was 0.8347 (>= 0.50) as shown in Table 8. The Bartlett's Test of Sphericity was observed to be 1852.00 with significance of 0% (i.e. 100% confidence).

As per Table 9 communalities, the extraction values are all grater then the cut-off value of 0.5; thus suggesting the utility of vaximax rotation initial Eigen value was kept at 1 given 7-factors explaining 70.260 cumulative patterns of variance (as shown in Table 10).

This is higher than the previous run done with Oblimin with Kaiser Normalization. The same is supported by Scree plot shown in Fig. 3, which shows specifically and the extra elbow at the 7th factor. This is corroborated by the incremental 4.3% variance explained by the 7th factor. As per Table 11 (rotated component Matrix) depicts the grouping of co-factors into factors for analysis.

Table 8. KMO and Bartlett's Test (Attrition Rate Varimax Rotation)

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.834
Bartlett's Test of Sphericity	Approx. Chi-Square	1.852E3
	df	300
	Sig.	.000

Table 9. Communalities (Attrition Rate Varimax Rotation)

	Initial	Extraction
y1	1.000	.702
y2	1.000	.760
y3	1.000	.736
y4	1.000	.721
y5	1.000	.665
y6	1.000	.739
y7	1.000	.750
y8	1.000	.788
y9	1.000	.789
y10	1.000	.687
y11	1.000	.665
y12	1.000	.722
y13	1.000	.764
y14	1.000	.669
y15	1.000	.635

	Initial	Extraction
y16	1.000	.643
y17	1.000	.600
y18	1.000	.562
y19	1.000	.685
y20	1.000	.679
y21	1.000	.815
y22	1.000	.718
y23	1.000	.724
y24	1.000	.680
y25	1.000	.665

Table 10. Total Variance Explained (Attrition Rate Varimax Rotation)

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	7.664	30.655	30.655	7.664	30.655	30.655
2	2.984	11.934	42.589	2.984	11.934	42.589
3	1.780	7.118	49.708	1.780	7.118	49.708
4	1.610	6.438	56.146	1.610	6.438	56.146
5	1.375	5.498	61.644	1.375	5.498	61.644
6	1.083	4.334	65.978	1.083	4.334	65.978
7	1.071	4.282	70.260	1.071	4.282	70.260
8	.881	3.523	73.783			
9	.777	3.109	76.892			
10	.682	2.727	79.619			
11	.635	2.540	82.159			
12	.526	2.102	84.261			
13	.478	1.914	86.175			
14	.435	1.739	87.913			
15	.418	1.672	89.585			
16	.397	1.590	91.175			
17	.370	1.479	92.654			
18	.328	1.313	93.968			
19	.294	1.176	95.143			
20	.271	1.084	96.227			
21	.244	.976	97.203			
22	.234	.935	98.138			
23	.199	.794	98.933			
24	.148	.591	99.524			
25	.119	.476	100.000			

Extraction Method: Principal Component Analysis.

Table 11. Rotated Component Matrix[a] (Attrition Rate Varimax Rotation)

	Component						
	1	2	3	4	5	6	7
y1	.266	-.101	.011	.141	.753	-.130	.130
y2	.167	.140	-.010	.022	.783	.313	-.025
y3	-.068	.063	.138	.011	.116	.833	-.029
y4	.737	-.072	-.079	.152	.212	.177	.260
y5	.409	.241	.025	.257	-.059	.345	.500
y6	.087	.618	.138	.176	-.146	.102	.518
y7	.001	.033	.188	-.225	.163	-.139	.785
y8	.109	.176	.835	-.108	.074	.009	.173
y9	.083	.258	.757	.246	-.145	.236	.077
y10	.133	.379	.612	.351	-.091	.139	-.006
y11	-.021	.050	.156	.783	.032	.125	-.092
y12	.253	-.010	.008	.786	.142	-.142	.022
y13	.520	-.108	.547	-.030	.329	-.271	.028
y14	.247	.629	.325	.195	.181	-.174	.079
y15	.229	.503	.396	.113	.235	-.318	.062
y16	.588	.273	.217	.142	.265	-.287	.051
y17	.709	.062	-.011	.007	.304	.007	-.028
y18	.623	.320	.094	.145	.083	.080	-.167
y19	-.075	.805	.160	-.009	-.047	.054	-.012
y20	.762	.077	.153	-.025	-.070	-.249	-.045
y21	.861	-.047	.129	.087	.179	-.106	.064
y22	.810	.085	.126	.083	.069	.001	.165
y23	.707	.408	.194	.017	-.054	.124	.022
y24	.374	.578	.191	-.303	.033	.258	.104
y25	.561	.566	-.054	-.097	.009	.132	.031

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 10 iterations.

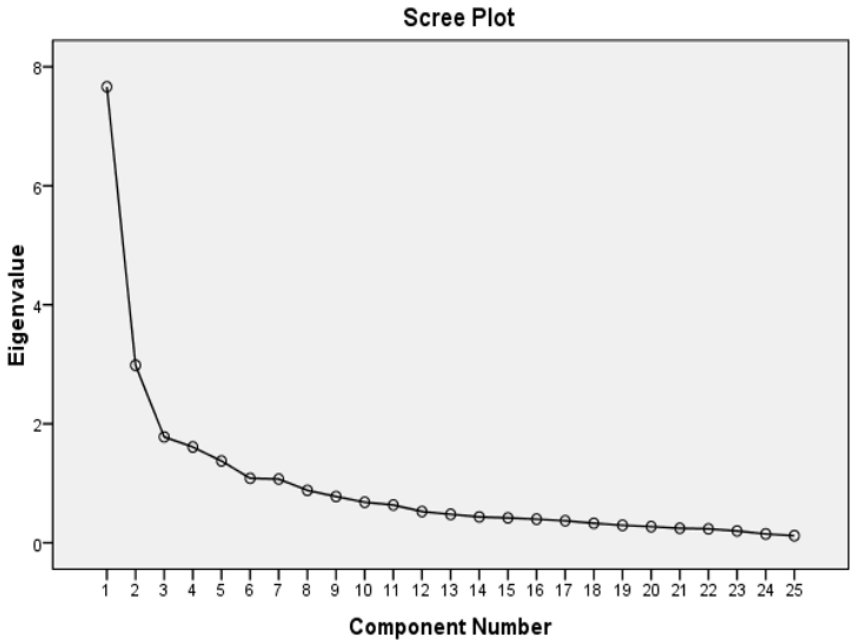

Fig. 3. Scree Plot (Attrition Rate Varimax Rotation)

5.1.4 Analysis: Grouping of co-factor into factors

With this use of factor analysis the various co-factor can be grouped as:

Groups are as follows (Reasons for High Attrition Rate)

1. Employee Welfare/ Benefits

(a) Unfavourable HR Policies.
(b) Lack of Leave.
(c) Lack of statuary benefits.
(d) Policies and procedure not conducive.
(e) Higher education.

2. Empowerment

(a) Number of opportunities for independent thought and action.
(b) Higher education.

3. Work life balance

(a) Physical, Psychological chain.
(b) Prestige of my job outside the organisation.
(c) Organisational culture.

4. Organisation Ethics and its code of conduct

(a) Discrimination.
(b) Organisational norm.
(c) Remuneration not par with other intuitions.
(d) Intrusive supervision.

5. Training and development

(a) No value addition.
(b) No scope for skill and development.
(c) No scope for career growth.
(d) Incapability with culture.

6. Performance management

(a) Lack of recognition.
(b) No or low incentives.

7. Job dissatisfaction

(a) Sub-standard nature of administration job.
(b) Low self-fulfilment factor.
(c) Lack of opportunities for promotion.

The above analysis therefore validates the alternative hypotheses.

H_{a1}: Lack of Employee Welfare & Benefits influences attrition rate.

H_{a2}: Lack of Empowerment of Employee influences attrition rate.

H_{a3}: Work life balance influences attrition rate of the employee.

H_{a4}: Organisation Ethic code of conduct influences attrition rate of the employee.

H_{a5}: Training and development of employee influences attrition rate.

H_{a6}: Performance management of employee influences attrition rate.

H_{a7}: Job dissatisfaction in the employee influences attrition rate.

5.2 Factors Missing in Current Job

A questionnaire was administrated to sample size of 350. And the results were an alysed using SPSS 19. Cronbach's Alpha test was conducted to judge the reliability and validity of the test.

Cronbach's Alpha value was found to be 0.855 (as shown in Table 12) with F-Stat value of 10.647 (as shown in Table 14) with 0% significance (i.e. 100% confidence). This is an excellent statistical result signifying the reliability of sampling process.

5.2.1 Reliability Test

Table 12. Reliability Statistics (Current Job Analysis)

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.855	.856	11

Table 13. Summary Item Statistics (Current Job Analysis)

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Variances	1.422	1.055	1.669	.614	1.582	.032	11

Table 14. ANOVA (Current Job Analysis)

		Sum of Squares	df	Mean Square	F	Sig
Between People		1087.646	170	6.398		
Within People	Between Items	98.460	10	9.846	10.647	.000
	Residual	1572.085	1700	.925		
	Total	1670.545	1710	.977		
Total		2758.191	1880	1.467		

Grand Mean = 3.1611

5.2.2 Factor Analysis using Three Factors

Factor analysis was done using Principal Component Analysis (PCA) Bartlett's Test of Sphericity and Kaiser-Meyer-Olkin (KMO) test was used to judge sampling adequacy (cut-off value fixed at 0.50) as shown in Table 15.

Observed value of KMO was 0.817 (>= 0.50) and Chi-Square value was 1001.647 with significance of 0% (i.e. 100% confidence) as shown in Table 15.

Minimum value of r for PCA is being kept at 0.3 (as shown in Table 16) for extraction PCA factor of the value of co-factors was observed to be higher than the cut-off.

In this analysis the cut-off initial Eigen value was kept at 1. As per Table 17 this gave a three factor rotation explaining a cumulative percentage variance of 71.142. The same is also supported confirmed by the Scree plot shown in Fig. 4.

Therefore, Three factor loading rotation was subsequently performed on these as factors and the rotation method used was Oblimin with Kaiser Normalization (shown in Table 20, Table 21 and Table 22).

The Three factor rotation is weak since there are only two co-factors in the third factor (Grouping) having r grater then 0.30. Hence three factor rotations seem to be a weaker argument. Therefore Two factor rotation was performed.

Table 15. KMO and Bartlett's Test (Current Job Analysis- Three Factor)

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.817
Bartlett's Test of Sphericity	Approx. Chi-Square	1001.647
	df	55
	Sig.	.000

Table 16. Communalities (Current Job Analysis- Three Factor)

	Initial	Extraction
y1	1.000	.793
y10	1.000	.777
y11	1.000	.749
y2	1.000	.727
y3	1.000	.834
y4	1.000	.531
y5	1.000	.794
y6	1.000	.492
y7	1.000	.684
y8	1.000	.703
y9	1.000	.743

Extraction Method: Principal Component Analysis.

Table 17. Total Variance Explained (Current Job Analysis- Three Factor)

Component	**Initial Eigenvalues**			**Extraction Sums of Squared Loadings**		
	Total	**% of Variance**	**Cumulative %**	**Total**	**% of Variance**	**Cumulative %**
1	4.652	42.287	42.287	4.652	42.287	42.287
2	2.120	19.268	61.555	2.120	19.268	61.555
3	1.055	9.587	71.142	1.055	9.587	71.142
4	.703	6.391	77.533			
5	.581	5.284	82.818			
6	.500	4.543	87.361			
7	.424	3.857	91.218			
8	.345	3.134	94.352			
9	.293	2.663	97.015			
10	.197	1.793	98.808			
11	.131	1.192	100.000			

Table 18. Total Variance Explained by Sums of Squared Loadings
(Current Job Analysis- Three Factor)

Component	**Rotation Sums of Squared Loadings**
	Total
1	4.039
2	3.301
3	1.678

a. When components are correlated, sums of squared loadings cannot be added to obtain a total variance.
Extraction Method: Principal Component Analysis

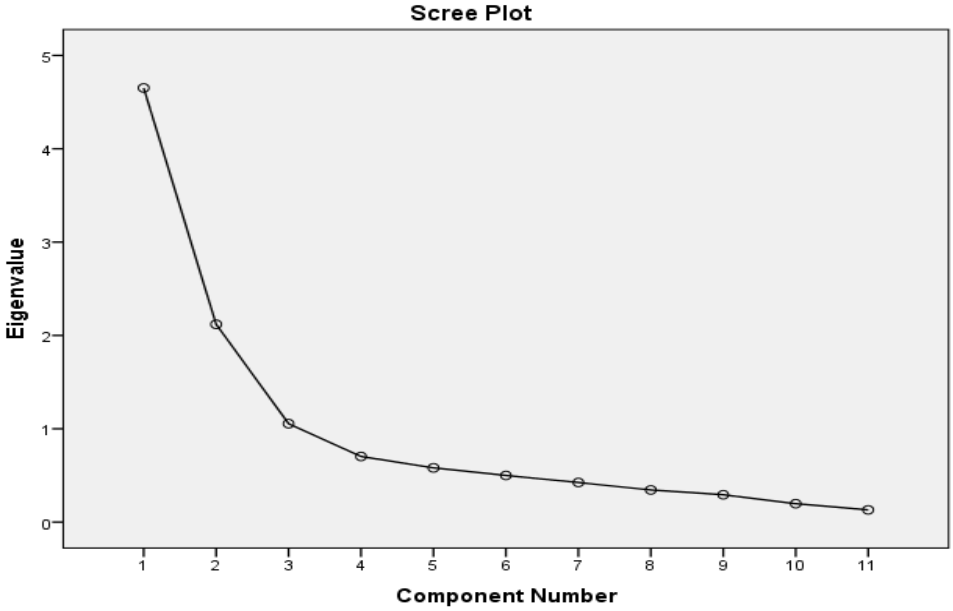

Fig. 4. Scree Plot (Current Job Analysis- Three Factor)

Table 19. Component Matrix[a] (Current Job Analysis- Three Factor)

	Component		
	1	2	3
y11	.794	-.341	
y10	.790	-.388	
y7	.758		
y4	.703		
y6	.680		
y8	.656	-.423	-.305
y9	.638		-.578
y3	.514	.726	
y1	.592	.665	
y2	.535	.661	
y5	.360	-.388	.717

Extraction Method: Principal Component Analysis.[a]
a. 3 components extracted.

Table 20. Pattern Matrix[a] (Current Job Analysis- Three Factor)

	Component		
	1	2	3
y8	.887		
y10	.815		
y9	.796		-.448
y11	.792		
y7	.633		.351
y6	.371	.365	
y3		.948	
y1		.887	
y2		.845	
y4	.340	.489	
y5			.870

Extraction Method: Principal Component Analysis.
Rotation Method: Oblimin with Kaiser Normalization.[a]
a. Rotation converged in 12 iterations.

Table 21. Structure Matrix (Current Job Analysis- Three Factor)

	Component		
	1	2	3
y10	.860		.394
y11	.847		.374
y8	.823		
y7	.748	.319	.510
y9	.732	.354	
y6	.550	.499	.387
y3		.896	
y1		.886	
y2		.839	
y4	.534	.606	
y5			.887

Extraction Method: Principal Component Analysis.
Rotation Method: Oblimin with Kaiser Normalization.

Table 22. Component Correlation Matrix (Current Job Analysis- Three Factor)

Component	1	2	3
1	1.000	.309	.240
2	.309	1.000	.069
3	.240	.069	1.000

Extraction Method: Principal Component Analysis.
Rotation Method: Oblimin with Kaiser Normalization.

5.2.3 Factor Analysis using Two Factors

Two Factor analysis was done using Principal Component Analysis (PCA) Bartlett's Test of Sphericity and Kaiser-Meyer-Olkin (KMO) test was used to judge sampling adequacy (cut-off value fixed at 0.50) as shown in Table 23.

Observed value of KMO was 0.817 (>= 0.50) and Chi-Square value was 1001.764 with significance of 0% (i.e. 100% confidence) as shown in Table 23.

Minimum value of r for PCA is being kept at 0.3 (as shown in Table 24) for extraction PCA factor of the value of co-factors was observed to be higher than the cut-off.

In this analysis the cut-off initial Eigen value was kept at 1. As per Table 25 this gave a two factor rotation explaining a cumulative percentage variance of 61.555. The same is also supported confirmed by the Scree plot shown in Fig. 5.

Therefore, two factor loading rotation was subsequently performed on these as factors and the rotation method used was Oblimin with Kaiser Normalization (shown in Table 28 and Table 29).

Table 23. KMO and Bartlett's Test (Current Job Analysis- Two Factor)

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.817
Bartlett's Test of Sphericity	Approx. Chi-Square	1001.647
	df	55
	Sig.	.000

The used of Two factor rotation is also support by the initial component matrix value as Table 30.

To extract higher loading of the two components the cut-off value of r is kept at greater than and equal to 0.50. As per Table 28 factor one will have 07 co-factors and factor two will have 03 co-factors.

Table 24. Communalities (Current Job Analysis- Two Factor)

	Initial	Extraction
y1	1.000	.793
y10	1.000	.775
y11	1.000	.747
y2	1.000	.723
y3	1.000	.791
y4	1.000	.518
y5	1.000	.280
y6	1.000	.463
y7	1.000	.663
y8	1.000	.609
y9	1.000	.409

Extraction Method: Principal Component Analysis.

Table 25. Total Variance Explained (Current Job Analysis- Two Factor)

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.652	42.287	42.287	4.652	42.287	42.287
2	2.120	19.268	61.555	2.120	19.268	61.555
3	1.055	9.587	71.142			
4	.703	6.391	77.533			
5	.581	5.284	82.818			
6	.500	4.543	87.361			
7	.424	3.857	91.218			
8	.345	3.134	94.352			
9	.293	2.663	97.015			
10	.197	1.793	98.808			
11	.131	1.192	100.000			

Table 26. Total Variance Explained by Sums of Squared Loadings (Current Job Analysis- Two Factor)

Component	Rotation Sums of Squared Loadings
	Total
1	4.178
2	3.174

Extraction Method: Principal Component Analysis.
a. When components are correlated, sums of squared loadings cannot be added to obtain a total variance.

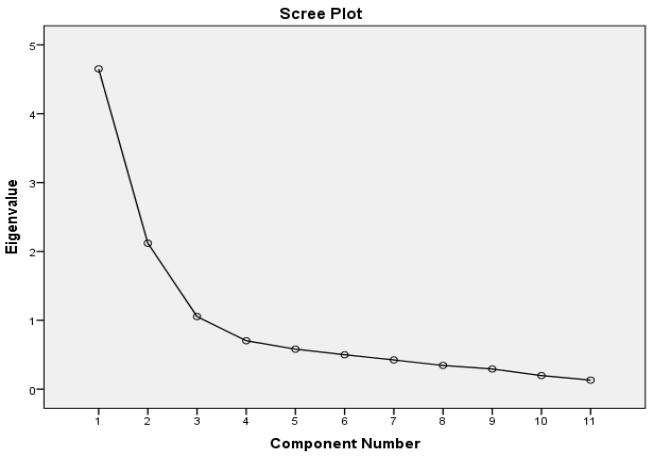

Fig. 5. Scree Plot (Current Job Analysis- Two Factor)

Table 27. Component Matrix[a] (Current Job Analysis- Two Factor)

	Component	
	1	2
y11	.794	-.341
y10	.790	-.388
y7	.758	
y4	.703	
y6	.680	
y8	.656	-.423
y9	.638	
y3	.514	.726
y1	.592	.665
y2	.535	.661
y5	.360	-.388

Extraction Method: Principal Component Analysis.[a]
a. 2 components extracted.

Table 28. Pattern Matrix[a] (Current Job Analysis- Two Factor)

	Component	
	1	2
y10	.883	
y11	.854	

	Component	
	1	2
y8	.800	
y7	.796	
y5	.542	
y9	.530	
y6	.521	.325
y3		.906
y1		.884
y2		.855
y4	.449	.461

Extraction Method: Principal Component Analysis.
Rotation Method: Oblimin with Kaiser Normalization.[a]
a. Rotation converged in 6 iterations.

Table 29. Structure Matrix (Current Job Analysis- Two Factor)

	Component	
	1	2
y10	.880	
y11	.864	
y7	.812	
y8	.774	
y6	.603	.456
y9	.593	.381
y5	.492	
y1		.890
y3		.886
y2		.850
y4	.565	.574

Extraction Method: Principal Component Analysis.
Rotation Method: Oblimin with Kaiser Normalization.

Table 30. Component Correlation Matrix (Current Job Analysis- Two Factor)

Component	1	2
1	1.000	.252
2	.252	1.000

Extraction Method: Principal Component Analysis.
Rotation Method: Oblimin with Kaiser Normalization.

Therefore, on account of above values obtained through two factor rotation, the two factors was chosen. As it has greater explanatory power.

5.2.4 Analysis: Grouping of co-factor into factors

With this use of factor analysis the various co-factor can be grouped as:

Group A (Factor)

1) Approachable supervisor.
2) Feedback mechanism.
3) Motivation / Incentives.
4) Remuneration at par with other institutions.
5) Recognition.
6) Scope for career growth.
7) Scope for skill development.

Group B (Factor)

1. Job satisfaction.
2. Job security.
3. Working environment.

The above analysis therefore validates the alternative hypotheses.

H_{a8}: Employee welfare/benefits are missing in current job.
H_{a9}: Employee empowerment is missing in current job.
H_{a10}: Work life balance is missing in current job.
H_{a11}: Organization Ethics and its code of Conduct are missing in current job.
H_{a12}: Training and Development opportunities are missing in current job.
H_{a13}: Performance Management is missing in current job.
H_{a14}: Job dissatisfaction is missing in current job.

VI. Findings and Conclusion

6.1 The hypotheses validation findings.

The analyses validates the following hypotheses.

H_{a1}: Lack of Employee Welfare & Benefits influences attrition rate.
H_{a2}: Lack of Empowerment of Employee influences attrition rate.
H_{a3}: Work life balance influences attrition rate of the employee.
H_{a4}: Organisation Ethic code of conduct influences attrition rate of the employee.
H_{a5}: Training and development of employee influences attrition rate.
H_{a6}: Performance management of employee influences attrition rate.
H_{a7}: Job dissatisfaction in the employee influences attrition rate.
H_{a8}: Employee welfare/benefits are missing in current job.
H_{a9}: Employee empowerment is missing in current job.
H_{a10}: Work life balance is missing in current job.
H_{a11}: Organization Ethics and its code of Conduct are missing in current job.
H_{a12}: Training and Development opportunities are missing in current job.
H_{a13}: Performance Management is missing in current job.
H_{a14}: Job dissatisfaction is missing in current job.

6.2 Other Findings

1. **A comparison of "Reasons for Leaving Last Job" and "Factors missing in Last Job" brings out two Co- Factors which are absent as "Reasons for Leaving Last Job" They are:**
    1. Issue of remuneration – lack of remuneration at par with other institutes.
    2. Lack of approachable supervision.

The absence of above two co factors runs counterfactual to existing arguments about employee exit concept:

1. People change bosses.
2. Higher remuneration leads to employee exit.

It seems that issue of remuneration and supervision remains but as a job changing reasons cease to matter quite likely because:

1. The growth in private technical institutes has ensured that remuneration have flattened out and thus cease to be a co-factor.

2. Leadership grooming hasn't yet happened in these institutes because their recent origins (2000 onwards).

2. Comparison of Factors Responsible for Attrition Rate with Factors missing in Last Job and Current Job:

Attrition rate management in a service sector firm has been a cause of concern. Also it signifies availability of job opportunities for people.

Common Co-factors observed missing in Last Job and Current Job vis-a-vis Attrition Rate are:

1. Lack of skill development.
2. Lack of career growth/promotions.
3. Lack of recognition.

It is observed that among the common reasons (co-factors) observed; the reason which are observed to have a higher weightage (loading in Structure Matrix Table). Factors missing in previous job remain ***persistent and are residual reasons for higher attrition rate in spite of the passage f two years waiting period in current job taken in sample study.***

It could therefore be concluded that only a concentrated effort by all private engineering colleges can result in reduction of attrition rate. Individual college level effort can only work up to a certain point and no more.

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